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# Factors Influencing Post - High School Graduation Plans Of Students Enrolled In Food Service-Related Courses At California Regional Occupation Centers/Programs (Career Selection, Occupational Choice, Vocational)

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FACTORS INFLUENCING POST-HIGH SCHOOL GRADUATION PLANS  
OF STUDENTS ENROLLED IN FOOD SERVICE-RELATED COURSES  
AT CALIFORNIA REGIONAL OCCUPATION CENTERS/PROGRAMS

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A Dissertation  
Presented to  
the Faculty of the Graduate School  
University of the Pacific

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In Partial Fulfillment  
of the Requirements for the Degree  
Doctor of Education

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by  
Faye Candace Stucy Johnson

November, 1984



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November, 1984

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(November, 1984)

FACTORS INFLUENCING POST HIGH SCHOOL GRADUATION PLANS  
OF STUDENTS ENROLLED IN FOOD SERVICE-RELATED COURSES  
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Abstract of the Dissertation

Purpose: The purpose of this study was to determine the degree of influence from various factors on a student's decision to enroll in a food service-related course and whether these factors were affected by post high school graduation plans.

Procedure: Sixty-nine percent of the Regional Occupational Centers/Programs teachers and one section of students instructed by each teacher completed the survey instruments. The questionnaire items queried the respondents concerning demographic information as well as the degree of influence of various person- and job-related factors.

Findings and Conclusions: Results of this investigation revealed that the responding student population had a strong interest in pursuing higher education. The major obstacle to enrollment for the non-college bound population was not discovered. Grade point average, course requirements and money were found to be perceived as not limiting their college enrollment.

The teacher population rated the influence of various factors differently for six of 19 items and generally higher than the student group. The two populations were generally congruent with respect to the relative order placement of the factors. White and minority populations evaluated the importance of most factors differently from one another. The two gender groups noted some of the influencing factors differently. White and male populations indicated the greatest propensity toward higher education.

Most vocational students intend to seek employment in the food service field. The teacher population tended to view students as being primarily job oriented. Vocational program students need to be informed about and, if appropriate, encouraged to pursue higher education. Vocational programs often enroll a disproportionate share of females and minority populations. Attainment of higher education by these group may serve as a vehicle for upward mobility. Students perceive satisfaction with the decision to enroll and with school in general if they note the applicability and relevance of the material they study.

Recommendations: 1) Replicate the study using various vocation program students and nationwide to determine the consistency and generalizability of these results. 2) Conduct a follow-up study to determine the rate of actualization of college and job seeking plans. 3) Investigate the discrepancies between teacher and student populations relative to influencing factors and post-graduation plans to determine the sources of these differences.

## ACKNOWLEDGEMENTS

Consideration of the number of people who have been important to the accomplishment of this doctoral program is a humbling experience. I wish to pay written tribute to some of these individuals.

I express my appreciation to my parents, Mr. and Mrs. Malcolm Stucy, for their financial and emotional support throughout my college career. Their high expectations allowed me to achieve lofty dreams.

To my immediate family, I offer my unending gratitude for their patience and good nature. My dear husband, Carl, cheerfully bore numerous roles and responsibilities. His everlasting confidence in me when my own wavered is a precious jewel I will always cherish. My daughters Catherine and Brenda spent summers, days and nights having only "a part of a mom" yet our relationship is stronger than most. Perhaps the true worth of this project is noted when ten- and eleven-year-olds speak casually but knowingly, "...and when I get my doctorate...."

Persons outside my family have also played a significant role in the completion of this degree. I recall appreciatively the hours of personal and telephone visits in which Walter and Christianne Beeler shared their expertise with me. Their support was particularly valuable in the early stages of this project.

Debby Dohner, typist of this dissertation, devoted countless hours to the preparation of this document. Her ability to interpret squiggles, lines and arrows drawn in various colors and to perform near

miracles on the word processor will always remain a source of wonderment.

Dr. Lucas Calpouzos, Dean of the School of Agriculture and Home Economics, and Dr. Marilyn Ambrose, Chairman of the Department of Home Economics, provided valuable encouragement. Important, too, is the friendship and encouragement I received from my dear friend, Faye Anglen, a talented graphic artist whose histograms added to the clarity of the presentation of this study's results.

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As I reflect on the great value of the support provided by so many persons, I realize more clearly that I, too, have a responsibility. That responsibility is to instill in others the confidence that through hard work and perseverance, they too can achieve more than they ever thought possible.

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## CHAPTER 1

### Introduction

Vocational education may be broadly defined as a program which prepares individuals for immediate or future employment. Vocational education has been in existence since the beginning of mankind. However, it has been a formal part of the American public educational system for only the past 100 years, having its genesis in the early years of the 20th century.<sup>1</sup>

It is now estimated that approximately 50 percent of the California persons participating in vocational education are enrolled in high school programs.<sup>2</sup> Education and training have been related to be the "indispensable elements that give meaning to free choice of occupation."<sup>3</sup>

William Honig, California Superintendent of Public Instruction, succinctly emphasized the value of vocational preparation when he stated:

Graduation from high school ends the formal education of one of every two high school students in California, and one of every five students who start high school fails to continue on to graduation. The young people in both of these groups need an education that prepares them for employment....California's

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<sup>1</sup>Charles A. Bennett, History of Manual and Industrial Education 1870-1917 (Peoria: Charles A. Bennett, 1973), p. 547.

<sup>2</sup>Legislative Analyst, Vocational Education in California (Sacramento: Office of State Printing, 1977), p. 9.

<sup>3</sup>United States Department of Labor, Manpower Reports to the  
(footnote continued)

economic survival depends on a strong, well-trained work force. Certainly, we must all work hard to improve the image of vocational education to win the recognition and support it deserves.<sup>4</sup>

In contrast with young people in many other countries, American youth have the privilege and the burden of making their own occupational choice. These decisions may have critical impacts on the future well-being of the individual. Numerous studies have indicated that one's occupation influences the individual's future social and economic statuses, as well as the respect with which society holds the individual.<sup>5</sup>

Most persons will spend the majority of their adult years pursuing an occupation. The occupation serves as one of the primary factors contributing to success in life. The process of vocational choice is clearly one of the most important decisions an individual must make.<sup>6</sup>

Recently, attention has been directed at discovering the factors which influence vocational choice. Since the 1950's, prominent theorists

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President (Washington, D.C.: U.S. Government Printing Office, 1963), p. XIII.

<sup>4</sup>William Honig, Vocational Education Operational Questions & Answers Secondary Only: Program Year 1982-83 (Sacramento, Ca.: State Department of Education, 1983).

<sup>5</sup>Ann Roe, The Psychology of Occupations (New York: Wiley and Sons, 1956), p. 8; David J. Pucel, "The Individual and His Choice of Occupation," in The Individual and His Education, ed. Alfred H. Krebs, (Washington, D.C.: American Vocational Assoc., 1972), p. 46; John L. Holland, Making Vocational Choices: A Theory of Careers (Englewood Cliffs: Prentice Hall, 1973), p. 13.

<sup>6</sup>Eli Ginzberg and others, Occupational Choice: An Approach to a General Theory (New York: Columbia Univ. Press, 1951), p. 22.

have posited that the choice process is a developmental one and that the home environment has a significant impact on it.<sup>7</sup>

Some of the theorists as well as other researchers have addressed the impact of "inheritedness" on occupational choice; that is, the degree to which one's family influences the process.<sup>8</sup> Also studied have been the influences of other individuals, teachers, counselors and peers.<sup>9</sup> Job-related factors have also been reported to influence the choice process as have occupational information sources.<sup>10</sup>

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<sup>7</sup>Roe, The Psychology of Occupations, p. 123; Holland, p. 113; Eli Ginzberg, "Toward a Theory of Occupational Choice: A Restatement," The Vocational Guidance Quarterly, 20 (1972), pp. 157-176; Donald Super and others, Vocational Development: A Framework for Research (New York: Columbia Univ., 1957), pp. 40-41; John D. Krumboltz, "A Social Learning Theory of Career Selection," The Counseling Psychologist, 6 (1976), p. 71.

<sup>8</sup>Roe, The Psychology of Occupations, p. 123; Holland, p. 123.

<sup>9</sup>J. P. Lisack, Educational and Employment Plans and Occupational Choices of Indiana High School Seniors in the Class of '75 (ERIC No. ED 120 565, 1975), p. 98; Helen C. Veres and Mary Margaret Carmichael, Expanding Student Opportunities in Occupational Education: Methods to Reduce Sex-Role Stereotyping in Program Choice (ERIC No. ED 217 180, 1981), p. 24; C. L. Mondart, C. M. Curtis, and L. H. Dobbins, Educational and Occupational Aspirations and Expectations of High School Youth (ERIC No. ED 048 452, 1970), p. 43; Ralph J. Patrick, "Factors Related to Occupational Preference of Selected Vocational-Technical Education Students in Delaware County, Pennsylvania," Unpublished Doctoral Dissertation, Univ. of Pittsburgh, 1980, p. 71; Roslyn D. Kane and Pamela Frazee, Occupational Choice: Do Traditional and Non-Traditional Women Differ? (ERIC No. ED 167 742, 1978), p. 10; John O. Crites, Vocational Psychology: The Study of Vocational Behavior and Development (New York: McGraw Hill, 1969), p. 88; "I Don't Want to Drive a Mack Truck.": Rural Southern Values and Attitudes - Barriers to Women in Non-Traditional Vocational Education (ERIC No. ED 199 011, 1980), p. 10.

<sup>10</sup>Luther B. Otto, "Girl Friends as Significant Others: Their  
(footnote continued)

### Background

The importance of an employed and a satisfied work force has been recognized throughout history. Early in mankind's history, ascription and apprenticeship programs were the recognized methods of preparing youth for the world of work. With the decline of the craft unions and the emergence of the industrialized society, school-related vocational education programs arose.<sup>11</sup>

In times of high unemployment in some fields and an abundance of workers in other areas, the people of the United States have looked to the educational system to correct the inequities. The relationship between education and the nation's economy was succinctly stated in the Manpower Report to the President, "...for the period 1929-1957 the

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(footnote continued)

Influence on Young Men's Career Aspirations and Achievements," Sociometry, 40 (1977), p. 187; Lungstrum, p. 166; Jones, p. 26; Veres and Carmichael, p. 25; Mondart, Curtis, and Dobbins, p. 46; Lisack, p. 97; Marvin L. Copes, "The Predictability of Career Choices of High School Seniors," Dissertation Abstracts International, 37-03: 1511-A, 1975; Judith S. Healy, "Factors Related to the Stability of Career Choices of High School Seniors," Unpublished Doctoral Dissertation, Fordham Univ., 1976, p. 82; Sandra Reitz Wilson and Lauriss L. Wise, The American Citizen: 11 Years after High School (Palo Alto: American Institute for Research, 1975), p. 20; Charles B. Jones, An Analysis of Student Follow-up Data for Administrative Decision Making (ERIC No. ED 099 649, 1974), p. 26; John Hillison and Gale Hagee, Career Information Needed by Classroom Teachers (ERIC No. ED 048 452, 1981), p. 18.

<sup>11</sup>Charles Bennett, History of Manual and Industrial Education up to 1807 (Peoria: Charles A. Bennett, 1926), p. 317.

improved education of the work force accounted for more than one-fifth the increase in real national product."<sup>12</sup>

Benefits to the individual derived from vocational preparation include increased earnings and lower rates of unemployment.<sup>13</sup> Vocational training provides the participant with some experience, thereby enhancing his attractiveness as a first-time hired employee. The business hiring this individual has the advantage of lower training costs. This is especially important for industries which have a high employee turn-over rate, such as the food service industry.<sup>14</sup> However, in situations where training costs are not great, the major advantage to the employer may be in terms of learned attitudinal qualities or "industrial discipline" of vocationally-prepared employees.<sup>15</sup>

The need for an understanding of the vocational education system as well as the various person- and job-related factors which influence the career choice process has become increasingly important as numerous and social and economic changes call for efficiency. These elements will be addressed by presenting information in two major

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<sup>12</sup>United States Department of Labor, Manpower Report on the President, 1963, p. XIII.

<sup>13</sup>William G. Conroy, Jr., "Some Historical Effects of Vocational Education of the Secondary Level," Phi Delta Kappan 61 (1979), p. 270; United States Department of Labor, Manpower Report to the President, 1964, p. 100.

<sup>14</sup>Rona Gindin, "P.I.C.s Help Fill Gap in Local Culinary Talent," Restaurant Business (1983), p. 128.

<sup>15</sup>Conroy, p. 270.

categories; the first category is historical: it reviews the major factors which have influenced federal and state legislation relative to vocational education. The second category reviews the major theories concerning vocational decision-making and the research pertaining to the factors influencing the career decision process.

Legislation Leading to the Establishment of Public  
Secondary School Vocational Education Programs

The involvement of the federal government in occupationally-related education at the high school level began with the Vocational Education Act of 1917. During the next 30 years additional funds were provided to maintain and enlarge the program.

Near the "midpoint" of the century it became apparent that the nation's vocational education policy needed to be re-examined in light of the changing technological, social and economic conditions. Following the seminal report of a blue ribbon committee appointed by President John F. Kennedy, the Vocational Educational Act of 1963 was signed into law by President Lyndon B. Johnson.<sup>16</sup> This Act established a new purpose for vocational education. That purpose was to serve the needs of all people, rather than the occupational areas, as had been the case with the original legislation.<sup>17</sup> Special populations highlighted as being in need

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<sup>16</sup>Grant Venn, Man, Education and Work: Post-secondary Vocational and Technical Education (Washington, D.C.: American Council on Education, 1965), p. 127.

<sup>17</sup>United States Department of Health, Education, and Welfare, Education for a Changing World of Work Report of the Panel of  
(footnote continued)

of attention were those experiencing high rates of unemployment.<sup>18</sup> Teacher training programs, curricula, and guidance and counseling services were also delineated as being in need of attention. Increased appropriations were included to fund these programs and services.<sup>19</sup>

It was soon noted that the basic purpose of this Act, to serve the occupational needs of all the people, had not been met.<sup>20</sup> A four-fold increase in federal appropriations and the establishment of national and state advisory councils to evaluate, gain support and inject new ideas into the system were mandated to correct the insufficiencies.<sup>21</sup> The removal of the "less than college grade" provision cleared the way for the federal funding of vocational education programs on the community college level.<sup>22</sup>

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(footnote continued)

Consultants on Vocational Education (Washington, D.C.: U.S. Government Printing Office, 1963), p. 213.

<sup>18</sup>United States Department of Health, Education and Welfare, p. 213.

<sup>19</sup>United States Congress, Senate, Committee on Labor and Public Welfare, Notes and Working Papers Concerning of Programs Authorized Under Vocational Education Act of 1963, 90th Congress, 2nd Session, March, 1968 (Washington, D.C.: U.S. Government Printing Office, 1968), pp. 33-34.

<sup>20</sup>United States Congress, Senate, Committee on Labor and Public Welfare, pp. 31-32.

<sup>21</sup>United States Congress, Senate, Committee on Labor and Public Welfare, p. 54.

<sup>22</sup>United States Congress, Senate, Committee on Labor and Public Welfare, p. 213.



In response to the federal legislation of the 1960's, the Regional Occupational Centers and Programs were begun in California.<sup>23</sup> Currently there are nearly two million students enrolled in these programs.<sup>24</sup> Nearly one-half of the enrollment is at the secondary school level.<sup>25</sup> The programs administered by this system must be in compliance with the California Plan for Vocational Education, California Labor Code, and Government Code, Education Code and Title 5.<sup>26</sup>

### Major Theories of Vocational Choice

Prior to the 1950's little scientific research had been conducted concerning the reasons individuals choose to participate in specific occupational areas. Many of the major theories since the 1950's have two commonalities: first, that the occupational choice process is a developmental one - that is, it continues over a period of years - and second, that the home environment has a primary impact.

Personality, self-concept, and social learning represent three types of theories postulated by the major occupational choice theorists since the middle of the century. Roe posited that the home environment, primarily the parents, shapes a child's attitudes, abilities and

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<sup>23</sup>Wesley P. Smith, A History of Vocational Education in California: 1900-1975 (Sacramento: Office of State Printing, 1979), p. 54.

<sup>24</sup>Legislative Analyst, p. 9.

<sup>25</sup>Legislative Analyst, p. 10.

<sup>26</sup>California, Administrative Code, Title 5, Education, Section 11504(j).



interests.<sup>27</sup> As the child grows older, he selects those occupations which allow him to compensate for unfulfilled needs.<sup>28</sup>

Holland, also ascribing to the personality theory, reported that individuals possess identifiable personality types and are predisposed to select occupations having characteristics congruent with the personality needs. He identified the personality types to include realistic, investigative, artistic, social, enterprising and conventional.<sup>29</sup> Another element contended by Holland was that vocational satisfaction, stability and achievement depend upon the congruence between one's personality type and the work environment.<sup>30</sup>

Ginzberg and others and Super represent the major self-concept theorists. In an earlier writing by Ginzberg and others, it was suggested that three periods have special relevance to the occupational choice process. These periods were defined as fantasy, tentative and realistic.<sup>31</sup> In later writings, Ginzberg recognized that the choice process begins earlier and continues longer than originally presumed.

Work by Ginzberg prompted a study by Super which led to an emphasis on the role of the psychological nature of individuals as a major

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<sup>27</sup>Roe, pp. 69-73.

<sup>28</sup>Roe, p. 72.

<sup>29</sup>Holland, p. 13.

<sup>30</sup>Holland, p. 9.

<sup>31</sup>Eli Ginzberg and others, Occupational Choice: An Approach to a General Theory (New York: Columbia Univ. Press, 1951), pp. 60-72.

contributor to the choice process. He was also one of the first theorists to suggest that an individual's rate and progress of vocational development can be measured.<sup>32</sup> The central theme of Super's self-concept theory is that persons select occupations which allow them to express their perceptions of self in an occupational environment. He divided the progression of vocational development into five life stages: growth, exploration, establishment, maintenance and decline.<sup>33</sup>

Krumboltz proposed the social learning theory of occupational choice when he stated that genetic endowments and special abilities, environmental conditions and events, learning experiences, and task approach skills interact with one another to produce three recognizable behavioral consequences. These consequences were defined as self-observation generalizations, task approach skills and actions.<sup>34</sup> In addition to preference for job-related tasks, actual or observed negative or positive reinforcement measures influence the choice process.<sup>35</sup>

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<sup>32</sup>Donald E. Super and Phoebe L. Overstreet, The Vocational Maturity of Ninth-Grade Boys (New York: Columbia Univ., 1960), p. 34.

<sup>33</sup>Donald E. Super and others, Vocational Development: A Framework for Research, pp. 40-41; Donald E. Super and others, Career Development Self-Concept Theory (New York: College Entrance Examination Board, 1963), pp. 58-64.

<sup>34</sup>Krumboltz, p. 71.

<sup>35</sup>Krumboltz, p. 71.

Research Concerning Occupation Selection  
Influencing Persons and Factors

Researchers have recognized that an individual does not select an occupation in isolation but rather in conjunction with several social institutions. The interaction of the individual with these institutions results in a molding, expanding and refining of human behavior characteristics. According to many researchers, the home environment has the most significant impact on an individual's behavior characteristics. The school environment also contributes significantly to the socialization process.

The family into which a child is born may be the single most important factor in his life. The family environment gives the child elements such as social standing, economic status and religious mores, as well as race and ethnicity. The family has a major impact on the choice process by the aspirations and expectations it holds for the child and the opportunities it can afford him.<sup>36</sup>

Parents influence a child's occupational decision process by both direct and indirect modeling.<sup>37</sup> In the rating of influencing factors by

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<sup>36</sup>Roe, p. 128.

<sup>37</sup>Auster, pp. 253-63; Robert M. Jackson and Naome M. Mears, "Father Identification, Achievement, and Occupational Behavior of Rural Youth: Five Year Follow-up," Journal of Vocational Behavior, 10 (1977), pp. 82-91; Ruth M. Lungstrum, Selected Factors Related to Occupational Preference High School Students Enrolled in Vocational Education Programs in the Wichita Public Schools (ERIC No. FD 074 257, 1973), p. 162.

students, parents generally ranked near the top of the list.<sup>38</sup> However, many parents do not possess the specific and relevant occupational information needed by the youth and their influence may actually limit the options available.<sup>39</sup> Teachers, counselors and school administrators influence students' vocational choices by acting as role models and by supplying the student with necessary information. The influence of teachers is generally considered to be greater than that of counselors.<sup>40</sup> Lungstrum discovered that school counselors headed the list of "least

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<sup>38</sup>J. P. Lisack, Educational and Employment Plans and Occupational Choices of Indiana High School Seniors in the Class of '75 (ERIC No. ED 120 565, 1975), p. 98; Helen C. Veres and Mary M. Carmichael, Expanding Student Opportunities in Occupational Education: Methods to Reduce Sex-Role Stereotyping in Program Choice (ERIC No. ED 217 180, 1980), p. 24; C. L. Mondart, C. M. Curtis and L. H. Dobbins, Educational and Occupational Aspirations and Expectations of High School Youth (ERIC No. ED 048 452, 1970), p. 43; Lungstrum, p. 171; Ralph J. Patrick, "Factors Related to Occupational Preference of Selected Vocational-Technical Education Students in Delaware County, Pennsylvania," Unpublished Doctoral Diss., Univ. of Pittsburgh, 1980, p. 71; Morgan V. Lewis and others, Non-Traditional Vocational Educational Programs for Women. Final Report (ERIC No. ED 136 025, 1976), p. 5; Nancy W. Head, A Study of the Decision-Making Process of New Hampshire School Senior Class of 1980 (ERIC No. ED 191 405, 1981), p. 8.; C. N. Russell, 1980 Survey of Grade 12 Students Post-secondary Plans and Aspirations (ERIC No. ED 201 225, 1981), p. 8.

<sup>39</sup>Roslyn K. Kane and Pamela Frazee, Occupational Choice: Do Traditional and Non-Traditional Women Differ? (ERIC No. ED 167 742, 1978), p. 10.

<sup>40</sup>Veres and Carmichael, p. 25; Susan A. Busow and Karen Glasser Howe, "Model Influence on Career Choices of College Students," Vocational Guidance Quarterly, 27 (1979), pp. 239-43; Lungstrum, p. 166; Charles B. Jones, An Analysis of Student Follow-Up Data for Administrative Decision Making, (ERIC No. ED 099 649, 1974), p. 26; John Hillison and Gale Hagee, Career Information Needed by Classroom Teachers, (ERIC No. ED 048 452, 1981), p. 9.

helpful" persons.<sup>41</sup> Other studies have attested to similar findings.<sup>42</sup> Lewis supported the role of counselors by reporting that often they feel that vocational counseling is not a major part of their responsibility nor is it an expectation for them by the school. They also are assigned responsibility for many students.<sup>43</sup>

Generally the influence of peers has been found to be less than that of parents or teachers.<sup>44</sup> Russell found that friends ranked second in influence to teachers except for the college bound group. This population ranked "college or university student I know" as having the second greatest influence.<sup>45</sup> Lungstrum concluded from her research that females were more influenced by friends than were male students.<sup>46</sup>

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<sup>41</sup>Lungstrum, p. 172.

<sup>42</sup>Jones, p. 26; Carla Derryberry and others, Wanted for Breaking with Tradition and Entering Today's Careers: Summary Report, (ERIC No. ED 192 827, 1979), p. 8; Henrietta Schwartz, Equity from an Anthropological Perspective. Research and Development Series No. 214M, (ERIC No. ED 215 169, 1981), p. 18; Ruth Shinn, "Up, Up the Ladder," Illinois Career Education Journal, 30 (1973), pp. 8-13; Elaine F. Alden and Berniece B. Seiferth, Factors Influencing Choice of Technical Careers by Woman and Minorities, (ERIC No. ED 188 651, 1979), p. 11; Lewis and others, p. 162.

<sup>43</sup>Lewis and others, pp. 151-152; Lungstrum, p. 177.

<sup>44</sup>Lungstrum, p. 173; Richard D. Seleny, "A Study of Consistency and Permanence of Occupational Choice of the Graduate of the University of Southern Colorado for the Years of 1968, 1970, 1972, and 1974," Unpublished Doctoral Diss., Univ. of Wyoming, 1978, p. 61; Veres and Carmichael, pp. 24-25.

<sup>45</sup>Russell, p. 8.

<sup>46</sup>Lungstrum, p. 173.

Little research has been performed which included siblings as an influencing factor choice. Of the studies which included siblings, the results showed that this group exerts relatively little impact on the occupational choice process.<sup>47</sup>

Considering the various job-related factors, personal interest and expected salary hold positions of primacy in influencing the choice process.<sup>48</sup> Results of the TALENT study which investigated the ranking of 400,000 students on a nationwide basis concerning the relative importance of various job characteristics disclosed that interest in job tasks ranked number one.<sup>49</sup>

Work experience or contact with someone employed in the area have been shown by research studies to have a positive influence on an individual's choice to enter the occupational area or closely related field. Parents and students queried by Goulet and Head noted that "skill developing part-time jobs during high school were the most desired form of job information for students."<sup>50</sup> Generally, the impact of these

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<sup>47</sup>Lungstrum, p. 166; Jones, p. 26; Veres and Carmichael, p. 25; Mondart, Curtis, and Dobbins, p. 46.

<sup>48</sup>Jones, p. 26; Lisack, p. 97; Goulet and Head, p. 9.

<sup>49</sup>Sandra Reitz Wilson and Luariss L. Wise, The American Citizen: 11 Years after High School, (Palo Alto: American Institutes for Research, 1975), p. 20.

<sup>50</sup>Goulet and Head, p. 13.

variables is not as strong as are those of interest and expected salary.<sup>51</sup>

A nationwide study reported that 60 to 70 percent of the respondents indicated that their high schools offered classes designed to increase career awareness. However, less than one-half of the students had participated in the program.<sup>52</sup>

The reading of job-related information was rated as helpful by many students.<sup>53</sup> The research relative to media sources on the vocational choice process has generally indicated that media occupational portrayals are sex stereotypical.<sup>54</sup> Lungstrum reported that books, magazines, pamphlets, television and radio rated at the bottom of the list of occupational choice influencers for her sampled occupation.<sup>55</sup>

### The Problem

Secondary school students frequently have the freedom to choose an occupational area from among several choices. Often, at a young

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<sup>51</sup>Jones, p. 26.

<sup>52</sup>Lewis and others, p. 151.

<sup>53</sup>Thomas L. Harris and Jean S. Wallin, "Influencing Career Choices of Seventh-Grade Students," Vocational Guidance Quarterly, 27 (1978), p. 53; Richard F. Haase and others, "Effect of Positive, Negative, and Mixed Occupational Information on Cognitive and Affective Complexity," Journal of Vocational Behavior, 15 (1979), p. 294.

<sup>54</sup>Schwartz, p. 18; Sarah H. Sternghanz and Lisa A. Serbin, "Sex Role Stereotyping in Children's Television Programs," Developmental Psychology, 10 (1974), pp. 710-715.

<sup>55</sup>Lungstrum, p. 167.



age, the student is called upon to make this decision, one which has a substantial impact on the direction and quality of his life. Several factors which may influence a student to enter an occupational field have been researched and similarities as well as significant differences in the results have been noted. This study investigated the perceptions of students and teachers concerning the degree of influence of various persons and factors on the individual's decision to enroll in a food service-related Regional Occupational Center and Program course of study and whether these elements are different considering the various categories of post-high school plans. Information also was gathered concerning the demographic- and person-related factors which may influence the selection of a post-high school graduation plan by a student.

#### Purpose of the Study

In view of the costs and commitments associated with the vocational preparation of youth and the importance of occupational choice on the future well-being of the individual and his closely-associated family, the focus of this study was to evaluate the factors influencing career choice and the variance of these factors relative to post-high school graduation plans. Specifically, this study addressed the following hypotheses:

1. There is no difference between the means of the teachers' and the students' responses with respect to the degree of importance of the influencing persons and factors on the students' decisions to enroll in a food service-related course.



2. There is no difference between the means of the students' responses with respect to influencing persons or factors on the basis of selected demographic- and person-related factors.
3. There is no difference among the proportions of the students' responses with respect to post-high school graduation plans on the basis of selected demographic- and person-related factors.
4. There is no difference among the proportions of the students' responses with respect to satisfaction with decision to enroll in a food service-related course and satisfaction with school in general.
5. There is no difference between the proportions of the teachers' and the students' responses with respect to perceptions of post-high school graduation and course enrollment plans.

#### Delimitations and Assumption

This study was delimited to the accessible population of students and teachers participating in food service-related courses at Regional Occupational Centers and Programs in California public high schools during the 1983-84 academic year. The study was based on the assumption that the questionnaires were sufficiently valid to yield data from which useful general conclusions could be drawn.

### Definition of Terms

To clarify the research design and to aid in the interpretation of the results of this study, the following technical definitions will be used:

Entry Level - Level of job which can be filled by a person with no previous full-time work experience and with no formal education beyond high school. However, the job may require that its holder possess specialized skills before assuming the position, but these skills should be obtainable at the high school level and not require post-secondary education for their acquisition.<sup>56</sup>

High School Regional Occupational Center and Program (ROC/P) Student - A high school or post-high school student enrolled in an ROC/P class.

Regional Occupational Center (ROC) - A vocational or technical training program established and maintained in a separate, identifiable physical facility pursuant to Article 1, Chapter 9, Part 28, Division 4, Title 2 of the California Education Code.<sup>57</sup>

Regional Occupational Program (ROP) - Vocational or technical training program which meets the criteria and standards of instructional programs

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<sup>56</sup>George Hammer, "Business Employment for High School Graduates," NASSP Bulletin, 59 (1975), p. 74.

<sup>57</sup>California, Administrative Code, Title 5, Education, Section 11501(a).

in Regional Occupational Centers which is conducted in a variety of physical facilities which are not necessarily situated at a single site.<sup>58</sup>

Training Site - A specific area in a local business, industry, or service organization or school faculty where a student in a vocational education program receives on-the-job training as part of a cooperative education program.<sup>59</sup>

Vocational Education - A program of education below college grade organized to prepare the learner for entrance into a particular chosen vocation or to upgrade employed workers, or for training or retraining purposes. It is offered at schools or classes under public supervision.<sup>60</sup>

### Procedures

#### Population

The accessible instructor population for this study consisted of all the teachers of food service-related courses at California Regional Occupational Centers and Programs during the 1983-84 academic year. A list of the names and addresses of the instructors was obtained from the Department of Vocational Education, Sacramento, California. The accessible student population for this study was comprised of the individuals

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<sup>58</sup>California, Administrative Code, Title 5, Education, Section 52302.

<sup>59</sup>Carter V. Good, Dictionary of Education, (New York: McGraw-Hill, 1973), p. 557.

<sup>60</sup>Good, p. 645.

enrolled in one section of a food service-related course taught by each of the participating teachers.

### Research Methodology

The survey instruments used in this study were designed following a review of the literature relative to factors previously postulated to influence career decision-making as well as those factors the researcher wished to investigate. Two five-point Likert scales were developed, one for students' responses, and one for teachers' responses. Both instruments contained demographic questions as well as those relating directly to the various person- and job-related factors influencing the decision to enroll in the course.

### Instrument Validation and Reliability

The survey instruments were reviewed critically for content validity and readability by a panel of three professionals who were knowledgeable about the food service-related courses at Regional Occupational Centers and Programs. Comments and suggestions from the validation panel were evaluated by the researcher and used as a basis for revising and clarifying the instrument. After content validity was confirmed, the instruments were pilot tested using a Butte County Regional Occupational Center food service class for the student population and teachers from four Northern California counties as the instructor population. The test-retest technique was utilized to assess the reliability of the instruments. The tests were separated by a three-week time period. The Pearson Product-Moment Correlation Method was applied to each questionnaire item to determine reliability.

### Data Collection Procedures

Packets containing cover letters summarizing the research project and explaining the expected benefits of this study were sent to all the teachers of the food service-related Regional Occupational Programs and Centers course in California.

The packets also contained 20 student and one teacher questionnaires, as well as a like quantity of sharpened pencils and a stamped, addressed envelope for the return of the completed questionnaires. The cover letter stated a desired date of the return of the questionnaires to be two weeks from the mailing of the packets. Three weeks later, letters encouraging the non-responding teachers to participate were mailed. Packets received four weeks after the mailing of this letter were included in the study results. A 70 percent response was achieved.

### Data Analysis

The questionnaire had three foci. The first portion of the survey instrument was to determine the degree of influence various person- and job-related factors have on students' decisions to enroll in an Regional Occupational Center and Program food service-related course.

A second portion was to determine whether the degree of these influencing factors varied according to post-high school graduation plans. A comparison of the teachers' and students' perceptions of the degree of influence of the various factors on the students' decision to enroll in this course of study was determined by responses from the two groups constituted the third focus.

Both descriptive and inferential statistics were used to analyze the data. Analysis of variance and chi square were used to show significant differences. Those items showing significant differences ( $p .05$ ) suggested rejection of the null hypothesis. All calculations were accomplished with the use of the Statistical Package for the Social Sciences (S.P.S.S.) program.

#### Significance of Study

This study has significance for both secondary and post-secondary administrators. On the secondary level, the significance of this study may be viewed from the perspectives of educational administration planning relative to meeting the needs of the students and to manpower and facility planning. It is important that secondary school teachers and administrators be cognizant concerning the degree of influence exerted by a variety of persons and factors which impact on the occupational decision-making process. This information, as well as knowledge about factors which modify the effect of the influencing persons and factors, will enable school administrators to do effective long-term personnel and facility planning.

Especially in times of a declining student population and state budgetary support, school personnel need to target their efforts in disseminating occupational information in ways which will be most efficient and effective. Knowledge of the influencing factors and their inter-relationships will enable school personnel to have greater insights into ways of being supportive of students by providing them with the

necessary skills, knowledge and attitudes to meet the challenges of the world of work.

On the post-secondary level, the results of this study are of benefit to food service-related personnel and outreach officers at two- and four-year colleges and universities. As a result of this investigation, these persons will gain information about the students enrolled in Regional Occupational Programs and Centers food service-related courses of study. Included in the information obtained is the numbers of students planning to attend the institutions of higher education and the influencing factors affecting their occupational choice. Also, information relative to the perceptions of the limiting factors by those students who would like to attend a two- or four-year college or university but plan to not attend is revealed. By becoming aware of the limiting factors, the involved personnel can then address these factors.

#### Organization of Study

The study is organized in a manner which presents the fundamental and relevant research components. The following chapters are included: Chapter 2 presents a review of the related and relevant literature. Included is a discussion containing some justifications for secondary school vocational programs. Also included is a discussion of the federal and State of California legislation relative to the establishment of Regional Occupational Centers and Programs. The theories concerning vocational choice and research pertaining to factors impacting on the choice process also are presented. The procedures utilized to

develop the survey instrument, select the sample and analyze the data are contained in Chapter 3. Chapter 4 is a presentation and in-depth analysis of the data collected. A summarization of the study, conclusions and recommendations for further research are included in Chapter 5, the final chapter of the dissertation.



## CHAPTER 2

### Review of the Literature

The purpose of this study was to evaluate the various person- and job-related factors which influence students to enroll in a high school Regional Occupational Center and Program food service-related course of study. Also investigated was the variance of these factors relative to the students' post-high school plans. In order to place this study in proper perspective, the literature review is focused on five topics; first, some justifications for high school vocational education programs; second, a brief historical overview of the development of public secondary school vocational education; third, a description of the Regional Occupational Centers and Programs; fourth, the major theories relative to the occupational decision-making process; fifth, a summarization and analysis of literature concerning factors influencing occupational choice.

#### Some Justification for Public Secondary School Vocational Education Programs

The place of vocational education in the public school system has been debated for decades. In the 1800s proponents of vocational education cited the tangible and intangible benefits to the individual and to society. The opponents of the programs stated the need for students

to concentrate in the academic subjects areas.<sup>1</sup> Controversy concerning the value of vocational education and its role in education continues.

This section will address some of the areas of concern. The benefits of vocational training can be noted by examining the economic and the non-economic returns. The economic returns include increased wage earnings and lower rates of unemployment. These factors are of benefit to the individual and to the society which reaps the advantages of the higher tax statuses and lesser unemployment and welfare costs.<sup>2</sup> Job satisfaction, direction in life, and reduced crime rates are generally considered to be non-economic or indirect benefits of vocational education.<sup>3</sup>

The non-economic attributes are difficult to quantify and to analyze.<sup>4</sup> Dr. Gene Bottoms, Executive Director of the American Vocational Institute, succinctly illustrated these benefits when he stated, "Every vocational education success prevents a potential social problem. Thus vocational education can protect young people from feeling aimless

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<sup>1</sup>Charles A. Bennett, History of Manual and Industrial Education 1870 to 1917 (Peoria: Charles A. Bennett, 1937), p. 320.

<sup>2</sup>Theodore Abramson, Carol Kehr Tittle and Lee Cohen, Handbook of Vocational Education Evaluation (Beverly Hills: Sage, 1980), pp. 206-207; John F. Thompson, Foundations of Vocational Education (Englewood Cliffs: Prentice-Hall, 1973), pp. 23-24; Tim L. Wentling, Evaluating Occupational and Educational Training Programs (Boston: Allyn and Bacon, 1983), pp. 350-356.

<sup>3</sup>Abramson, Tittle and Cohen, p. 207.

<sup>4</sup>Abramson, Tittle and Cohen, pp. 213-214; Harry G. Silberman, "Non-Economic Returns of Vocational Education," VocEd, 57 (1981), pp. 43-45.

and helpless.... It can keep people off the unemployment lines and away from dependency on welfare."<sup>5</sup>

Opponents of the vocational preparation programs state that the costly programs benefit only a few, that many dollars are spent on individuals who may never become productive members of society, and that only a small segment of the business community realizes benefits from the programs.<sup>6</sup> These issues will be addressed in the following paragraphs which review the results of several longitudinal studies as well as other research projects.

The differences in earnings between vocational program graduates and non-program participants may be an important measure of the benefits of vocational education to the individual and to society. However, the literature does not present a clear-cut economic advantage over lifetimes for participants in high school vocational training courses. Mertens recently reviewed the results of three nationwide longitudinal studies which were carried out to determine the effectiveness of vocational education programs. The information reported was obtained from the National Longitudinal Surveys of Labor Market Experience, Youth Cohort (NLS-Youth); National Longitudinal Surveys, the Younger Adult Workers (NLS-YAWS) study conducted by the National Center for Research in Vocational Education; and the National Longitudinal Study of

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<sup>5</sup>Gene Bottoms, "Vocational Education Looks to the Future," VocEd, 57 (1981), pp. 10-11.

<sup>6</sup>Abramson, Tittle and Cohen, p. 213.

the High School Class of 1972 (Class of '72).<sup>7</sup> Mertens concluded that vocational education is "...good for some of the people some of the time. With the addition of post-secondary training it becomes even better for some of the people some of the time."<sup>8</sup> Specifically, she found that earnings advantages to vocationally-trained individuals varied according to course of study and gender. Additionally, she discovered that female participants in non-typical programs for female students had higher earnings than their counterparts in traditional sex-role courses of study.<sup>9</sup>

Woods reviewed the characteristics of five national longitudinal data sets. Studies investigated included Project Talent; Youth in Transition; NLS-YAWS; NLS-Youth and Class of '72. The author concluded that these studies varied considerably from each other with respect to populations sampled, number of respondents, and dates of initial and follow-up surveys. She concluded that these studies do not adequately address the value of vocational education.<sup>10</sup> This view was further supported by Silberman. He stated that "...the longitudinal studies say more about teaching, inequality, and social stratification than about particular program effectiveness."<sup>11</sup>

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<sup>7</sup> Donna M. Mertens, "The Vocational Education Graduate in the Labor Market," Phi Delta Kappan, 64 (1983), pp. 360-361.

<sup>8</sup> Mertens, p. 361.

<sup>9</sup> Mertens, p. 360-361.

<sup>10</sup> Elinor M. Woods, "National Longitudinal Studies and Data Sets," VocEd, 55 (1980), pp. 35-38.

<sup>11</sup> Silberman, p. 45.

Conroy and Woods addressed the issue of conflicting data concerning the benefits of vocational education. Conroy, a long-time supporter of vocational education programs, stated that erroneous conclusions can be reached concerning the earning potential of vocationally trained individuals as compared with students from other programs if ability, socioeconomic status of parents and other intervening factors are not controlled.<sup>12</sup>

Vocational preparation may be of benefit to individuals and to society in ways which cannot be directly measured. Vocational education has historically served as compensatory programs for the poor, handicapped, and disadvantaged.<sup>13</sup> Alluding to this another author stated, "Costs for education and training programs are sometimes obscure but benefits can never be expressed purely in financial terms."<sup>14</sup>

Woods concurred with Conroy when she stated that a part of the difficulty in making comparisons among student groups concerning the benefit of vocational education lies with the populations studied. Students voluntarily select to enroll in a vocational course of study; therefore, no ideal control group exists. Students from other curriculum tracks vary in characteristics from vocational program enrollees. The uncontrolled labor market conditions, nationally or in locally-impacted

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<sup>12</sup>William B. Conroy, Jr., "The Economic Effects of Vocational Education," VocEd, 55 (1980), pp. 39-41.

<sup>13</sup>Conroy, "The Economic Effects of Vocational Education," pp. 39-41.

<sup>14</sup>Wentling, p. 353.

areas, also serves as a variable when comparing vocationally and non-vocationally prepared groups.<sup>15</sup>

Conroy analyzed data from "Class of '72" and found that male high school graduates who did not attend college but had taken vocational courses earned more money than those who had not been in the training programs. These differences were noted for students of high, low, and average scholastic ability. It was also noted that students of low ability who had taken vocational courses earned more money than non-program participants of average ability. Further evidence indicated that high and average ability female vocational program students earned more money annually than did high school graduates who had not participated in the training programs. These findings were supported by a 1976 Massachusetts study.<sup>16</sup>

Increased ability to locate a job and lower rates of unemployment are factors generally held to be advantages for vocationally prepared youths over non-program participants. The National Center for Educational Statistics reported that 71.39 percent of program completers were employed in areas related to their training or were involved with further education programs. Additionally, the unemployment rate for vocational

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<sup>15</sup>Woods, pp. 35-38.

<sup>16</sup>Conroy, "The Economic Effects of Vocational Education," pp. 39-41.

program graduates was ten percent in contrast with 16.5 percent for members of the general population in the same age group.<sup>17</sup>

Reporting findings similar to those of the National Center for Educational Statistics was the NLS-YAWS study. It showed that students who had taken several high school vocational credits were more likely to be employed and to be involved with higher-paying jobs related to their areas of training.<sup>18</sup> These findings were supported in a 1980 report by Mertens and others.<sup>19</sup> Findings reported by Doeringer and Vermeulen revealed that 60 percent of the vocational program graduates, 48 percent of the general curriculum, and 15 percent of the academic curriculum graduates were in the labor force the October following high school matriculation.<sup>20</sup> However, other researchers have found that that difference between program participants and non-participants fades with time.<sup>21</sup>

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<sup>17</sup>Gene Bottoms and Patricia Copa, "A Perspective on Vocational Education Today," Phi Delta Kappan, 64 (1983), pp. 348-354.

<sup>18</sup>Bottoms and Copa, p. 352.

<sup>19</sup>Bottoms and Copa, p. 352.

<sup>20</sup>Peter B. Doeringer and Bruce Vermeulen, Jobs and Training in the 1980s (Boston: Martinus Nijhoff, 1981), p. 118.

<sup>21</sup>James O'Toole, Work, Learning and the American Future (San Francisco: Jossey-Bass, 1977), p. 114; Jacob I. Kaufman, An Analysis of the Comparative Costs and Benefits of Vocational versus Academic Education in Secondary Schools (University Park: Institute for Research on Human Resources, Pennsylvania State University, 1967); Doeringer and Vermuelen, pp. 97-98.

The Vocational Education Amendments of 1976 set "employment related to training" as a measure of effectiveness of vocational preparation programs. However, this may not be a valid criterion since many factors other than the area of training (i.e., labor market conditions and personal considerations) impact upon job selection.<sup>22</sup> Studies have shown that approximately one-third of the high school vocational graduates obtained their first job in the area of training; however, an additional 40 percent were employed in related areas.<sup>23</sup>

Since employers are the "consumer" of the knowledge and skills learned by program participants the attitude of these individuals may be relevant to the assessment of the value of high school vocational education programs. The industrial discipline learned by the student is an important outcome of vocational preparation, particularly in job areas where training costs are not great.<sup>24</sup>

Employer satisfaction with vocational program graduates was noted to be positive among three-fourths of the surveyed firms. Employers stated that vocational training makes potential employees more

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<sup>22</sup>Conroy, "The Economic Effects of Vocational Education," pp. 39-41; Alan Weisburg, "What Research has to Say About Vocational Education and the High School," Phi Delta Kappan 64, pp. 355-359.

<sup>23</sup>Conroy, "The Economic Effects of Vocational Education," pp. 39-41.

<sup>24</sup>Conroy, "Some Historical Effects of Vocational Education on the Secondary Level," pp. 270-271; Silberman, pp. 43-45.



attractive.<sup>25</sup> Another study which surveyed members of the National Association of Manufacturers showed similar results.<sup>26</sup>

Vocational training programs are costly ones and controversy exists concerning the comparison of benefits to the costs. Available data originates from studies done more than a decade ago. Abramson, Tittle and Cohen reported on seven studies conducted in the 1960s and 1970s for which average rates of return on the educational investment were calculated. This involved a calculation of program costs per student and a comparison of the greater earnings of the vocational program graduates in contrast with non-program participants. These studies showed a high of 31.8 percent rate of return to a low of five percent. No quantitative measure of non-economic benefits were made.<sup>27</sup>

In view of the high costs associated with vocational programs, a suggestion has been offered that only those students identified as mostly likely to succeed in the program and to pursue it or a related area following graduation be allowed to participate. The argument to this contention is that the students who are likely to fail in the program are also likely to be at risk not to succeed in the employment arena. Denying job training for these individuals may set them on a course which eventually leads to unemployment and dependency on the welfare system. Employers generally seek to minimize costs associated with hiring by

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<sup>25</sup>Bottoms and Copa, p. 353.

<sup>26</sup>Bottoms and Copa, p. 353.

<sup>27</sup>Abramson, Tittle, and Cohen, pp. 308-313.

selecting those applicants with the least expense. Vocational training allows many individuals to be more attractive to employers and thereby enable them to compete effectively in the job arena.<sup>28</sup>

Justification for Food Service Public Secondary School  
Vocational Education Programs

In terms of manpower characteristics, the food service industry is described as being labor intensive; it has high labor costs per dollar of sales and it experiences a high rate of employee turnover. In many respects the industry is still largely a handicraft one, and, therefore, it has not had the advantage of large cost savings generally associated with mechanization and the resulting mass production of goods. It is also an industry heavily dependent on small portion production, quality preparation and attractive product display.<sup>29</sup>

The high rate of employee turnover, estimated to be as high as 20 to 30 percent per year,<sup>30</sup> is due to several factors. The relative abundance of jobs in this service industry, the ease of job promotion and transfer, and the failure of some employees to consider their work as valuable are some of the factors. The cost of hiring and training a new worker may be as high as eight percent of the individual's annual

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<sup>28</sup>Doeringer and Vermeulen, pp. 82-85.

<sup>29</sup>John B. Knight and Lindal H. Kotschevar, Quantity Food Production, Planning, and Management (Boston: CBI, 1979), pp. 2-3.

<sup>30</sup>"The 1983 Job Survey: Is Food Service Behind The Times?," Restaurants and Institutions, 1 (1983), pp. 49-50.

wage.<sup>31</sup> This cost can be reduced if vocationally-trained persons are hired. The employee can expect to obtain an initial pay level and position beyond that which he could obtain otherwise.<sup>32</sup>

The quantity production of prepared food requires trained culinary workers who possess a body of technical knowledge. A variety of training programs is available to prepare persons who wish to pursue a career in the industry. Many establishments maintain their own training programs for employees. An increasing number of facilities find this method to be expensive and inefficient and are requiring applicants for entry-level positions to have experience or vocational training.<sup>33</sup>

A small number of post-secondary food service educational institutions exist, primarily designed for the preparation of chefs. Several four-year colleges and universities offer majors in food service, restaurant management or related areas. Graduates of these programs often seek employment in restaurant management or in positions which deal with fiscal control and growth.<sup>34</sup> In California, the majority of the training of individuals for entry-level positions is done through the

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<sup>31</sup>Knight and Kotschevar, p. 3.

<sup>32</sup>Rona Gindin, "P.I.C.'s Help Fill Gap in Local Culinary Talents," Restaurant Business, 82 (1983), p. 128.

<sup>33</sup>Gindin, p. 128.

<sup>34</sup>Knight and Kotschevar, p. 5.

Regional Occupational Centers and Programs, which are administered through the public school system.<sup>35</sup>

#### Description of the Food Service Industry

The food service industry is involved with the feeding of large numbers of people. It has existed on a limited scale throughout much of the history of mankind, but the great diversity and complexity of the industry are relatively new.

The rapid rise in the growth of the food service industry which began during the 1950's and is continuing at the present time is due to several factors. First, the American society is a highly mobile population due to career and economic influences or to personal choice. Reliable and relatively inexpensive transportation also contributes significantly to the mobility of the population. Second, the population has shifted from being a rural-based society to an urban-based one. This has allowed for large concentrations of the population to be served by the industry. Third, the composition of the work force has changed. More women are employed outside of the home resulting in a greater amount of family discretionary income and concurrently a greater restriction on the time available for food preparation tasks. Fourth, the population of the United States has increased. The "baby boom" during

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<sup>35</sup>William L. Kahrl, Meeting Challenges in Food Service: A Guide for Solving Present and Future Problems (New York: Lebhar-Friedman, 1974), p. 170.

the 1950's and the growing members of senior citizens have also contributed to the growth of the food service industry.<sup>36</sup>

The food service industry is comprised of all the commercial eating and drinking places in the United States. Included in this classification are all the "fast food" outlets, military, school and hospital cafeteria and restaurants, ranging from small family-operated cafes to haute cuisine facilities. This industry is an important factor in the nation's economy, and the social and recreational life of the American people.<sup>37</sup>

The food service industry is one of the largest, most dynamic, and rapidly growing industries. The annual payroll from the nearly 300,000 establishments<sup>38</sup> was in excess of 22 billion dollars<sup>39</sup> in 1980. It consistently ranks among the top five industries in the nation in dollar income. One in every three food dollars is now spent in the food service industry and projections are that it will soon expand to one in two food dollars. The average annual growth of the industry for the past several years has been six percent.<sup>40</sup>

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<sup>36</sup>John J. Casson, "The Economic Importance of the Hospitality Industry," in Practice of Hospitality Management, eds. A Pizam, R. C. Lewis, and P. Manning (Westport: AVI, 1982), pp. 13-15.

<sup>37</sup>Casson, p. 4.

<sup>38</sup>U.S. Department of Commerce, Bureau of the Census, County Business Patterns: 1980 United States, County Business Patterns 80-1 (Washington, D.C.: U.S. Government Printing Office, 1980), p. 69.

<sup>39</sup>U.S. Department of Commerce, Bureau of the Census, p. 69.

<sup>40</sup>Knight and Kotschevar, p. 2.

Four and one-half million persons are employed in this industry.<sup>41</sup> This constitutes more than four percent of the total number of employed persons.<sup>42</sup> Individuals in the industry have job titles which include busboy, waiter-waitress, maitre d'hotel, cook, and chef. All totaled, there are approximately seventy job titles in common usage in the food service industry.<sup>43</sup> The food service industry is truly big business in terms of income generated and employees hired.

A Brief Historical Overview of the Development  
of Public Secondary School  
Vocational Education

In the 1700's Benjamin Franklin, a strong supporter of education and practical education in particular stated, "[H]e who hath a trade hath an estate."<sup>44</sup> Vocational education is based on the premise of providing individuals with an education which will allow them to have saleable skills. Vocational education is as old as mankind. However, the practice of training individuals for vocations outside the family or small community group setting is of relatively recent origin.

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<sup>41</sup>U. S. Department of Commerce, Bureau of the Census, p. 69.

<sup>42</sup>Casson, p. 13.

<sup>43</sup>Villela, p. 4.

<sup>44</sup>Benjamin Franklin, Poor Richard: An Almanack (1757; reprint, New York: McKay, 1976), p. 108.

### Ascription

The first form of vocational education, ascription, involved parents or other adult members of a community teaching the youth the necessary survival skills of hunting, building and gathering. Later, craft and trade skills were transmitted to the young, either on a deliberate or on a more informal basis in which the trainee merely observed and imitated behaviors of the more experienced persons.<sup>45</sup>

### Apprenticeship

Apprenticeship programs, the teaching of a trade or craft by a master to a student, called an apprentice, evolved when society emerged into an era of specialization. This form of vocational education lasted for centuries.<sup>46</sup> The craftsmen of specific trades joined together in organizations known as guilds or associations. These organizations established the rules for the training programs, thereby providing a systematic approach for imparting specialized skills and knowledge to a new generation of craftsmen. The master was required to provide for the academic education as well as the vocational training of the apprentice.

The American craftsman's responsibilities for the education and training of an apprentice was similar to that of the European system except that in the United States the apprenticeship system was generally under the jurisdiction of the town and colony authorities.

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<sup>45</sup>Paul H. Douglas, "Apprenticeship," Encyclopaedia of the Social Sciences (1930 ed.), pp. 144-45.

<sup>46</sup>Douglas, p. 144.

### The Decline of Apprenticeships

The decline of the apprenticeship system in the United States occurred concurrently with the industrial revolution. The apprenticeship system was suitable for the teaching of a craft, but it was not congruent with the factory production of goods.<sup>47</sup>

### Federal Legislation Relative to the Establishment of Public Secondary School Vocational Education Programs

Several legislative events gave impetus to the development of vocational education programs in the public secondary schools. The precedent of granting federal funds for vocational education programs had its inception with the Morrill Act of 1862 which provided for post-secondary school vocational education. The historic Smith-Hughes Act of 1917 was the first federal law supporting vocational education at the secondary school level. It was followed by other laws which expanded program offerings and funding. The landmark Vocational Education Acts of 1963 and 1968 resulted in the system becoming more responsive to societal needs. Recent legislation has strengthened the system which has continued to meet a changing society's demands. These selected legislative events are reviewed in this section.

Pre-1900: Precedent-setting legislation. The 19th century was an era of great concern by the American public for the academic and vocational education of its youth. The apprenticeship system, the

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<sup>47</sup> Florence Mishnun, "Labourers, Statutes of," Encyclopaedia of the Social Sciences (1933 ed.), p. 6.



previous method of educating the young had declined and no practical alternative had evolved.

In the latter part of the century, private charity schools, mechanics' institutes and lyceums, and technical institutes evolved nationwide, though on a limited basis, to meet the educational needs of the children of the common people.<sup>48</sup> The evolution of these schools and institutes marked the conclusion of ascription and apprenticeships as being the primary forms of vocational preparation and the commencement of vocational and academic education being a part of a more formal educational system.

The inclusion of vocational education into the public school system did not come easily. A debate raged for several decades, proponents of its placement stating the benefits to the individual and to society while the opponents cited the concern that the hard-fought right to a free public education for all children may be lost. It was in this social climate that the law providing federal support for vocational education at the college level was enacted.

1900-1927: The historic act. The landmark and historic Vocational Education Act of 1917, PL 64-347, also known as the Smith-Hughes Act, was signed into law by President Woodrow Wilson. It was based on a report by the Commission of National Aid to Vocational Education which was established by the President to study and to recommend a framework

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<sup>48</sup>Bennett, History of Manual and Industrial Education up to 1870, p. 317.

for vocational education in American public schools. The report contained guidelines concerning the types of schools which were to be aided by the receipt of federal funds for vocational preparation. The schools were to be: (a) "those supported and controlled by the public," (b) "less than college grade," and (c) "designed to prepare boys and girls over fourteen years of age for useful or profitable employment in agriculture and in trades and industries." <sup>49</sup>

1920-1950: Supplementary legislation. Several legislative acts were passed by the various Congresses in the first half of the 20th century. These acts supplied funds and expanded program offerings beyond that provided in the Smith-Hughes Act. The George-Reed Act (1929) included public school home economics vocational education programs with the programs eligible for federal funding. It also provided for additional federal monies for agricultural and home economics vocational programs. During the 1930s the George-Ellzey Act (1934), George-Dean Act (1937) and George-Barden Act (1947) provided additional funds and further strengthened vocational education programs at the high school level. <sup>50</sup>

1950-1962: Socially-responsive legislation: The technological revolution which followed World War II had tremendous effects on the

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<sup>49</sup>Bennett, History of Manual and Industrial Education 1870 to 1917, p. 547.

<sup>50</sup>Hawkins, Prosser, and Wright, pp. 398-401.

nation's society and economy. These impacts were noted in federal legislation commencing in the 1950's and continuing to the present time.

The National Defense Education Act was one of the first legislative events to arise from the technological revolution. It was enacted by Congress in 1958 and was a direct consequence of the "space race" which began with the Russian launching of Sputnik in 1957.<sup>51</sup> Through this Act, appropriations were authorized for the establishment of area vocational education programs; that is, vocational schools which would serve beyond the geographic boundaries of one school district.<sup>52</sup> These were designed to meet the national defense need of providing highly skilled technicians.<sup>53</sup> It is significant that this legislation represented a profound departure from the past federal policy. As a result of this Act, federal funds were made available to public school districts for educational purposes other than vocational preparation. Prior to this time, vocational education was the only federally-sponsored education program in the nation's schools.<sup>54</sup>

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<sup>51</sup>Grant Venn, Man, Education, and Work: Post-secondary Vocational Technical Education (Washington, D.C.: American Council on Education, 1964), p. 114.

<sup>52</sup>Mayor D. Mobley and Melvin Barlow, "Impact of Federal Legislation and policies upon Vocational Education," Vocational Education, the Sixty-fourth Yearbook of the National Society for the Study of Education, Part I (Chicago: Univ. of Chicago Press, 1965), p. 189.

<sup>53</sup>Venn, p. 115.

<sup>54</sup>Mobley and Barlow, p. 189.

1963-1970: A period of tremendous growth. The period preceding the enactment of the Vocational Education Act of 1963 was one of high levels of unemployment and a sagging national economy; not since the depression years had unemployment been higher. In 1962, 5.6 percent of the labor force was unemployed.<sup>55</sup> This represented the fifth consecutive year in which the unemployment rate averaged at least 5.5 percent.<sup>56</sup> The rate was higher than that of other industrialized countries.<sup>57</sup>

The problems created by the technological revolution lead to the appointment by President Kennedy of a Blue Ribbon Committee, the Panel of Consultants on Vocational Education. The expressed purpose of this committee, chaired by Benjamin C. Willis, was to review and evaluate the vocational education system and to make recommendations for its improvement and redirection. In his statement delivered to Congress on February 20, 1961, President John F. Kennedy said:

The National Vocational Education Act first enacted by the Congress in 1917 and subsequently amended, have provided a program of training for industry, agriculture, and other occupational areas. The basic purpose of our vocational education effort is sound and sufficiently broad to provide a basis for future needs. However, the technological changes which have

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<sup>55</sup>U.S. President, 1961-1963 (Kennedy), Manpower Report of the President and A Report on Manpower Requirements, Resources, Utilization, and Training, by the U.S. Department of Labor, 88th Congress, 1st Session, March, 1963 (Washington, D.C.: U.S. Government Printing Office, 1963), p. XIV.

<sup>56</sup>U.S. President, 1961-1963 (Kennedy), Manpower Report of the President and A Report on Manpower Requirements, Resources, Utilization, and Training, p. 3.

<sup>57</sup>U.S. President, 1961-1963 (Kennedy), Manpower Report of the President and A Report on Manpower Requirements, Resources, Utilization, and Training, p. XIV.

occurred in all occupations call for a review and re-evaluation of these Acts, with a view toward their modernization. To that end, I am requesting the Secretary of Health, Education, and Welfare to convene an advisory body drawn from the educational profession, labor-industry, and agriculture as well as the lay public, together with representation from the Departments of Agriculture and Labor, to be charged with the responsibility of reviewing and evaluating the current National Vocational Education Acts, and making recommendations for improving and redirecting the program.<sup>58</sup>

With these words, the second national study to review the American vocational education system was underway. This followed by more than four decades the passage of the historic Smith-Hughes Act of 1917.

In their seminal report of 1963, Education for a Changing World of Work, the committee stated that the American society and economy were vastly different than that which existed in the early years of the century when the initial vocational education law was enacted. They stated that the job market needs were different than in years past. A critical shortage of workers trained in emerging job fields co-existed with high rates of unemployment for workers whose skills were obsolete.<sup>59</sup> The panel went on to state that the educational system was not meeting the needs of the majority of the American people and that the vocational

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<sup>58</sup>U.S. President, 1961-1963 (Kennedy), Public Papers of the Presidents of the United States (Washington, D.C.: Office of the Federal Register, National Archives and Records Service, 1961), p. 107.

<sup>59</sup>U.S. Department of Health, Education, and Welfare, Education for a Changing World of Work: Report of the Panel of Consultants on Vocational Education (Washington, D.C.: U.S. Government Printing Office, 1963), p. 34.

education system was outmoded and not serving society's needs adequately.<sup>60</sup>

The panel recommended that the nation's vocational education system be directed at meeting the needs of all persons, in all communities, regardless of background. Groups of persons with high levels of unemployment were especially cited as being in need of federal funds to support their vocational development. Youths in high school, post-high school youths and adults, out of school youths and adults at work or unemployed, and youths with special needs were specifically named as being in need of assistance.<sup>61</sup>

On December 18, 1963, President of the United States Lyndon B. Johnson signed into law the Vocational Education Act of 1963.<sup>62</sup> This Act established two new basic purposes for the vocational education system: first, to serve the occupational needs of all people in the nation through unified programs rather than training them to fit into selected job categories and second, to meet the needs of individuals who could not succeed in the regular vocational programs due to educational, socioeconomic or other handicaps.<sup>63</sup> The effects of this historic piece of legislation are still apparent.

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<sup>60</sup>U.S. Department of Health, Education, and Welfare, pp. 31-37.

<sup>61</sup>U.S. Department of Health, Education and Welfare, p. 213.

<sup>62</sup>Venn, p. 127.

<sup>63</sup>U.S. Congress, Senate, Committee on Labor and Public Welfare, Notes and working Papers Concerning the Administration of  
(footnote continued)

A significant feature of the Vocational Education Act of 1968 was the removal of the "less than college grade" provision for the receipt of federal funds. Vocational education opportunities could be expanded to community colleges.<sup>64</sup>

Events Leading to the Establishment of the Regional Occupational Centers and Programs Vocational Education Concept in California

This section will review the significant events which gave impetus to the establishment of Regional Occupational Centers and Programs in California. The effect of federal legislation on the state events will be included.

1850-1916: The years of establishment. When California joined the Union in 1850, gold mining was one of the primary occupations in the state. The need for skilled craftsmen and mechanics was great. In 1854 mechanics in San Francisco opened the Mechanics Institute. This represented the first organized vocational school effort in California.<sup>65</sup>

Private trade schools were opened during the latter part of the 19th century. James Lick began the California School of Mechanical Arts. The Throop Polytechnic Institute, a part of the Eastern Sloyd

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Programs Authorized Under Vocational Education Act of 1963, 90th Congress, 2nd Session, March, 1968 (Washington, D.C.: U.S. Government Printing Office, 1968), pp. 33-34.

<sup>64</sup>U.S. Congress, Senate, p. 54.

<sup>65</sup>Wesley P. Smith, A History of Vocational Education in California 1900-1975 (Sacramento: Office of State Printing, 1979), p. 2.



Manual Training which also opened in the late 1800's, is the present day California Institute of Technology in Pasadena.<sup>66</sup>

The California State Legislature, in 1901, established the California Polytechnic School at San Luis Obispo for the expressed purpose of furnishing "to young people of both sexes mental and manual training in the arts and sciences, including agriculture, mechanics, engineering, business methods, domestic economy and other branches."<sup>67</sup> This is significant because it marked the beginning of financial support in California for public school vocational education.

The State Superintendent of Public Instruction placed the power of his office with vocational education when he stated in his 1874-75 annual report, "[a]ny system of technical and industrial education must begin with the public school."<sup>68</sup> The first public high school in California opened in San Francisco in 1858. It offered no vocational courses. In less than ten years, 47,000 students were enrolled in public high schools, primarily for the purpose of obtaining a vocational education. Only ten percent of the students had high school graduation as a goal.<sup>69</sup>

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<sup>66</sup>Charlot Holtzkamper and Associates, Vocational Education 1776-1976: A California Tribute to the Bicentennial Year (Sacramento: Office of State Printing, 1976), p. 24.

<sup>67</sup>Holtzkamper and Associates, p. 26.

<sup>68</sup>Smith, p. 3.

<sup>69</sup>Holtzkamper and Associates, p. 26.



1917-1950: Years of growth in enrollment. The entrance of the United States into World War I in April of 1917 changed the focus of vocational education. The California vocational education system was requested by the federal government to train personnel in wartime related activities such as in the areas of ship building and communications.<sup>70</sup>

Following the conclusion of World War I, and in response to the Smith-Hughes Act of 1917, the decade of 1920 to 1930 showed the greatest percentage growth in vocational education enrollment, nearly a 700 percent increase.<sup>71</sup> During the Depression years, the state vocational education system was involved in training or retraining programs for the unemployed through the California Conservation Corps, the National Youth Authority, and other federal work and training programs.<sup>72</sup>

In the decade of the 1940's, the nation once again entered a World War, and the vocational education system was again called upon to prepare workers for wartime-related industries. During this five-year period, nearly one million adults received training through the California vocational education program. More than 80 percent of this training was related to ship and aircraft building and repair.<sup>73</sup>

In California, as in the remainder of the United States, vocational education enrollment declined due to a booming economy in which

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<sup>70</sup>Smith, p. 11.

<sup>71</sup>Holtzkamper and Associates, p. 31.

<sup>72</sup>Holtzkamper and Associates, p. 31.

<sup>73</sup>Smith, p. 28.

there was a great availability of jobs, even for the unskilled. A virtual explosion of jobs in the technological areas occurred concurrently with a substantial decrease in job availability for those areas named in the Smith-Hughes Act and the subsequent legislation. These events occurred as the nation's people and economy felt the pangs of the post-war technological revolution.<sup>74</sup>

The report entitled "California Framework for Public Education" was issued in 1950. This report was the result of a three-year intensive analysis of the need to revise the role of public schools in relation to the fast changing nature of society. It identified four priority purposes for education in California. One purpose contained an unequivocal endorsement for vocational education. This is significant because it was the first official written statement of support for vocational education in California.<sup>75</sup> By the end of the 1950's the state legislature had enacted several statutes to implement and strengthen secondary vocational education.<sup>76</sup>

1960's: Years of expanded opportunities. The decade of the 1960's held exciting and eventful years for California vocational education as program opportunities expanded and new student populations were served in response to societal changes and needs. Many of these changes came about in response to the Manpower Development and Training Act

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<sup>74</sup>Smith, p. 36.

<sup>75</sup>Smith, pp. 36-37.

<sup>76</sup>Smith, p. 38.

of 1962, the Vocational Education Act of 1963, and the Vocational Education Act of 1968.

The Manpower Development and Training Act passed by Congress in 1961 provided an avenue for one of California's vocational education's greatest success stories. This program was in existence for 12 years and had as its purpose the training of individuals who had experienced long-term unemployment and for whom the likelihood of obtaining employment without occupational training was remote. Eighty percent of the students who completed vocational training were employed.<sup>77</sup> During this decade federal allocations for vocational education increased ten-fold and enrollments more than doubled, rising to more than one million as the mandates of Vocational Education Acts of 1963 and 1968, to serve the needs of all populations, including the disadvantaged, became a reality in California.<sup>78</sup>

The Regional Occupational Centers and Programs were begun during this decade. The impetus for these facilities was derived from a 1963 California law titled, "Countywide Vocational Schools." This law provided that the county superintendent of schools or the school district superintendent should have the administrative responsibility for the trade school. No progress was made in the establishment of trade

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<sup>77</sup>Holtzkamper and Associates, p. 37.

<sup>78</sup>Smith, p. 55.

schools due to an almost universal resistance to the concept of separate vocational schools in California.<sup>79</sup>

In 1965, the state vocational law was amended to include the concept of Regional Occupational Centers. In 1968, the state statutes were amended to allow adults to enroll in these programs and to allow for the establishment of Regional Occupational Programs. By 1970, just three years following the opening of the first Regional Occupational Center, 28,000 students were enrolled in California Regional Occupational Centers and Programs.<sup>80</sup>

#### Description of Regional Occupational Centers and Programs

The numbers of persons served, the extent and the availability of vocational education programs in California are unparalleled by any other state. Approximately two million students are enrolled in the nearly 400 secondary school districts, 70 community college districts and 66 Regional Occupational Centers and Programs.<sup>81</sup> Nearly one-half of the enrollment is at the high school level while almost one-third of the number of students are adults.<sup>82</sup> This section will contain a brief

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<sup>79</sup>Smith, p. 45.

<sup>80</sup>Smith, p. 55.

<sup>81</sup>Legislative Analyst, Vocational Education in California (Sacramento: Office of State Printing, 1977), p. 9.

<sup>82</sup>Legislative Analyst, p. 10.

description of the California Regional Occupational Centers and Programs purpose, funding, programs, and facilities.

The California Education Code clearly states that the purpose of vocational education is:

...that every student leaving school shall have the opportunity to be prepared to enter the world of work; that every student who graduates from any state-supported educational institution should have sufficient marketable skills for legitimate remunerative employment; that every qualified and eligible adult citizen shall be afforded an educational opportunity to become suitably employed in some remunerative field of employment.<sup>83</sup>

The system is open to any California resident at least 16 years of age who desires occupational preparation and is a full-time student.<sup>84</sup> The federal government mandates most of the laws and regulations regarding vocational education in California.<sup>85</sup>

Monies for vocational education in California amount to over one-half billion dollars annually, 90 percent of which is derived from state and local resources and ten percent is obtained federally. Additional funds are available for the vocational preparation of specific populations. The Regional Occupational Center and Program system is entirely state-funded.<sup>86</sup>

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<sup>83</sup> California, Education Code, Section 51004.

<sup>84</sup> California, Administrative Code, Title 5, Education, Section 10104.

<sup>85</sup> Legislative Analyst, p. 11.

<sup>86</sup> California Association of Regional Occupational Centers and Programs, Operational Policies (Sacramento: Office of State Printing, 1977), p. C-4.

Regional Occupational Centers and Programs are differentiated from one another on the basis of organizational design. Regional Occupational Centers generally consist of a separate school facility at which several vocational training programs may be conducted. Generally, two or more adjacent school districts participate.<sup>87</sup> The work experience sites for students enrolled in Regional Occupational Programs are scattered throughout a community.<sup>88</sup>

Students enrolled in Regional Occupational Centers and Programs may be high school students and earn credits towards graduation or they may be out-of-school adults who are not taking the class for high school graduation credits. All students are eligible to receive individual vocational counseling and guidance to aid in their career adjustment and decision-making process.<sup>89</sup>

All programs and course offerings by Regional Occupational Centers and Programs must be in accordance with the California State Plan for Vocational Education, California Labor Code, Education Code, Administrative Code and Title 5. The curriculum must be established and maintained with the advice and cooperation of a representative committee from the related industry. The instructional program must be directly related to existing or anticipated employment opportunities in

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<sup>87</sup> California, Education Code, Section 11501(a).

<sup>88</sup> California, Education Code, Section 52302.

<sup>89</sup> California, Education Code, Section 52302.5.

order to provide the student with a reasonable expectation of employment at the completion of training.<sup>90</sup>

All courses and significant revisions of course content must be approved by the State Department of Education. Approved courses are reviewed periodically for compliance with the five-year California Plan for Vocational Education and the California Administrative Code, Title 5.<sup>91</sup>

All teachers in this system must be fully credentialed by the State and have a minimum of two years of professional on-the-job experience in the area of instruction, except for those instructors of non-vocational adult courses. The emphasis on recent and appropriate work experience testifies to the commitment of this system for the current and relevant occupational preparation of its students.

In addition to the classroom teaching responsibilities, the teacher must maintain continuous involvement within the industry to assure currency of teaching materials and techniques. They are also extensively involved in the job placement of students and graduates.<sup>92</sup>

The Major Theories Relative to the Occupational  
Decision-making Process of Vocational Choice

The development of theories allows for the explanation, delineation, and communication of concepts in a manner which provides a forum

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<sup>90</sup>California, Administrative Code, Title 5, Education, Section 11504(j).

<sup>91</sup>California, Education Code, Section 52302.3 and Section 52309.

<sup>92</sup>California, Education Code, Section 52323.

for the reaction, testing, and evaluation by other researchers in the field. Through this process, knowledge about concepts is increased and ideas for new theories can emerge.

The American society is no longer bound by the historic forms of work training, ascription and apprenticeship. Within certain limitations, individuals are free to select their own occupational fields. How this process occurs has been the subject of research. Several theorists have proposed systems and models which describe an important decision-making process in the life of nearly every person, that of determining an occupational field to pursue. Ginzberg described the significance of the decision by stating:

The choice of a mate has this in common with the choice of a job: both decisions are of major importance to the future happiness of the individual; both call for a major investment of time, effort, and emotion; both involve many facets of the personality.<sup>93</sup>

This section will briefly review each of the major theories.

Early theories relative to vocational choice. Prior to the early 1900s there existed three prominent theories concerning vocational choice. The first and most widely accepted of the sociological theories postulated that one's occupation was the culmination of an accidental process, that its occurrence was due to external factors and therefore beyond the control of the individual. Individual talents and skills were ignored. The second general theory held that an individual's emotional forces and

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<sup>93</sup>Eli Ginzberg and others, Occupational Choice: An Approach to a General Theory (New York: Columbia Univ. Press, 1951), p. 22.



impulses were largely responsible for the occupational selection. Both theories emphasized a single factor as being the pivotal point in the decision-making process and that the individual was a passive component in the process.<sup>94</sup>

The third theory dealt with the personality of the individual. It presumed that the personality served as the basis for defining the central value in an individual's life. Six major categories were considered to be exhaustive of all the possible personality types. It was considered that values other than the central one associated with the personality pattern were unimportant. It was postulated further that individuals would strive to meet their needs as dictated by the central value.<sup>95</sup>

During the first half of the 20th century, occupational selection was considered to be a process in which an individual's characteristics or traits were matched with the requirements of the job. The trait and factor theory considered the occupational decision-making process to be a point-in-time event; that is, the decision was made during a relatively short time interval and with the information which was available.<sup>96</sup> This attitude is in contrast to present day theorists who postulate that the process is a long term, evolving one, being rooted in childhood experiences.

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<sup>94</sup>Ginzberg, pp. 18-24.

<sup>95</sup>Ginzberg, pp. 23-24.

<sup>96</sup>Van Hoose and Pietrofesa, p. 1.

The trait and factor theory was the dominant one until the 1950's.<sup>97</sup> Since then, several alternate theories have been proposed. The major theories may be characterized as being developmental in nature, that the vocational choice process is a long-term, multi-faceted one in which many external, as well as internal, events are operative. The importance and the uniqueness of personal characteristics are also recognized.

The major theories may be divided into three schools of thought. First, those which view the occupational decision-making process as originating in the individual's personality, which is largely shaped by one's early home experiences;<sup>98</sup> second, those which view the occupational choice process as an attempt by the individual to fit the occupational role to his self-concept and needs;<sup>99</sup> and third, one which ascribes to the social learning theory process.<sup>100</sup> Thus, there was a shifting of emphasis away from the needs of occupations and a static concept of the time of occupational decision-making to an emphasis on individuals and their characteristics, and to a dynamic conception of the occupational decision-making process.

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<sup>97</sup> Van Hoose and Pietrofesa, p. 1.

<sup>98</sup> Roe, p. 160.

<sup>99</sup> Donald Super and others, Vocational Development: A Framework for Research (New York: Columbia Univ. Press, 1957), pp. 111-12.

<sup>100</sup> John D. Krumboltz, "A Social Learning Theory of Career Selection," The Counseling Psychologist 6 (1976), p. 71.

Occupational decision-making: Personality theories. The works of Anne Roe and John Holland reflect their backgrounds in clinical psychology and studies in the fields of personality theories and occupational choice. Roe suggested, in the mid-1950's, that the primary vocational choice influencer is the individual's personality, and that the personality is a product of the person's attitudes, abilities and interests. She stated further that these elements are a result of the individual's early life experiences, primarily in the home environment and with one's parents.<sup>101</sup> This relationship gives rise to the direction and to the intensity of the application of the individual's psychic energies.<sup>102</sup> Needs which are routinely not met become unconscious drives or motivators. The child, and later the young adult, seeks opportunities to compensate for the deficit. A common form of compensation may be in the selection of an occupation since this serves as one of the primary sources of fulfillment in the lives of most people.<sup>103</sup> Her theory also postulates that the selection of person-oriented or non-person-oriented occupations arises from the individual's early life home experiences.<sup>104</sup>

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<sup>101</sup>Roe, The Psychology of Occupations (New York: Wiley and Sons, 1956), p. 128.

<sup>102</sup>Roe, p. 129.

<sup>103</sup>Roe, p. 80.

<sup>104</sup>Roe, p. 160.

Another of the researchers who gave personality a primary role as an influencer in the occupational decision-making process was Holland. The theory proposed by Holland emphasizes the relationship between parents and children, as well as the influences of heritable and environmental factors in formulating the basis for the development of specific personality types.<sup>105</sup> Each personality type prefers specific activities, is likely to pursue occupations congruent with it and to flourish in selected environments. The six personality types include realistic, investigative, artistic, social, enterprising, and conventional.

Holland described each type as follows:

A. The realistic type person has a preference for the explicit and ordered manipulation of objects, and is adverse to educational or therapeutic activities. He is likely to have mechanical and athletic abilities and to be deficient in social skills.<sup>106</sup>

B. The investigative type person is characterized by his preference for observational, symbolic and creative investigations of physical, biological and cultural phenomena. He is likely to be adverse to persuasive, social and repetitive activities. He may be scholarly and self-confident and be deficient in leadership skills.<sup>107</sup>

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<sup>105</sup>John L. Holland, Making Vocational Choices: A Theory of Careers (Englewood Cliffs, New Jersey: Prentice Hall, 1973), p. 13.

<sup>106</sup>Holland, p. 14.

<sup>107</sup>Holland, pp. 14-15.

C. A preference for free and unsystemized activities and an aversion to explicit and ordered activities characterizes the artistic personality type individual. He is likely to be expressive, intuitive and non-conforming, and to have artistic talents.<sup>108</sup>

D. Manipulation of others to inform and to train, and an aversion to explicit and ordered activities involving tools, characterize the social type of person. This individual may be predisposed to seek out opportunities to assist others.<sup>109</sup>

E. The person characterized as being of the enterprising type may prefer activities which involve the manipulation of others to attain organizational goals or economic gains. An aversion for symbolic, systematic activities are often noted in these individuals. Enterprising type individuals are perceived as being aggressive, self-confident and sociable but lacking scientific abilities.<sup>110</sup>

F. The conventional type of person has a preference for activities which entail the explicit, ordered and systematic manipulation of data and is adverse to exploratory or unsystematized activities. He sees himself as a conforming person and as having clerical and numerical abilities.<sup>111</sup>

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<sup>108</sup>Holland, p. 15.

<sup>109</sup>Holland, p. 16.

<sup>110</sup>Holland, pp. 16-17.

<sup>111</sup>Holland, pp. 17-18.

Holland stated that work environments can be similarly categorized because they are composed of people with similar personalities. One of his background principles is that "[the] choice of a vocation is an expression of personality."<sup>112</sup>

Another element of the theory is that vocational satisfaction, stability and achievement depend upon the congruence between one's personality type and the work environment.<sup>113</sup> Many studies have been performed by researchers, including Holland, to investigate the usefulness of the theory and its classification scheme. These studies have reported generally positive results and have given support for the theory and its typology.<sup>114</sup>

Occupational decision-making: Self concept theories. In 1951, Ginzberg and others proposed the first general theory relative to occupational decision-making in five decades. This theory revolutionized the long-standing vocational philosophy. They postulated that there are three basic elements involved in occupational decision-making; first, that the choice is a process, second; that the process is largely irreversible, and third; that compromise is an essential element of every choice.<sup>115</sup>

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<sup>112</sup>Holland, p. 6.

<sup>113</sup>Holland, p. 9.

<sup>114</sup>Holland, p. 84.

<sup>115</sup>Eli Ginzberg, "Toward a Theory of Occupational Choice," in Vocational Guidance and Career Development: Selected Readings, eds. Herman J. Peters and James C. Hansen (New York: MacMillan, 1966), p. 95.

They suggested that the occupational choice of an individual is the culmination of a series of decisions beginning several years prior to the actual time of the decision. Three distinct periods have relevance to the process. The first period, fantasy, exists when the child believes he can do anything and be anything he wants to be. Tentative choices, the second period, begins at approximately age 11 and concludes in the late teen years. During this stage, the child makes occupational choices based almost entirely on his interests, abilities and values. During the final stage, the realistic period, the child begins to work out compromises between his interests, abilities and values and the opportunities and limitations of the world.<sup>116</sup>

Nearly two decades after the original theory was published, Ginzberg re-examined its salient points with reference to research which had occurred during the intervening years. The reformulation addressed the three major elements of the 1951 theory. Ginzberg stated in the revised theory that the occupational decision-making process was an open-ended one, spanning the entire working life of most individuals. Feedback was cited as an important factor in the on-going process. In the reformulated theory, Ginzberg did not view the irreversibility of decisions as unequivocally as was noted in the original theory. He stated that decisions made prior to age twenty did not appear to have as

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<sup>116</sup>Eli Ginzberg and others, Occupational Choice: An Approach to a General Theory (New York: Columbia Univ. Press, 1951), pp. 60-72.

great an impact on future decisions as was originally proposed.<sup>117</sup> Rather than looking upon the fit individuals make between their preferences and the constraints of the environment, Ginzberg suggested that it be viewed as optimization, the "find of the best occupational fit between their changing desires and their changing circumstances."<sup>118</sup>

The original theory proposed by Ginzberg provided the impetus for research by Super. His well known work, entitled, " Career Pattern Study," served as a basis for the refinement of the self-concept theory of occupational choice.<sup>119</sup> Donald Super is one of the foremost occupational choice theorists in America today. Also ascribing to the developmental approach, Super contributed significantly to knowledge in the field by introducing the role of self-concept in vocational choice. With his work, the emphasis shifted to a study of the psychological nature of individuals as a primary contributor to vocational development and choice. Super was one of the first theorists to suggest that an individual's rate and progress of vocational development could be measured.<sup>120</sup>

The central theme of his self-concept theory is that individuals select occupations which allow them to express their perceptions of self

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<sup>117</sup>Eli Ginzberg, "Toward a Theory of Occupational Choice: A Restatement," The Vocational Guidance Quarterly, 20 (1972), pp. 167-76.

<sup>118</sup>Ginzberg, "Toward a Theory of Occupational Choice: A Restatement," p. 169.

<sup>119</sup>Donald Super and others, pp. 111-12.

<sup>120</sup>Donald E. Super and Phoebe L. Overstreet, The Vocational Maturity of Ninth-Grade Boys (New York: Columbia Univ. Press, 1960), p. 34.



in an occupational environment. The development and implementation of self concept is an evolving one, spanning the entire life of the individual. In his later works, Super divided the progression of vocational development into five life stages: growth (childhood), exploration (adolescence), establishment (young adulthood), maintenance (maturity), and decline (old age).

The growth stage is characterized as a period of identification with key figures and fantasizing about occupations. The fantasy phase evolves into more realistic sub-stages and into reality testing. Self examination, role tryouts and occupational exploration are components of the exploration stage. In the establishment stage, the individual is working in a chosen occupation. Effort is exerted to make the occupation a permanent one or occupational change may occur. Holding the job is the primary concern of the person in the maintenance state. Deceleration and retirement are components of the decline stage.<sup>121</sup>

Exploration, role playing, interests, experiences as well as self concept and progression in life stages contribute to vocational choice.<sup>122</sup> Super's theory also states that job satisfaction and satisfaction with life

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<sup>121</sup>Super and others, Vocational Development: A Framework for Research, pp. 40-41.

<sup>122</sup>Donald E. Super and others, Career Development: Self-Concept Theory (New York: College Entrance Examination Board, 1963), pp. 58-64.

generally are primarily functions of the congruence among one's work, self concept, abilities and interests.<sup>123</sup>

Occupational decision-making: Social learning theory. In 1976 John Krumboltz proposed a theory of occupational selection based on the social learning theory premise of positive and negative reinforcement and on modeling. He stated that the purpose for proposing this theory was to "explain how educational and occupational preferences and skills are acquired and how the selection of courses, occupations and fields of work are made."<sup>124</sup> Krumboltz stated there are four major categories of influencers on the decision process: genetic endowment and special abilities; environmental conditions and events; learning experiences; and task approach skills, defined as the interactions between the genetic and environmental components.<sup>125</sup>

The four categories of influences interact with one another in the occupational decision-making process to produce three types of outcomes or consequences. These are identified as Self-Observation Generalizations (SOGs), Task Approach Skills (TASs), and Actions (ACTs). Self-Observation Generalizations occur when the individual thinks about or performs job-related tasks, compares it with the performance of others and makes evaluative judgments. Task Approach Skills

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<sup>123</sup>Donald E. Super, "A Theory of Vocational Development," p. 108.

<sup>124</sup>Krumboltz, p. 71.

<sup>125</sup>Krumboltz, p. 71.

occur when the individual makes evaluative projections into the future about his ability to perform the job-related tasks. Actions refers to the behavior which follows SOGs and TASSs. It is an overt step in the pursuance of an occupational field.<sup>126</sup>

Occupational selection is based upon one's preference for the job-related tasks. Preference for an occupation is enhanced if the individual has received positive reinforcement for performance of job-related tasks, has observed a valued role model being positively reinforced for performance of job related tasks or has received exposure to positive images or words relative to the occupation. The acquisition of career decision-making skills and the implementation of initial job-related activities are similarly influenced.<sup>127</sup>

Each of the theories has contributed to knowledge of the occupational decision-making process. Each emphasizes and gives a primary place in the process to a different factor, although none is without its shortcomings.

Osipow stated that these theories have several errors in common. One common error is that the theories tend to be too broad in scope and limited in detail. Another error is that the theories ascribe to the basic premise that all individuals want to work. Rarely is consideration given that individuals may have negative attitudes towards occupational roles. Seldom are the problems associated with minority work force populations

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<sup>126</sup>Krumboltz, p. 71.

<sup>127</sup>Krumboltz, p. 71.

addressed in the theories. The theories need to place more emphasis on the process as a dynamic force within changing external and internal environments.

The choice of an occupation is an important and complex one. A better understanding of the factors influencing this process is important to the occupation-seeking individuals as well as to those who guide them, for example, school administrators, teachers, and counselors.<sup>128</sup>

#### Factors Influencing Occupational Choice

In their early writings, the major theorists concurred that the home environment is of paramount importance in the formulation of the values, goals, attitudes and expectations which characterize the individual. They also concurred that the occupational decision-making process is a complex one which begins prior to the child's entrance into the formal educational system and continues throughout the individual's employable lifetime. Like other human behaviors, vocational development is molded by many factors, internal as well as external to the individual.

In the mid-1950's, Super suggested three types of factors which impact upon vocational choice. The classification includes role factors, generally socially imposed and dealing with role expectations; personal factors arising from within the individual and including self-concept; and

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<sup>128</sup>Samuel H. Osipow, ed., Theories of Career Development, 2nd rev. ed., (New York: Appleton-Century-Crofts, 1973), pp. 307-309.

situational or other factors over which the individual has no direct control.<sup>129</sup>

More recently, Hoppock categorized the factors impacting on occupational-choice into three groups. Economic conditions, including periods of prosperity, recession or depression; psychological factors, involving one's perceptions of self and of reality; and sociological factors, generally resulting from one's patterns of socialization as a result of the family environment.<sup>130</sup> Holland, Gottfredson and Nofzinger stated that vocational choice depends upon self-knowledge, vocational knowledge, and the ability of the individual to make appropriate decisions based on the accumulated information.<sup>131</sup>

It has been recognized that an individual does not select an occupation in isolation, but rather, in conjunction with several social institutions. The interaction of the individual with these institutions results in a molding, expanding, and refining of the human behavior characteristics. However, not all institutions exert the same degree of influence. According to many researchers, the home environment has the most significant impact on an individual's behavior characteristics.

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<sup>129</sup>Super and others, Vocational Development: A Framework for Research, pp. 45-53.

<sup>130</sup>Robert Hoppock, Occupational Information, 4th rev. ed., (New York: McGraw-Hill, 1976), p. 93.

<sup>131</sup>John L. Holland, Gary D. Gottfredson, and Dean H. Nofzinger, "Testing the Validity of Some Theoretical Signs of Vocational Decision-Making Ability," Journal of Counseling Psychology, 22 (1975), pp. 411-22.

The school environment also contributes significantly to the socialization process. Therefore, occupational choice may be considered to be one of the results of the educational system. The relevant research concerning the relationships of these institutions to the occupational decision-making process of the individual will be reviewed in this section. The impacting factors will be considered using three categories: influential persons including the family socioeconomic status, influential job attributes and factors, and the influence of selected occupational information sources.

#### Family Socioeconomic Status

The importance of a family's socioeconomic status on the child's educational and occupational aspirations has been noted by researchers for several decades. In 1954, Bendix, Lipset and Malm studied the relationship between an individual's social origin and his career pattern. They reported that children of families in the high-status occupations have higher educational attainments than children of parents holding lower paying jobs. Even when educational attainments were identical, the children of fathers engaged in manual labor were more likely to enter the job market in lower status positions than were the children of parents holding higher paying jobs.<sup>132</sup> Recent studies substantiate these findings.<sup>133</sup>

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<sup>132</sup>Richard Bendix, Seymour M. Lipset, and F. Theodore Malm, "Social Origins and Occupational Career Patterns," Industrial and Labor Relations Review 7 (1954), pp. 246-61.

<sup>133</sup>Kathleen Goulet and Nancy W. Head, A Study of the  
(footnote continued)

The level and stability of a family's socioeconomic background were considered by Smelser to be of significant value in a child's occupational history "from birth to 18 years of age."<sup>134</sup> Also giving a position of primacy to the family's socioeconomic status was Pavalko when he stated, "[s]ocial class milieu in which a person is reared...represents a major constraint upon occupational aspirations."<sup>135</sup> Numerous empirical studies indicate the importance of socioeconomic status. Generally, the higher the social class of a young person's family, the more likely he (she) is to aspire to the most prestigious and rewarding occupational positions."<sup>136</sup>

Sewell challenged the popular notion that higher education is provided equally for poor but talented young people. His research showed that a child from a high socioeconomic status home was 2.5 times as likely to continue his education beyond high school than was one from a lower socioeconomic status environment. Sewell's work indicated that

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(footnote continued)

Decision-Making Process of New Hampshire High School Senior Class of 1980 (ERIC No. ED 191 405, 1981), pp. 7-8; Kanouse and others, Effects of Post-Secondary Experiences on Aspirations, Attitudes and Self-Conceptions (ERIC No. ED 214 430, 1980), pp. 7-8; Faith Dunne and others, Aspirations and Attitudes Among Rural High School Students: A Report from the Options Project (ERIC No. ED 152 454, 1977), pp. 10-13.

<sup>134</sup>William T. Smelser, "Adolescent and Adult Occupational Choice as a Function of Family Socioeconomic History," Sociometry 26 (1963), p. 393-409.

<sup>135</sup>R. M. Pavalko, Sociology of Occupations and Professions (Ithasca: F. E. Peacock, 1971), p. 51.

<sup>136</sup>Pavalko, p. 52.

this difference remained even when academic ability was taken into account.<sup>137</sup> Also relating lesser occupational aspirations of lower socioeconomic status students were Kopan and Walberg. They further stated that this may be a function of the child being reared in a home where one or both of the parents may be absent. These individuals may have more limited out-of-school experience and therefore limited occupational horizons.<sup>138</sup>

Giving evidence to the lower socioeconomic status of single parent homes is the 1980 census report data. California families headed by a female and having children under 18 years of age had approximately half the income of two-parent families.<sup>139</sup> Nearly 40 percent of these families were below the poverty level in 1979.<sup>140</sup>

### Parents

The child has no control over the family into which he is born, yet this may be the single most significant contributor to his future.

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<sup>137</sup>William Sewell, "Inequalities of Opportunities for Higher Education," American Sociological Review 36 (1971), pp. 793-809.

<sup>138</sup>Andrew Kopan and Herbert Walberg, eds. Rethinking Educational Equality (Berkeley: McCutchan, 1974), p. 32.

<sup>139</sup>U.S. Department of Commerce, Bureau of Census, 1980 Census of the Population. General Social and Economic Characteristics: California (Washington, D.C.: U.S. Government Printing Office, 1980), p. 6-114.

<sup>140</sup>U.S. Department of Commerce, Bureau of Census, 1980 Census of the Population. General Social and Economic Characteristics: California, pp. 6-107 and 6-115.



Theodore Caplow, a well-known sociologist, referred to the "accident of birth" when he stated, "[i]f occupations--or at least occupational statuses--are inherited, the 'choice' may be said to take place at birth."<sup>141</sup> Therefore, it is "the accident of birth" that establishes a framework for the shape of each child's world.

The family environment serves as the first and primary socializing agent for the child, impacting upon him both actively and passively. The "inherited" factors, including social standing, economic status, and religious mores, as well as race and ethnicity are passive influencers which serve as important occupational-choice enhancers or detractors. Future occupational aspirations, expectations and opportunities are, to a large extent, dictated by the family environment and serve as active influencers on the choice process. It is through this institution that reality becomes known to the child.<sup>142</sup>

Roe contended that the occupations of the parents are the most important factors in determining the social and economic statuses of the family.<sup>143</sup> The social environment, in turn, dictates the basic cultural values and proscriptions which impact upon the child's occupational choice process. He is likely to incorporate these attitudes into his own lifestyle to meet the immediate social group's approval and acceptance.

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<sup>141</sup>Theodore Caplow, The Sociology of Work (Minneapolis: Univ. of Minnesota Press, 1954), p. 214.

<sup>142</sup>Roe, p. 128.

<sup>143</sup>Roe, The Psychology of Occupations, p. 8.

Departure from the inextricably interwoven family and social group's standards may result in a breakdown of the relationship between the individual and his "roots."<sup>144</sup> Therefore, leaving the established family and social environments may be held as burdensome or by the individual.

A parent may impact actively upon a child's occupational choice by encouraging the development of a personality type which is consistent with that of the parent. Holland attested to the influence of the parents in the shaping of a child's personality style in his book entitled, Making Vocational Choices: A Theory of Careers. He related that a parent with a particular personality type provides environmental events, opportunities, and activities which reinforce his own style. Concurrently, the parent tends to ignore or reject events, opportunities and activities which are characteristic of other personality styles. It is likely the child will receive more parental reinforcement for participation in activities favored by and which are congruent with the parents' style.<sup>145</sup> The parallelism of parents and their offsprings' personality patterns was also documented in a more recent investigation by DeWinne, Overton and Schneider in their study of 2,225 freshman college students. The study revealed a pattern which suggested that the father-son and father-

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<sup>144</sup>David J. Pucel, "The Individual and His Choice of Occupation," in The Individual and His Education, ed. Alfred H. Krebs (Washington, D.C.: American Vocational Association, 1972), p. 46.

<sup>145</sup>Holland, Making Vocational Choices: A Theory of Careers, pp. 11-12.

daughter relationship were of paramount importance. The mother-child relationship were not as dominant.<sup>146</sup>

Generally, parental role models influence the child by demonstrating acceptable occupational positions. Auster and Auster posited that daughters who enter sex-role non-traditional occupations are likely to have emerged from a family environment in which the mother was employed in a non-traditional occupation.<sup>147</sup>

In a study of rural populations, it was found that the parental role model influence extends beyond the general status of the job (i.e., professional, blue collar) and to the level of advancement achieved on the job.<sup>148</sup> A number of researchers have noted the similarity between the occupational-choice of offspring and their parents, especially their father's job. Lungstrum collected data from 366 senior high school students enrolled in vocational education programs at Wichita, Kansas. Using Roe's Two-Way Classification of Occupations table, she discovered that 60 percent of the males "selected an occupation in the same or adjacent occupational group as their father's occupation and over three-

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<sup>146</sup>Robert F. DeWinne, Tom D. Overton, and Laurence J. Schneider, "Types Produce Types - Especially Fathers," Journal of Vocational Behavior, 12 (1978), pp. 140-44.

<sup>147</sup>Carol J. Auster and Donald Auster, "Factors Influencing Women's Choice of Nontraditional Careers: The Role of Family, Peers, and Counselors," The Vocational Guidance Quarterly, 29 (1981), pp. 253-63.

<sup>148</sup>Robert M. Jackson and Naomi M. Mears, "Father Identification, Achievement, and Occupational Behavior of Rural Youth: 5-Year Follow-Up," Journal of Vocational Behavior, 10 (1977), pp. 82-91.

fourths (80 percent) selected an occupation at the same or adjacent occupational level."<sup>149</sup> The relationship between female student's selection and mother's occupational title was not as strong. Lungstrum suggested that the mother's occupation might serve "more of a point of departure than an influence" to choose a similar occupation for both sons and daughters.<sup>150</sup> The close relationship between student's preferences and parental job titles using Roe's classification system was later supported by Patrick.<sup>151</sup> These studies are consistent with Roe's theory of vocational choice.

Several studies have investigated the perceived influence of various persons, including parents, upon the occupational choices of a student. In 1975, approximately 50,000 Indiana high school seniors were queried concerning their personal characteristics, family backgrounds, interests, future plans and factors influencing these plans. In response to the question related to the most helpful person or source in formulating plans, the choice "parents or relatives" was selected over three

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<sup>149</sup>Ruth M. Lungstrum, Selected Factors Related to Occupational Preference of High School Students Enrolled in Vocational Education Programs in the Wichita Public Schools (ERIC No. ED 074 267, 1973), p. 162.

<sup>150</sup>Lungstrum, p. 166.

<sup>151</sup>Ralph J. Patrick, "Factors Related to Occupational Preference of Selected Vocational-Technical Education Students in Delaware County, Pennsylvania," Unpublished Doctoral Dissertation, Univ. of Pittsburgh, 1980, p. 125.

times more frequently than the next choice, friends.<sup>152</sup> However, when queried about the most important reason for the selection of the occupational choice, "parents opinion" ranked ninth.<sup>153</sup> The parent's position of primacy in the career decision process was noted in a 1981 study by Russell. He found that all four groups of students sampled (undecided, college-bound, college-bound if things work out, and work-bound) listed parents as the most influential person in helping them to make a decision.<sup>154</sup>

In agreement with the Indiana study is one conducted by Veres and Carmichael in 1981. In this investigation, the "mother/stepmother" category was named by 75 percent of the respondents as the most frequently consulted person concerning occupational-decisions. The "father/stepfather" category was mentioned less often, ranking number three in frequency following the "mother/stepmother" and the "school counselor" listings.<sup>155</sup> Talking with parents was perceived by nearly 81 percent of the students as being a helpful method of obtaining career information and almost 73 percent reported that they had utilized this

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<sup>152</sup>J. P. Lisack, Educational and Employment Plans and Occupational Choices of Indiana High School Seniors in the Class of '75 (ERIC No. ED 120 565, 1975), p. 98.

<sup>153</sup>Lisack, p. 98.

<sup>154</sup>C. N. Russell, 1980 Survey of Grade 12 Students Post-Secondary Plans and Aspirations (ERIC No. ED 201 225, 1981), pp. 7-8.

<sup>155</sup>Helen C. Veres and Mary Margaret Carmichael, Expanding Student Opportunities in Occupational Education: Methods to Reduce Sex-Role Stereotyping in Program Choice (ERIC No. ED 217 180, 1981), p. 24.

method.<sup>156</sup> Females named the "mother/stepmother" classification most often as the primary influential person while a larger number of males than female respondents indicated their fathers to be the primary influencing person.<sup>157</sup> The population was composed of approximately 500 eighth and tenth grade students in New York.<sup>158</sup>

Earlier research conducted by Mondart, Curtis and Dobbins utilized 13,607 Louisiana secondary school students. The high degree of influence exerted by parents on the occupational plans of students and the close relationship between the same sex parent as the child in the seeking of occupational advice was also evidenced.<sup>159</sup> Lungstrum noted the same relationship in her study.<sup>160</sup> Later, Dunne found that in the rural population she studied, the mother was the dominant and frequently the only advisor to female students while both parents served as significant advisors to male students.<sup>161</sup>

In a study published in 1980, Patrick reported that mothers and fathers ranked first and second, respectively, followed by co-workers as

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<sup>156</sup>Veres and Carmichael, p. 25.

<sup>157</sup>Veres and Carmichael, p. 25.

<sup>158</sup>Veres and Carmichael, p. 16.

<sup>159</sup>C. L. Mondart, C. M. Curtis, and L. H. Dobbins, Educational and Occupational Aspirations and Expectations of High School Youth (ERIC No. ED 048 452, 1970), p. 43.

<sup>160</sup>Lungstrum, p. 171.

<sup>161</sup>Faith Dunne and others, Aspirations and Attitudes among Rural High School Students: A Report from the Options Project (ERIC No. ED 152 454, 1977), pp. 10-13.

student identified sources of information about occupations.<sup>162</sup> However, co-workers were identified by the respondents to be the primary source of influence on occupational decision-making, followed by mothers and fathers.<sup>163</sup> Approximately 1,500 Pennsylvania students enrolled in area vocational-technical schools participated in the study.<sup>164</sup>

"My interests" was the category most often selected as the single factor which caused the Texas students, sampled by Jones, to choose the educational or occupational route followed after leaving high school. The population was comprised of two groups of students; those who had participated in secondary school vocational education programs and those who had not participated. The influence of high school vocational class ranked ahead of the combined score the "parents" and "someone in my family" categories. The total of these groups rated second in influence for the non-vocational course of study student population.<sup>165</sup> All four populations studied by Russell noted high school teachers to have an intermediate influence on their career choice.<sup>166</sup>

Using a smaller and a specialized course of study student population, Hillison and Hagee found the influence of the home and family

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<sup>162</sup>Patrick, p. 71.

<sup>163</sup>Patrick, p. 72.

<sup>164</sup>Patrick, p. 45.

<sup>165</sup>Charles B. Jones, An Analysis of Student Follow-up Data for Administrative Decision Making (ERIC No. ED 099 649, 1974), p. 26.

<sup>166</sup>Russell, p. 21.

environment to rank eighth out of nine factors when 231 male and female college students majoring in Agricultural Education were queried. Teachers and peers were ranked as being more influential than the family and home categories.<sup>167</sup> Parents were noted as influential persons in many research studies, however Kane and Frazee suggested that unless parents have specific and relevant occupational information, their "role is likely to be that of supporting and encouraging students rather than assisting them in their career decision-making."<sup>168</sup> Parental influence may actually limit the options of the children.<sup>169</sup>

#### Teachers and Counselors

The school as a social institution may be considered second only to the home environment in the degree of influence it exerts on the occupational choice of a student.<sup>170</sup> These two institutions do not impact separately on the individual, but rather inter-relatedly. The school environment may reinforce, modify, or negate values and

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<sup>167</sup>John Hillison and Gale Hagee, Career Information Needed by Classroom Teachers (ERIC No. ED 048 452, 1981), p. 18.

<sup>168</sup>Roslyn D. Kane and Pamela Frazee, Occupational Choice: Do Traditional and Non-Traditional Women Differ? (ERIC No. ED 167 742, 1978), p. 10.

<sup>169</sup>Kane and Frazee, p. 10.

<sup>170</sup>John O. Crites, Vocational Psychology: The study of Vocational Behavior and Development (New York: McGraw Hill, 1969), p. 88.



proscriptions learned earlier in the home.<sup>171</sup> Because the years of formal schooling coincide with some of the most formative developmental periods, this institution contributes significantly to the vocational decision-making process. Many students and adults in occupational decision-making positions of influence recognize the direct relationship between the amount and type of education achieved by an individual and his occupational choice and his future occupational mobility.<sup>172</sup> They may also realize the close relationship which exists between parental occupation and the social and economic statuses of a family. Generally, students recognize the value of and the need for education. Veres reported that 98.5 percent of the respondents in her study listed the completion of high school as an expectation and 77.2 percent reported an intention to pursue some type of educational program beyond the secondary school level.<sup>173</sup> A similar finding was reported by Dunne.<sup>174</sup> The majority of the students opined that the education obtained in high school will be of great help in future occupational roles.<sup>175</sup>

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<sup>171</sup>"I Don't Want to Drive a Mack Truck.": Rural Southern Values and Attitudes - Barriers to Women in Non-Traditional Vocational Education (ERIC No. ED 199 011, 1980), p. 10.

<sup>172</sup>Kenneth B. Hoyt, "Career Education: Challenge for Counselors," The Vocational Guidance Quarterly, 23 (1975), pp. 303-10.

<sup>173</sup>Veres and Carmicael, p. 19.

<sup>174</sup>Dunne, p. 17.

<sup>175</sup>Lungstrum, p. 160; Patrick p. 128; Mondart, Curtis, and Dobbins, p. 51.

The school environment exerts its influence in several ways. Teachers, counselors and administrators serve as role models for the students by demonstrating occupational values, attitudes and positions. The school curriculum selected by the student, or assigned to him, also influences his occupational choice. School personnel and students interact with one another, exchanging occupationally-related information, aspirations, and expectations. Also reported are conflicting results from students queried about the influences of teachers, counselors, and peers on their occupational choice. Two studies found that over 50 percent of the students sampled stated that no other individual had influenced their occupational choice, that it had been made solely on the basis of personal interest, for employment or for post-secondary education purposes. Teachers and counselors exerted little influence on female students, generally. When an individual was named as instrumental in the process, it was most often a parent.<sup>176</sup> In the same direction as the information generated from Lewis' study, which utilized 520 female students and recent graduates from eleven high schools throughout the United States, was work done by Kane and Frazee. They utilized data from a nationwide survey of women enrolled in area vocational-technical schools and concluded that approximately 50 percent of the students opined that "neither a high school teacher or counselor was influential in their

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<sup>176</sup>Morgan V. Lewis and others, Nontraditional Vocational Educational Programs for Women. Final Report (ERIC No. ED 136 025, 1976), p. 5; Goulet and Head, p. 9.

selection of training."<sup>177</sup> Dunne reported that as both male and female students increased in age they sought advice more often from teachers than from counselors. It was hypothesized that the students may "trust" certain teachers or that they may have "used up" counseling services.<sup>178</sup>

Lungstrum discovered that school counselors headed the list of the "least helpful" sources in determining an occupational choice for males and ranked second in this category for females. Other studies have also attested to the small degree of influence exerted by school counselors on the occupational choice process of students.<sup>179</sup> Another study showed that college-bound population perceive the counseling office as having a "guidance" function while non-college-bound youth perceived the counselor as being a "job counselor."<sup>180</sup>

In defense of counselors, Lewis reported that the typical counselor's job assignment often includes many non-counseling duties such as scheduling tasks and responsibilities regarding troublesome students.<sup>181</sup>

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<sup>177</sup> Kane and Frazee, p. 10.

<sup>178</sup> Dunne, pp. 29-30

<sup>179</sup> Lungstrum, p. 172.

<sup>180</sup> Dunne, p. 29.

<sup>181</sup> Jones, p. 26; Carla Derriberry and others, Wanted for Breaking with Tradition and Entering Today's Careers: Summary Report (ERIC No. ED 192 827, 1979), p. 8.; Henrietta Schwartz, Equity from an Anthropological Perspective. Research and Development Series No. 214M (ERIC No. ED 215 169, 1981), p. 18; Ruth Shinn, "Up, Up the Ladder," Illinois Career Education Journal, 30 (1973), pp. 8-12; Elaine F. Alden  
(footnote continued)

Counselor education programs often place emphasis on "typical" counseling functions and these professionals may perceive themselves as unprepared to deal with vocational decision-making duties.<sup>182</sup> Lewis conducted a survey utilizing a limited number (N=18) of school counselors. He queried them regarding what they considered to be their major responsibilities. Only five respondents considered vocational, occupational, or career counseling to be an appropriate response. The majority of the counselors indicated that they felt their primary responsibility areas to be related to aiding the student to reach his optimum potential. In addition, most of the counselors reported perceived congruence between their views and their conceptions of the school's expectations for them.<sup>183</sup> School counselors also are assigned responsibility for many students.<sup>184</sup>

In contrast with the previously related articles is the 1981 study by Veres and Carmichael in which the category, "conference with counselor" was named by nearly 80 percent of the student population as being helpful in the selection of an occupation.<sup>185</sup> The school counselor rated second as a source of advice on occupational decision-making.<sup>186</sup>

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and Berniece B. Seiferth, Factors Influencing Choice of Technical Careers by Women and Minorities (ERIC No. ED 188 651, 1979), p. 11; Lewis and others, p. 162.

<sup>182</sup>Lewis and others, p. 150.

<sup>183</sup>Lewis and others, p. 151.

<sup>184</sup>Lungstrum, p. 177; Lewis and others, p. 152.

<sup>185</sup>Veres and Carmichael, p. 25.

<sup>186</sup>Veres and Carmichael, p. 25.

Sixty percent of the respondents stated that they had met with a counselor at least once to discuss occupational selection.<sup>187</sup> A similar percentage was reported by Dunne.<sup>188</sup> The influence of teachers may be considered as slight when reviewing data from this report. Teachers were rated as seventh out of eleven sources of advice consulted on occupational matters, being considered as important by only 37 percent of the responding sample.<sup>189</sup> Talking with teachers was considered to be helpful in selecting an occupation by 53 percent of the students.<sup>190</sup> In an earlier study, Mondart, Curtis, and Dobbins also indicated the greater influence of counselors than teachers on the occupational decision-making process of students.<sup>191</sup> Generally, teachers are rated as fairly influential in the area of occupational decision-making. It has been suggested that females are more susceptible to accepting the roles of models of the same sex person, particularly teachers.<sup>192</sup>

Both male and female students enrolled in senior high school vocational courses ranked teachers second in influence, behind fathers

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<sup>187</sup>Veres and Carmichael, p. 23.

<sup>188</sup>Dunne, p. 23.

<sup>189</sup>Veres and Carmichael, p. 24.

<sup>190</sup>Veres and Carmichael, p. 25.

<sup>191</sup>Mondart, Curtis, and Dobbins, p. 143.

<sup>192</sup>Susan A. Busow and Karen Glasser Howe, "Model Influence on Career Choices of College Students," Vocational Guidance Quarterly, 27 (1979), pp. 239-43.

for male respondents and mothers for female respondents.<sup>193</sup> Vocational education teachers were rated as more influential in selecting an occupational route for students who had enrolled in secondary school vocational education courses than were academic teachers for those students who had not participated in vocational education courses.<sup>194</sup> Students majoring in agricultural education ranked instructor influences third out of a total listing of ten factors.<sup>195</sup> In another study, it was found that male and female students evaluated the influence of vocational teachers similarly but not highly. Vocational teachers were ranked ninth out of a total of 13 choices and behind the influence of counselors.<sup>196</sup>

#### Peers and Siblings

Luther Otto stated that many persons are influential to an individual "because of the roles they occupy and the expectations they hold (e.g., parents) or because they are selected by the individual as a basis for self-evaluation (e.g., friends)."<sup>197</sup> Otto also maintained that previous studies have viewed the influence of peers to be primarily due to the modeling roles they occupy.

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<sup>193</sup>Lungstrum, p. 166.

<sup>194</sup>Jones, p. 26.

<sup>195</sup>Hillison and Hagee, p. 9.

<sup>196</sup>Mondart, Curtis, and Dobbins, p. 43.

<sup>197</sup>Luther B. Otto, "Girl Friends as Significant Others: Their Influence on Young Men's Career Aspirations and Achievements," Sociometry, 40 (1977), p. 287.

Using data collected from 137 males in their mid-thirties, Otto suggested that peer influences are stronger than the effects of parental educational encouragement but only parents have an influence on the individual's occupational achievements. He also stated that peers evaluated one another's educational potential over broader criteria than did the parents. The author cautioned that his findings were based on a small sample size and by using a retrospective recalling technique which may be subject to contamination.<sup>198</sup>

Pietrofesa and Splete contended that the peer group influences an individual's occupational selection process by impacting upon his attitudes, values, and school motivation. These factors, related to educational attainment, in turn influence occupational choices.<sup>199</sup> Lungstrum concluded from the results of her research that females were more influenced by friends than were male students. Female students ranked friends fifth in amount of helpfulness in the occupational selection process while the male students ranked friends ninth out of ten choices. Considering the degree of influence exerted by friends on the process, females ranked them third while males placed them in the fourth position out of five factors.<sup>200</sup>

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<sup>198</sup> Otto, pp. 287-93.

<sup>199</sup> John L. Pietrofesa and Howard Splete, Career Development: Theory and Research (New York: Grune and Stratton, 1979), pp. 87-88.

<sup>200</sup> Lungstrum, p. 173.

Mondart, Curtis and Dobbins concluded that friends rank just below parents in the degree of influence they exert on female student's occupational choice. Male students rated parents and a person in the occupation as having greater influence on their choice process than have friends.<sup>201</sup> Russell found that friends rank just below parents in the amount of influence on the occupational choice process for most student population groups. The college-bound group noted that friends attending an institution of higher education were second in importance of influence.<sup>202</sup> Studying Caucasian and non-Caucasian populations, Alden also found the impact of friends and classmates to be strong for both populations, greater than that of teachers or counselors.<sup>203</sup>

Other researchers have suggested that the influence of the peer group is less substantial than was reported by Otto or Mondart, Curtis and Dobbins. Veres and Carmichael also found a low rate of respondents indicating that peers had been significant sources of occupational advice. Approximately 60 percent considered this group to be an unimportant source of information.<sup>204</sup> "Talking with friends" ranked fifth out of ten categories for choices of perceived helpfulness.<sup>205</sup>

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<sup>201</sup>Mondart, Curtis, and Dobbins, p. 43.

<sup>202</sup>Russell, p. 7.

<sup>203</sup>Alden and Siefert, p. 11.

<sup>204</sup>Veres and Carmichael, p. 24.

<sup>205</sup>Veres and Carmichael, p. 25.



The influence of fathers and male friends appeared to be non-supportive for female entry into roles other than those that are stereotypical. The authors list a number of reasons why males may react in this manner including that they may feel threatened, jealous, and have a disliking for their wives being involved with the lesser feminine aspects of non-traditional jobs."<sup>206</sup> From the respondents in a 1981 research project it was revealed that "peer pressure or derision" would discourage female students from studying in a male-dominated vocation. However, this opinion was rated as less influential as an occupational choice impacter than those of parental opinion and satisfactory role models.<sup>207</sup>

The impact of siblings on the occupational choice process has received little attention in the literature. Considering peers to be the primary component of categories which include family members and "relatives other than parents," research has shown that they have little influence on the occupational decision-making process. In studies conducted by Lungstrum and by Jones, peers ranked in the bottom quadrant for influence on the process.<sup>208</sup> Veres and Carmichael supported these findings by indicating that approximately 70 percent of the

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<sup>206</sup>Derryberry and others, p. 22; "I Don't Want to Drive a Mack Truck.": Rural Southern Values and Attitudes - Barriers to Women in Non-Traditional Vocational Education, pp. 26-27.

<sup>207</sup>"I Don't Want to Drive a Mack Truck.": Rural Southern Values and Attitudes - Barriers to Women in Non-Traditional Vocational Education, p. 28.

<sup>208</sup>Lungstrum, p. 166; Jones, p. 26.

respondents did not list siblings as an important impacting factor.<sup>209</sup> In an earlier study, Mondart, Curtis and Dobbins revealed that siblings influenced occupational decisions for 39 percent of the surveyed population.<sup>210</sup>

Some of the research studies have evaluated various job attributes such as salary, working conditions, flexibility of hours, and relationships with co-workers, as well as other factors, on the occupational choice process. Related elements, including interest in the job-related tasks and the availability and the study of occupationally-related materials have also been investigated.

#### Personal Interest and Expected Salary

Just as the literature is replete with evidence of parents being the most significant person-related factor impacting on an individual's vocational choice, the literature strongly indicates the primacy of personal interests and expected salary as influencing factors on the choice process. Holland succinctly expressed the profound relationship between interests and the person when he stated, "[i]n short, what we have called 'vocational interests' are simply another aspect of personality."<sup>211</sup> The relationship between salary and the social and economic statuses of a family are likely to result in the expected salary being one of the primary considerations of vocational choice.

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<sup>209</sup>Veres and Carmichael, p. 25.

<sup>210</sup>Mondart, Curtis, and Dobbins, p. 46.

<sup>211</sup>Holland, Making Vocational Choices: A Theory of Careers, p. 7.

Jones combined person-related influencing sources with job-related factors in the survey instrument he administered to Texas high school graduates. Approximately 26 percent of the respondents who had enrolled in vocational education courses while attending secondary school stated that interest was the one factor which influenced them to pursue a particular occupational route. This was followed by about 13 percent of the sample who indicated the primacy of a vocational course taken during the school years. In contrast, 45 percent of the students who had not participated in vocational education courses related the importance of interest in occupational choice.<sup>212</sup> If one assumes that the student's selection of a vocational program while in high school also indicates interest, the results from these two populations are approximately equal. Work experience and money, in order, followed as occupational choice motivating factors.<sup>213</sup>

The Indiana study of 50,000 high school seniors indicated job activities to lead salary by 300 percent as the most important reason for the occupational selection. The "people I will work with" category was rated third in importance.<sup>214</sup> The relative placement of the interests and money factors was also noted by Copes.<sup>215</sup> In a follow-up study of

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<sup>212</sup>Jones, p. 26.

<sup>213</sup>Jones, p. 26.

<sup>214</sup>Lisack, p. 97.

<sup>215</sup>Marvin L. Copes, "The Predictability of Career Choices of High School Seniors," Dissertation Abstracts International, 37-03: 1511-A, 1975.

high school graduates, Healy discovered that "manifest interest" was the most important element in career choice stability.<sup>216</sup> Russell found that students with college attendance plans ranked "knowledge of good employment opportunities" as being the most important factor in their post high school career choice plan. Interestingly, the undecided and non-college bound populations selected "social life" and "living away from home" as being the most significant factors in their post-high school graduation plans.<sup>217</sup>

Results of data collected from the 400,000 students in the TALENT study also placed "interesting and challenging work" at the forefront of the listing for importance of job characteristics. Interestingly, about 37 percent of the sample felt this job attribute was being met satisfactorily in their position. The characteristics of expected income, job security, opportunity for advancement and congenial coworkers received lower importance rating scores.<sup>218</sup>

Results of another study showed that 90 percent of the respondents indicated that "boss," "vacation time," and "job flexibility" were

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<sup>216</sup>Judith S. Healy, "Factors Related to the Stability of Career Choices of High School Seniors," Unpublished Doctoral Dissertation, Fordham Univ., 1976, p. 82.

<sup>217</sup>Russell, p. 23.

<sup>218</sup>Sandra Reitz Wilson and Lauriss L. Wise, The American Citizen: 11 Years after High School (Palo Alto: American Institutes for Research, 1975), p. 20.

important. Job skills, wages, location and advancement were noted as being important by fewer individuals.<sup>219</sup>

Data from a 1978 research project indicated that interest is the most important factor in occupational selection for women enrolled in sex-role-stereotypic and non-role-stereotypic occupations. Of the sampled population, 75 percent rated this factor as being very important. Ability was ranked second by both populations.<sup>220</sup> The earnings category followed. Data indicated that expected salary was a more important influencing factor for women pursuing sex-role traditional occupations than for those electing non-traditional occupations.<sup>221</sup> When categories relative to course experiences and role models were included as variables, interest was rated as second by students planning sex-role typical occupations, while it was ranked third by those with intentions for atypical careers.<sup>222</sup>

Nearly four decades ago, Strong illustrated the stability of interest patterns over an extended period of time. His findings demonstrated a high correlation coefficient of .82 between the interests of 15-

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<sup>219</sup>Dunne, p. 24.

<sup>220</sup>Kane and Frazee, p. 4.

<sup>221</sup>Kane and Frazee, p. 5.

<sup>222</sup>Sex as a Determinant of Vocational Choice. Final Report  
(ERIC No. ED 145 135, 1977), p. 5.

and 25-year old men and a correlation coefficient of .75 between the interests of 15- and 55-year old men.<sup>223</sup>

Expected salary was the first ranking influencing factor in other studies.<sup>224</sup> Lungstrum referred to the high ratings for job interest, happiness with job and expected salary categories when she stated, "[s]tudents tended to place higher priority on intrinsic values of jobs in general but extrinsic values on occupations of their choice."<sup>225</sup> She noted that more than 50 percent of the respondents selected job interest and satisfaction as important job qualities, still they considered salary to be the most important job attribute, ranking it ahead of the category which included the job challenge and excitement characteristics.<sup>226</sup> Both male and female students considered salary to be of primary importance. However, females tended to rate the social qualities of working with and helping people to be relevant job characteristics. Male respondents indicated a greater desire to work with one's hands than to work out-of-doors.<sup>227</sup> More recent studies support these findings.<sup>228</sup> The population studies by Russell noted that a high rate of unemployment in

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<sup>223</sup>Edward K. Strong, Jr., Vocational Interests of Men and Women (Stanford: Univ. Press, 1943), p. 286.

<sup>224</sup>Lungstrum, p. 162; Veres and Carmichael, p. 75.

<sup>225</sup>Lungstrum, p. 162.

<sup>226</sup>Lungstrum, p. 161.

<sup>227</sup>Veres and Carmichael, p. 26.

<sup>228</sup>Goulet and Head, p. 10; Dunne, pp. 24-26.

an occupational area had a strong or very strong effect in causing them to change their post-high school graduation plans.<sup>229</sup>

### Occupational Information

Work experience and contact with someone employed in the area have been shown by research studies to have a positive influence on an individual to enter the occupational area or closely related field. These methods allow the individual to learn directly about the job functions and requirements. Generally, the impacts of these variables are not as strong as are those of interest and expected salary. Work experience was named by nearly ten percent of the high school students who have been enrolled in vocationally-related courses as the most important element influencing their occupational routes. However, only two percent of the non-vocationally trained graduates named this factor.<sup>230</sup> Previous work experience ranked third in importance for male Agricultural Education college majors.<sup>231</sup>

Many students are exposed to courses dealing with occupational information during their school years. In a nationwide study, 60 to 70 percent of the respondents indicated that their schools offered activities or courses designed to increase career awareness. However, less than one-half of the sampled students had participated in the program. A

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<sup>229</sup>Russell, p. 9.

<sup>230</sup>Jones, p. 26.

<sup>231</sup>Hillison and Hagee, p. 9.

study of a rural population noted 64 percent of the sampled individuals had taken vocationally-related tests and 67 percent had met with a counselor in the past year.<sup>232</sup> A like proportion considered the courses to be of little value.<sup>233</sup> Mondart, Curtis, and Dobbins reported that about one-third of their surveyed population indicated that an occupational choice had been made following a study of the area. However, another one-third of the responding population indicated a dearth of knowledge concerning job-related duties.<sup>234</sup>

Patrick noted that 60 percent of the students in the population he investigated felt a need for "some or considerable help with their occupational planning,"<sup>235</sup> and that non-white students desired more assistance than did white respondents.<sup>236</sup> The researcher also observed that knowledge about occupations has been correlated with vocational maturity,<sup>237</sup> which was defined by Super as "the place reached on the continuum of vocational development from exploration to decline."<sup>238</sup> Other reports indicated that job-related information obtainment by students expanded their "occupational horizons" and allowed them to

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<sup>232</sup>Dunne, p. 9.

<sup>233</sup>Lewis and others, p. 151.

<sup>234</sup>Mondart, Curtis, and Dobbins, p. 51.

<sup>235</sup>Patrick, p. 126.

<sup>236</sup>Patrick, p. 127

<sup>237</sup>Patrick, p. 26.

<sup>238</sup>Pavlak, p. 43.



consider a job requiring a wider range of educational preparations.<sup>239</sup> It was also noted that obtaining job-related information resulted in "significantly reduced cognitive complexity with which occupations are perceived."<sup>240</sup>

A limited number of researchers have investigated the impact of media sources on the vocational choice process. Veres and Carmichael reported that television acted as a socializer, conveying occupational information and providing role models, most of which were sex-role stereotypical.<sup>241</sup> The influence has been addressed by other researchers as well.<sup>242</sup> Lungstrum noted that books, magazines, pamphlets, television and radio were rated at the bottom of the list of occupational choice influencers for both males and females, in the sampled population.<sup>243</sup> This finding was confirmed by Russell.<sup>244</sup>

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<sup>239</sup>Thomas L. Harris and Jean S. Wallin, "Influencing Career Choices of Seventh-Grade Students," The Vocational Guidance Quarterly, 27 (1978), p. 53.

<sup>240</sup>Richard F. Haase and others, "Effect of Positive, Negative, and Mixed Occupational Information on Cognitive and Affective Complexity," Journal of Vocational Behavior, 15 (1979), p. 294.

<sup>241</sup>Veres and Carmichael, p. 4.

<sup>242</sup>Henrietta Schwartz, p. 18; S. H. Sternghanz and L. A. Serbin, "Sex Role Stereotyping in Children's Television Programs," Developmental Psychology, 10 (1974), pp. 710-15.

<sup>243</sup>Lungstrum, p. 167.

<sup>244</sup>Russell, p. 23.

### Post-high School Plans

Kane, Patrick and Lungstrum queried their sampled vocational student populations regarding post-high school plans. Kane and Frazee discovered that 30 percent of the vocational program population intended to enter a post-high school academic program and of this group, the largest number had received considerable influence to pursue the career field from teachers. Approximately 70 percent of the sampled population intended to seek employment following graduation.<sup>245</sup>

Forty-five percent of the Witchita, Kansas high school seniors enrolled in selected vocational programs intended to seek additional education following graduation. More than one-half of the respondents planned to pursue this at a four-year college or university, while nearly one-fourth of the sampled population intended to attend a public vocational school.<sup>246</sup>

Vocational education program students responded to a survey conducted by Patrick. This indicated that 50 percent of respondents planned to seek no further education beyond the high school level. Of the remaining students, 38 percent intended to pursue additional learning at a community or junior college or at a vocational or technical school. The remaining students were evenly distributed in their plans

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<sup>245</sup>Kane, p. 41.

<sup>246</sup>Lungstrum, p. 191.

to pursue "some college or university" and to "graduate from a four-year college or university."<sup>247</sup>

Results of a five-year follow up survey of vocational program students in Butte County, California revealed that 89.5 percent of the population graduated from high school or earned a high school equivalency. Forty-eight percent attended a two- or four-year college or university. Of this population, 37 percent completed one year of schooling and 39 percent completed two years of post-high school education. Forty-seven percent of the students who enrolled in a four-year college or university following high school graduation received a degree.<sup>248</sup>

A publication by the California Postsecondary Education Commission revealed that slightly more than 60 percent of the high school senior students enrolled in a two- or four-year college or university the fall following high school matriculation.<sup>249</sup> A Canadian study revealed that nearly 60 percent of this population intended to go to college.<sup>250</sup> Based on research conducted by Dahl, it can be estimated

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<sup>247</sup>Patrick, p. 150.

<sup>248</sup>Ira Nelken, Results of Regional Occupational Program "Five Years After" Survey, 4 October 1982, Butte County Superintendent of Schools.

<sup>249</sup>California Postsecondary Education Commission, California College-Going Rates, 1982 Update (Sacramento: Office of State Printing, 1983), p.5.

<sup>250</sup>Russell, p. 5.

that 87 percent of the students who state higher education intentions will follow through with the post-high school graduation plan.<sup>251</sup>

However, another study stated that 49 percent of the 69 percent stating a higher education aspiration actually enrolled. This was labeled the "reach grasp disparity."<sup>252</sup> A report based on the 1972 National Longitudinal Study stated that the initial differences which exist between population groups exist with respect to demographic characteristics, scholastic ability, and high school curriculum pattern.<sup>253</sup> Earlier, Dunne reported a similar finding.<sup>254</sup>

Goulet and Head queried 3,000 New Hampshire students about their post high school graduation plans. They noted that 50 percent stated an intention to attend college and that the distribution of male and female students stating this intention was equal.<sup>255</sup> However, 30 percent of those indicating non-educational plans following graduation stated that they may pursue it at some later date.<sup>256</sup>

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<sup>251</sup>Randall W. Dahl, "The Implementation of Educational Plans of Kentucky High School Graduates: Selected Results from the Kentucky Longitudinal Study (ERIC No. ED 211 027, 1981), p. 3.

<sup>252</sup>Goulet and Head, p. 12.

<sup>253</sup>Kanouse and others, Effects of Postsecondary Experiences on Aspirations, Attitudes and Self-Conceptions (ERIC No. ED 214 430, 1980), p. 6.

<sup>254</sup>Dunne, pp. 10-16.

<sup>255</sup>Goulet and Head, p. 7.

<sup>256</sup>Goulet and Head, p. 9.

### Summary and Conclusions

The importance of a satisfied and efficient work force has been noted throughout history and has been especially valued in the United States. For almost 200 years Congress has voted to support vocational education, commencing with the Morrill Act in the 1800's and continuing to the present time. Millions of Americans have been recipients of these programs and have been of benefit to society by their increased productivity and contentment with their occupations. The California Regional Occupational Centers and Programs have prepared thousands of youth each year for the world of work.

Recognizing the importance of the choice of an occupation, several prominent theories concerning the development of the choice process and the factors impacting upon it have arisen. Commonalities among these theories are that the home environment impacts significantly on vocational selection and that the process is a developmental one; that is, it continues over a period of several years. Many other factors have been postulated to influence the occupational choice process including the school environment, personal interest and job-related factors, as well as various forms of occupational information.

An individual's social and economic statuses can be considered to arise from the family environment since the occupations of the parents are primarily responsible for the family's income and standing in a community. The family and the social environment dictate, to a large extent, the values and attitudes which impact significantly upon an individual's characteristics, including his vocational behaviors. The individual spends many of his most formative years in the school

environment interacting with administrators, teachers, counselors, and peers. These persons may reinforce or alter the values and attitudes held by an individual, thereby influencing his educational and vocational choices. The modeling of roles by these persons also influences the individual's behaviors.

Personal interests in job-related tasks have been repeatedly noted by students as holding a position of primacy in the choice process. Occupational information, gained by work experience, knowledge of a field through an individual employed in the area, or through various media sources have been shown to increase the student's awareness of the job. It is through scientific research that attempts are made to understand the choice process so that each person can work at an occupation for which he is uniquely suited and thereby contribute to the improvement of society and of himself.

## CHAPTER 3

### Methodology and Procedures

This study focused on the various person- and job-related factors which influence a student to enroll in a food service-related Regional Occupational Center/Program course. Variance in the patterns of these factors relative to post-high school graduation plans was also investigated. In order to study comprehensively this issue, specific techniques and procedures were employed. These are discussed in this chapter.

#### The Population

This study utilized the entire population of food service-related course teachers in the state of California during the 1983-84 academic year. A list of the names and addresses of the instructors was obtained from the most recent and available California Basic Education Data System (CBEDS). Code number 4402, "Food Management, Production and Services" and code number 4836, "Quantity Food Occupations" were utilized to identify the teachers. The CBEDS information was collected in October, 1983. One hundred twenty individuals were identified and asked to participate in the study. Information was received that ten of the persons were unable to participate for a variety of reasons; for example, they were no longer teaching in the program or the program was closed. One individual responded indicating a desire to not be included in the study. Therefore, 109 instructors from 40 programs

constituted the teacher population for the study. Seven weeks after the initial mailing of the packets, 73 teachers had responded, representing a 69 percent response rate. (The mailing procedure is described later.)

The accessible student population consisted of one section of students enrolled in a course taught by the responding instructor. In order to eliminate selection bias, the teachers were requested to administer the questionnaires to the first section of students meeting each week. One thousand ninety-seven completed questionnaires were obtained.

#### Instrumentation

Two research instruments were utilized in this study. One instrument was developed for responses by teachers and one was designed for responses by students. These questionnaires were developed by the investigator following a review of the related literature, discussions with professionals in the area, and those items of particular interest to the researcher. Both survey instruments were similar in nature; they requested both demographic information and data relative to the perceptions of the influence of various person- and job-related factors on the career choice process. Teacher questionnaires were color-coded to aid in their ready differentiation from student forms.

Both questionnaires contained 33 points of inquiry, using a Likert five-point scale. The first 14 items dealt with demographic information. The remaining questions queried the respondents about the degree of influence of various factors on the choice process. Teachers were requested to indicate their perceptions considering only the



responding section of students when marking the questionnaire. Students were instructed to mark the survey instrument indicating the influence of the various factors on their decision to enroll in the course. Samples of the teacher and student survey instruments are shown in Appendices A and B, respectively.

In an attempt to eliminate central tendency bias, no midpoint for degree of influence was included. Choices which could be selected included "great influence," "moderate influence," "slight influence," "no influence," and "discouragement."

#### Data Collection Procedures

Concurrently with the mailing of the questionnaires to the teachers, individually addressed letters were sent to the directors of programs in which the instructors were employed. The letter explained the nature of the study and requested their encouragement of the teachers to participate in the project. Assurances of anonymity of all responses were communicated. Survey instruments for both teacher and student responses were included for perusal by the directors. A sample of the letter mailed to the directors is exhibited in Appendix C.

The packets of materials mailed to the teacher population contained a cover letter, individually addressed to the teachers, explaining the purpose of the study and asking for their cooperation. Also communicated were assurances of anonymity of responses. A sample of the cover letter mailed to the teachers is included in Appendix D. The packets also contained 20 student and one teacher questionnaires, sharpened pencils, a mailing label bearing the instructor's name, and a

large, self-addressed, stamped manila envelope to facilitate the return of the completed forms. A desired return date of two weeks was given for the completed questionnaires. The teachers were informed that the pencils could be retained with the researcher's appreciation for their participation.

Complimentary summaries of the study results were offered to each teacher. To indicate their desire to receive the summarization, each instructor was asked to return the mailing label with the packet of completed forms.

Three weeks after the mailing of the packets, letters thanking the responding teachers for their participation were mailed. A sample of this letter is located in Appendix E. Concurrently, reminder letters soliciting participation from non-respondents were sent. A self-addressed post card on which the teacher could communicate his need for an additional packet of materials or his plans for the completion of the questionnaires was enclosed with the letter. The reminder letter and post card are included in Appendices F and G, respectively.

Seven weeks following the initial mailing of the packets, letters thanking the remainder of the responding population were sent. A copy of this letter can be found in Appendix E. Two packets of questionnaires were returned after the materials had been sent to the computer center for statistical analysis and therefore were not included in the study.

A ten percent randomly-selected sample of the non-responding population was contacted by telephone and requested to complete the forms. This was for the purpose of determining if the non-respondents

answered questionnaire items differently than the responding population. It was found that their responses did not vary from that of the population which originally responded.

#### Instruments' Validity and Reliability Determination

Prior to the final printing of the survey instruments, questionnaires were assessed for content validity and item reliability. A team of three experts in the area of Regional Occupational Centers/Programs courses of study evaluated the forms for content validity. One member of the validation team was the Director of a County Regional Occupational Program. Another team member was an instructor in a food service-related course and the third individual was a supervisor for vocational homemaking programs in northern California. As a result of their input, minor changes regarding item and instruction wordings were made to improve the readability and clarity of the forms.

#### Pilot Study--Teachers' Instruments

Following the confirmation of the content validity, 15 food service-related teachers in northern California and their respective program directors were contacted and their assistance in this part of the investigation solicited. Copies of the letters sent to the directors and teachers may be found in Appendices H and I, respectively.

An open-ended question sheet requesting information relative to instructions, clarity, readability and relevance of the items was included in the letters to the teachers. A sample of this form is included in Appendix L.

During the planning stages for this investigation, it was determined that if ten percent of the sample population raised the same or similar type of concern about an instruction or item, the issue would be discussed with the validation panel. No changes in the questionnaire resulted from the teachers' responses. Statements obtained from the teachers were favorable ones.

Three weeks following the mailing of the first phase of the pilot study, the second phase was instituted. This involved the mailing of a second instrument, identical to the first, to the sample teacher population. Eleven sets of completed questionnaires were completed and returned. One questionnaire was received too late to be included in the analysis. Analysis of the teachers' responses was performed using the Statistical Package for the Social Sciences (SPSS) at the Computer Center, California State University, Chico. The Pearson Product-Moment Correlation was utilized to determine the reliability of individual instrument items - that is, the consistency of response for each item over a period of time. These data yielded useful information relative to the degree of confidence with which the results may be interpreted. Reliability coefficient information is located in Appendices J and K.

#### Pilot Study--Students' Instruments

Concurrently with the pilot study of the teachers' survey instrument was the field testing of the students' instrument. One section of approximately 20 food service-related course students in Butte County was utilized for this phase of the investigation. Permission to gather the data was obtained from the County Regional Occupational Program

Director and the classroom teacher. A short, open-ended question sheet regarding the clarity, readability and relevance of the instructions and items was distributed to each student. A copy of this question sheet can be found in Appendix L. The pre-determined basis for revision of the questionnaire was identical to that previously described for the teachers' forms. No changes were necessary as a result of the procedure.

Three weeks following the administration of the survey instrument to the students, an identical instrument was re-submitted for their completion. Sixteen useful matched sets of questionnaires were obtained and analyzed as previously described.

#### Statistical Analysis of Data

Seven weeks following the initial mailing of the questionnaire packets to the teachers, the instruments were submitted to the Computer Center, California State University, Chico, for processing by direct data entry. The forms were then processed using the SPSS program. Both descriptive and inferential statistical techniques were used to analyze the data. Analysis of variance and chi square were used to show significant differences. Items showing significant differences ( $p < .05$ ) resulted in a rejection of the null hypothesis. A summarization of the null hypothesis corresponding instrument items and method of analysis are located in Table 1.

Table 1  
Null Hypotheses and Methods of Statistical Analysis

Null Hypothesis	Source of Information	Method of Analysis
1) There is no difference between the means of the teachers' and the students' responses with respect to the degree of importance of the the influencing persons and factors on the student's decision to enroll in a food service-related course:	Instruments A and B:	
a) Mother/stepmother/guardian	Item 15	ANOVA
b) Father/stepfather/guardian	Item 16	ANOVA
c) Sister(s) and/or brother(s)	Item 17	ANOVA
d) Other family member	Item 18	ANOVA
e) Teacher(s)	Item 19	ANOVA
f) Counselor(s)	Item 20	ANOVA
g) Other adult(s)	Item 21	ANOVA
h) Friend(s)	Item 22	ANOVA
i) Liking of the work required by the job.	Item 23	ANOVA
j) Hobbies	Item 24	ANOVA
k) Previous jobs	Item 25	ANOVA
l) Expected wages	Item 26	ANOVA
m) Anticipated ease of finding a job.	Item 27	ANOVA

Table 1  
(continued)

Null Hypothesis	Source of Information	Method of Analysis
1) (continued)	Instruments A and B:	
n) Fitting into desired lifestyle.	Item 28	ANOVA
o) Observations of someone doing the job tasks.	Item 29	ANOVA
p) Conversations with an employee in the field.	Item 30	ANOVA
q) Job description materials	Item 31	ANOVA
r) Enrollment in occupational- or career-related course.	Item 32	ANOVA
s) Results of job preference test.	Item 33	ANOVA
2) There is no difference between the means of the student responses with respect to influencing persons or factors on the basis of:	Instrument B:	
a) Gender	Items 1 and 15-33	ANOVA
b) Head of household	Items 2 and 15-33	ANOVA
c) Racial or ethnic group	Items 3 and 15-33	ANOVA
d) Satisfaction with decision to enroll in a food service-related course.	Items 6 and 15-33	ANOVA
e) Post-high school graduation plan categories.	Items 9-10 and 15-33	ANOVA

Table 1  
(continued)

Null Hypothesis	Source of Information	Method of Analysis
3) There is no difference among the proportions of the students' responses with respect to post-high school graduation plans on the basis of:	Instrument B:	
a) Gender	Items 1 and 9-10	Chi Square
b) Head of household	Items 2 and 9-10	Chi Square
c) Racial or ethnic group	Items 3 and 9-10	Chi Square
d) Grade level in school	Items 4 and 9-10	Chi Square
e) Paid employment in a food service-related job.	Items 5 and 9-10	Chi Square
f) Satisfaction with the decision to enroll in a food service-related course.	Items 6 and 9-10	Chi Square
g) Grade level of decision to enroll in a food service-related course	Items 7 and 9-10	Chi Square
h) Most important reason for enrolling in a food service-related course.	Items 8 and 9-10	Chi Square
4) There is no difference among the proportions of the students' responses with respect to satisfaction with decision to enroll in a food service-related course and satisfaction with school in general.	Instrument B: Items 6 and 7	Chi Square



Table 1  
(continued)

Null Hypothesis	Source of Information	Method of Analysis
5) There is no difference between the proportions of the teachers' and the students' responses with respect to perceptions of:	Instruments A and B:	
a) Student's post-high school graduation plans to seek a job in a food service-related area.	Item 9	Chi Square
b) Students' post-high school plans to attend a two- or four-year college or university and major in a food service-related area.	Item 10	Chi Square
c) Single most important reason for students choosing to not attend an institution of higher education.	Item 11	Chi Square
d) Student enrollment at an institution of higher education and major in a food service-related area if all obstacles to it were removed.	Item 12	Chi Square
e) The most important reason for enrolling in the food service-related course.	Item 13	Chi Square
f) Student's intention to enroll in another food service-related course.	Item 14	Chi Square

### Summary

The entire population of food service-related Regional Occupational Center/Program teachers and one section of their students were queried concerning their demographic characteristics and the degree of influence selected person- and job-related factors had on the decision to enroll in the course of study. A response rate of 69 percent was achieved. Both groups completed the 33-item, five-point Likert scale questionnaires. The responses were evaluated using descriptive and inferential statistics.

A pilot study was conducted prior to preparation of the final survey instruments to gain information about the relevance and clarity of the items and instructions and to establish reliability. A complimentary summary of the results was sent to responding teachers.

## CHAPTER 4

### Findings

This chapter contains the analysis of the responses from questionnaires that were sent to all the food service-related teachers in California during the spring semester, 1984. Questionnaires were completed by the teacher population and one student section taught by each teacher. Analysis of variance and chi square were used to determine significance of difference among various populations. The purpose of the study was to determine the various person- and job-related factors which influenced a student to enroll in a food service related Regional Occupational Center/Program and whether those factors varied according to various demographic characteristics and post-high school plans.

This chapter is organized to present the results and discuss the gathered data. First, a descriptive overview of the teacher and student populations is presented. This provides information about the programs and about the demographic characteristics of the sampled populations. Second, each hypotheses is stated and the results of the survey instrument items pertaining to the hypotheses are described. Tables and figures are included to aid in the interpretation of the results.

#### Population Description

Means and percentages were obtained for all questionnaire items and are presented below. Many of these items are used to describe the

populations and are included in this section of the chapter. The means and percentages for other items are discussed in the following sections of this chapter.

### Teacher Population

Seventy-six of the 110 teachers of Regional Occupation Centers/Programs food service-related courses responded to the survey instrument. This represented 70 percent of the total teacher population. The results show that two out of three of the teachers are female and that a substantial proportion (88.2 percent) is Caucasian. Seventy-six percent are employed on a full-time basis.

One-third of the instructors have four to six years of teaching experience in a food service-related Regional Occupational Center/Program course of study. Nearly equal numbers of instructors have taught one to three years and seven to ten years. Twenty percent have been employed in this field for more than ten years. Percentage figures relative to the teachers' demographic and programmatic characteristics are shown in Table 2.

Table 2

Descriptive Analysis of Regional Occupational Centers/Programs  
Food Service-related Teacher Population and  
Program Characteristics (N=76)

<u>Characteristics:</u>	<u>N</u>	<u>Percentage</u>
<b>Sex:</b>		
Male	25	32.9
Female	51	67.1
<b>Taught food service course in Non-regional Center/Program:</b>		
yes	33	40.8
no	43	55.3
no response		3.9
<b>Race or Ethnic Group:</b>		
Black	2	2.6
Asian-Pacific Islander	1	1.3
Hispanic	4	5.3
White/Caucasian	67	88.2
Other	2	2.6
<b>Number of years of teaching experience in food service-related Regional Occupational Center/Program:</b>		
less than 1 year	2	2.7
1-3 years	17	22.7
4-6 years	25	33.3
7-10 years	16	21.3
more than 10 years	15	20.0
<b>Present teaching assignment:</b>		
Full-time assignment	57	76.0
Part-time assignment	18	24.0
<b>Credential authorizing the teaching of food service:</b>		
Designated Subject	48	63.2
Single Subject	9	11.8
Special Secondary	9	11.8
General Secondary	3	3.9
Other	7	9.2

Table 2  
(continued)

<u>Characteristics:</u>	<u>N</u>	<u>Percentage</u>
Total number of food service sections being taught by instructor:		
1 section	17	22.7
2 sections	15	20.0
3 sections	11	14.7
4 sections	8	10.7
5 or more sections	24	32.0
Total number of students taught by instructor:		
10 or fewer students	6	7.9
11-25 students	23	30.3
26-50 students	21	27.6
51-75 students	13	17.1
more than 75 students	13	17.1

### Student Population

Each teacher was asked to administer the student questionnaire to one section of students. Teachers who taught multiple sections were requested to have the section which meets first each week complete the forms. This was for the purpose of eliminating teacher selection bias. One thousand, ninety-seven (1,097) student forms were completed and returned.

The population was nearly equally distributed between males and females and 64 percent of the students listed their race as Caucasian, while 17.8 percent listed it as Hispanic. Lower proportions of students indicated Black or Asian-Pacific Islander as their race. Nearly two-thirds of the students live in homes headed by both a male and a female member. Twenty-three percent considered a single female to be the

household head, while 8.2 percent listed a single male as being the head of the household. Nearly three-fourths of the responding students were in the 11th or 12th grades.

Sixty-seven percent considered that they are very satisfied or satisfied with school in general and 90 percent stated that they are very satisfied or satisfied with their decision to enroll in the course of study. Less than 40 percent have been employed in a paying, food service-related job not connected with Regional Occupational Centers/Programs. Five hundred thirteen students indicated that they intend to attend a two- or four-year college or university following high school graduation, while the remaining 53 percent (N=584) stated their intentions to not go to an institution of higher education. Characteristics of this group of students are shown in Table 3.

Table 3

Descriptive Analysis of the  
Characteristics of the Responding Regional  
Occupational Centers/Programs Students (N=1097)

<u>Characteristics:</u>	<u>N</u>	<u>Percentage</u>
<b>Sex:</b>		
Male	520	47.5
Female	575	52.5
<b>Head of Household:</b>		
Single Female	256	23.4
Single Male	87	8.0
Both Male and Female	751	68.6
<b>Race or Ethnic Group:</b>		
Black	120	11.0
Asian-Pacific Islander	35	3.2
Hispanic	194	17.8

Table 3  
(continued)

<u>Characteristics:</u>	<u>N</u>	<u>Percentage</u>
White	681	62.4
Other	61	5.6
Grade in School:		
10th grade	211	19.3
11th grade	399	36.4
12th grade	395	36.0
Adult student enrolled only in ROC/P courses	51	4.7
Other	40	3.6
Employed in paying, food service-related job, not connected to school work:		
Yes	425	38.8
No	671	61.2
Satisfaction with decision to enroll in course of study:		
Very Satisfied	511	46.7
Satisfied	489	44.7
Slightly Satisfied	73	6.7
Not Satisfied	22	2.0
Satisfaction with school in general:		
Very Satisfied	146	13.3
Satisfied	586	54.0
Slightly Satisfied	234	21.6
Not Satisfied	121	11.2
Students post-high school grad plan		
To go to a two- or four-year college or university	513	47.0
To not go to a two- or four-year college or university	584	53.0

### Hypothesis I

There is no difference between the means of the teachers' and the students' responses with respect to the degree of importance of the influencing persons and the factors on the student's decision to enroll in a food service-related course: a) mother/stepmother/guardian;



b) father/stepfather/guardian; c) sister(s) and/or brother(s); d) other family member; e) teacher(s); f) counselor(s); g) other adult(s); h) friend(s); i) liking of the work required by the job; j) hobbies; k) previous jobs; l) expected wages; m) anticipated ease of finding a job; n) fitting into desired lifestyle; o) observations of someone doing the job tasks; p) conversations with an employee in the field; q) job description materials; r) enrollment in occupational- or career-related course; s) and results of job preference test.

The purpose of this hypothesis was to determine the teachers' and students' perceptions concerning the degree of importance of various person- and job-related factors related to the decision to enroll in a food service-related course of study. Also tested was the congruency of the perceptions of the two sampled populations. Data for this hypothesis are presented descriptively, utilizing means and percentages and by using an analysis of variance (ANOVA), an inferential statistical method. Results of the ANOVAs are displayed in Table 4. The table is organized from greatest to least influence of the factors on the basis of the students' responses. A comparison of the mean values for the factors by the students and the teachers is presented diagrammatically in Appendix M.

Description of teacher group perceptions. Teachers considered friends to have the greatest influence on students' decisions to enroll in the course. "Liking of the work required by the job" and the "counselor(s)" categories were given the second highest mean ratings by teachers. These categories were followed closely by the groups repre-

Table 4

ANOVA Results of the Relationship of Teachers' and Students' Responses with Respect to the Degree of Importance of 19 Influencing Factors on the Student's Decision to Enroll in a Food Service-related Course

<u>Influencing Factors:</u>	Means <sup>a</sup> of Student Group	Means <sup>a</sup> of Teacher Group	F- Ratio
Liking of the work required by the job	2.065	1.958	58.617***
Friend(s)	2.594	1.829	26.765***
Hobbies	2.627	2.681	0.129
Anticipated ease of finding a job	2.637	1.986	23.045***
Mother/stepmother/guardian	2.662	2.438	2.313
Conversations with an employee in the field	2.681	2.019	19.576***
Observations of someone doing the job tasks	2.710	1.987	27.736***
Expected wages	2.732	2.110	18.395***
Fitting into desired lifestyle	2.733	2.425	4.600*
Enrollment in occupational- or career-related course	2.747	2.222	16.552***
Teacher(s)	2.807	2.055	26.996***
Counselor(s)	2.822	1.959	34.793***
Previous jobs	2.858	2.152	21.798***
Job description materials	2.944	2.795	1.293
Father/stepfather/guardian	2.977	2.639	4.970*
Other adult(s)	3.018	2.648	6.969**
Results of job preference test	3.154	3.110	0.113
Sister(s) and/or brother(s)	3.186	2.817	7.637**
Other family member	3.195	3.153	0.095
Cumulative Mean	2.710	2.370	

\* =  $p < .05$   
 \*\* =  $p < .01$   
 \*\*\* =  $p < .001$

a: 1 = great influence  
 2 = moderate influence  
 3 = slight influence

4 = no influence  
 5 = discouragement

senting "anticipated ease of finding a job" and "observation of someone doing the job tasks." Teachers rated "other family members" and "results of a job preference test" to be the least influential factors. Inspection of the data showed that the instructors indicated that only three categories, "sister(s) and/or brother(s)," "other family members," and "expected wages" categories would discourage the student from enrolling in the course. Less than three percent of the instructors noted these factors. Table 4 shows the mean rating by teachers for all the categories of influencing factors.

Description of student group perceptions. The student group rated "liking the work" to be the single most important factor in their decision to enroll in a food service-related course. Inspection of the data showed that was indicated by 69.2 percent as having a "great" or a "moderate" influence. This was followed, in order, by the categories descriptive of "friends," "hobbies," "easy to get a job," "mothers/-stepmothers/guardian," and "talks with someone who is or has been in the job area." The mean response of these five factors differed only slightly. The least influential factors were "result of a job preference test," "sister(s) and/or brother(s)," and "other family members," categories. Students noted that all categories of influencing factors were perceived to be ones which would discourage enrollment; however, in all instances, the percentage of students responding in this manner was 3.5 or less. The mean percentage of the perceptions of the student group concerning the influencing factors is exhibited in Table 4.

Congruency of students' and teachers' perceptions. These comparisons were facilitated by the use of the ANOVA procedure to describe significant differences between students and teachers concerning the importance of various influencing factors. Results of the ANOVA are presented in Table 4. It can be noted that the two groups similarly perceived the influence of the "mother/stepmother/guardian," "liking of the work required by the job," "hobbies," "job description materials," and the "results of a job preference test" categories. Significant differences existed between the two groups relative to the perceived importance of the remaining influencing factors.

Inspection of the data revealed that the factor considered to be the most influential one by the teacher population received a higher degree of importance score than did the most influential factor for the student group. The teacher population mean influence score for the factors was 2.370 as compared with 2.710 mean score for the student group. Appendix M diagrammatically shows the relationship of teachers' and students' perceptions of these factors.

On the basis of these data, the null hypothesis is retained for the "mother/stepmother/guardian," "other family member(s)," "liking the work required by the job," "hobbies," "job description materials," and "results of a job preference test." It was rejected for the remaining 13 factors.

## Hypothesis II

There is no difference between the means of the student responses with respect to influencing persons or factors on the basis of: a) gender; b) head of household; c) racial or ethnic group; d) satisfaction with decision to enroll in a food service-related course; and e) post-high school graduation plan categories.

The purpose of this hypothesis was to determine whether the importance of the nineteen influencing factors on students' decision to enroll in a food service-related course differed according to selected demographic- and person-related factors. Analysis of variance (ANOVA) was used to determine significance of differences. The ANOVA tables are located in Appendices N through S. Fisher's Least Significant Differences (LSD) test was applied to factors exhibiting significant differences. A summary of the statistical data responding to this hypothesis is located in Table 5.

Sex. As can be noted in Table 5, variations in responses from the two gender groups were significant for the influence of the "father/stepfather/guardian" category showed. In both cases, the significance of differences was at the .05 level.

More than 40 percent of the male students rated "father/stepfather/guardian" to be of "great" or "moderate" influence, while only one-third of the female students rated this category similarly. Fifty percent of the females indicated that the male authority figure had no influence.

Table 5

ANOVA F-Ratio values for the Relationship of the  
Degree of Importance of Various Demographic-  
and Person-related Factors on Students'  
Decision to Enroll in a Food  
Service-related Course

Characteristic:	Sex <sup>a</sup>	Head of House- hold <sup>a</sup>	Race/ Ethnic Group <sup>a</sup>	Satis- faction with De- cision to Enroll in Course <sup>a</sup>	Intend to find a Food- Service- Related Job <sup>a</sup>	Intend to go to College and Major in a Food Service- Related Area <sup>a</sup>
Mother/stepmother/ guardian	2.57	1.42	2.03	11.51 ***	4.40 *	12.56 ***
Father/stepfather/ guardian	3.95 *	17.74 ***	1.50	7.69 ***	2.89	15.60 ***
Sister(s) and/or brother(s)	.15	.59	5.03 ***	9.71 ***	3.09 *	9.31 ***
Other family members	.35	.56	2.84 *	2.63 ***	4.45 *	11.60 ***
Teacher(s)	.26	.97	2.17	16.99 ***	3.66 *	13.98 ***
Counselor(s)	.38	1.03	3.99 **	4.49 **	1.81	1.88
Other adult(s)	1.25	.49	1.24	12.92 ***	2.45	15.02 ***
Friend(s)	1.27	.76	1.25	14.55 ***	1.55	6.29 **
Liking of the work required by the job.	.10	.55	2.10	72.87 ***	17.29 ***	29.95 ***
Hobbies	.00	.06	1.64	13.52 ***	6.33 **	14.51 ***
Previous jobs	.13	.73	1.49	9.39 ***	7.47 ***	8.86 ***

Table 5  
(continued)

Characteristic:	Sex <sup>a</sup>	Head of Household <sup>a</sup>	Race/Ethnic Group <sup>a</sup>	Satisfaction with Decision to Enroll in Course <sup>a</sup>	Intend to find a Food Service-Related Job <sup>a</sup>	Intend to go to College and Major in a Food Service-Related Area <sup>a</sup>
Expected wages	6.73 ***	1.34	5.28 ***	10.64 ***	9.83 ***	13.71 ***
Anticipated ease of finding a job.	.10	.12	3.75	11.30 ***	13.11 ***	20.92 ***
Fitting into desired lifestyle.	3.38	.50	1.68	26.24 ***	34.71 ***	99.71 ***
Observations of someone doing the job tasks.	.01	.59	3.71 **	30.45 ***	12.02 ***	25.14 ***
Conversations with an employee in the field.	.76	1.04	1.14	23.58 ***	14.01 ***	20.79 ***
Job description materials	.16	1.38	8.35 ***	20.61 ***	15.74 ***	27.25 ***
Enrollment in occupational- or career-related course.	1.49	1.60	6.81 ***	25.98 ***	26.22 ***	44.20 ***
Results of job preference test.	.64	.07	3.89 **	12.29 ***	6.23 ***	17.25 ***

\* =  $p < .05$   
 \*\* =  $p < .01$   
 \*\*\* =  $p < .001$

a: p-values based on the ANOVA results (see Appendices N-S)

Male students rated "expected wages" to be a more important influencing factor than did female students. Nearly 40 percent of the

female respondents stated that the wages they could expect to receive had no influence on their decision to enroll in the course.

Head of the household. Except for one instance, the head of the household in which the student resides did not have a statistically significant impact on the respondents' indications of the importance of the nineteen influencing factors. In the case of the "father/stepfather/guardian" category, differences were observed at the .001 level of significance.

Inspection of the data revealed that the "father/stepfather/guardian" category was rated by 20 percent of the more than 1,000 responding students to have a "great influence" on their decision to enroll in the course. Fisher's Least Significant Difference test was used to determine differences among groups of students. At the .05 level of significance, the analysis revealed that the students from homes headed by a single female responded differently to the question regarding the influence of the "father/stepfather/guardian" category than did the students from homes headed by a single male or by both a male and a female member. More than one-half of the students in homes headed by a single female noted that the father figure had no influence on the decision.

Race/Ethnic Group. As can be noted in Table 5, variations in responses from the racial/ethnic groups were significant for the influence of nearly one-half of the factors. This is in contrast with fewer variations in responses from the gender and the head of household groups. The racial composition of the student population is shown in Table 3.



Considering all the influencing factors which showed significant differences due to race, Black students indicated "great" or "moderate" influence more often than did students of the other races. Likewise, in every instance, White students showed a lower rate of "great" or "moderate influence" due to the various factors on their decision to enroll in the course than did students of the other races. This is further evidenced by an average response rate of 24.5 percent of the Black students indicating a "great influence" from the various factors on their decision to enroll while only 11 percent of the White students responded in a like manner. Likewise, White students indicated "no influence" from the factors at a higher rate than did the other populations.

All the races indicated that the categories of "other family members" and "sister(s) and/or brother(s)" had the least influence on their decision to enroll in the course. Counselors were found to be influential by more than 60 percent of the minority students.

Appendix T diagrammatically displays the mean values for the degree of influence indicated by the racial groups on the students' decision to enroll in the food service-related course. The percent of students from each racial group indicating the various levels of influence is located in Appendix U.

Analysis of the data by Fisher's LSD was applied to the nine factors which showed statistically significant differences from one another. This test revealed that the responses of Black students were significantly different ( $p < .05$ ) from the responses of White students for six of the factors; that is, White and Black student responses were in different subsets for these factors. The categories of influencing

factors showing differences between Black and White students included "sisters and/or brothers," "other family members," "counselors," "job description materials," "enrollment in an occupational- or career-related course," and "results of job preference test."

Least Significant Difference test results gave evidence that the responses of Black, Asian/Pacific Islander and Hispanic students did not vary significantly from one another considering seven of the nine studied variables. Only in the case of the question querying the influence of "other family members" did the Asian/Pacific Islander students respond unlike the Black and the Asian/Pacific Islander students. Students describing their racial/ethnic heritage as "Other" responded similarly with Black, Asian/ Pacific Islander and Hispanic students except for the variable of "easy to find a job," and "reading or looking at job description materials" categories.

Responses from students identifying themselves as belonging to "White" or "Other" racial/ethnic group classifications did not vary significantly from one another except for the perceived influence of the "counselors" category on their decision to enroll in this course. Counselors were identified as having "great" or "moderate" influence by nearly 50 percent of the "Other" students while approximately one-third of the white students rated counselors similarly.

Satisfaction with decision to enroll in a food service-related course. The degree of the students' satisfaction with their decision to enroll in the food service-related course resulted in statistically significant differences in their responses to all nineteen of the influencing

factors. These differences were significant at the  $p < .01$  and  $p < .001$  levels. A summary of these results is shown in Table 5. As described earlier, more than 90 percent of the respondents were "very satisfied" or "satisfied" with their decision to enroll in the course.

The percentage of students responding that the various person- and job-related factors had a "great influence" on their decision to enroll in the course decreased as their indication of satisfaction with their decision to enroll in the course decreased. Nearly 28 percent of the students who were "very satisfied" with their decision to enroll in this course noted that the influencing factors had a "great influence" on their decision to enroll in the course. This percentage decreased to 13.5 percent for those students who were not satisfied with the decision. Fathers were perceived as the major discouraging factor for all students. Mothers were perceived by all the groups as not discouraging the decision to enroll in the course.

Fisher's LSD test indicated that the responses of students to questions concerning the degree of importance of various influencing factors on their decision to enroll in the course was significantly different ( $p .05$ ) for the group of students indicating that they were "very satisfied" with their decision than for students indicating other levels of satisfaction for three-fourths of the factors.

The two populations at the opposite ends of the satisfaction scale, the "very satisfied" and "not satisfied" groups rated the influence of "hobbies", "ease of finding a job" and "expected wages" alike. In each instance, inspection of the data revealed that more than one-half of

the students in each group rated the factor to have a "great" or "moderate" influence on the decision.

Post-high school graduation plans. The students were asked to consider their major post-high school graduation plan relative to two possibilities. The first possibility involved their seeking of a job and not attending college. Students were also queried as to whether the job they intended to seek was related to an area of food service. The second choice involved their plans to enroll in an institution of higher education and whether the intended major area of study would be a food service-related one. Analysis of variance showed that for the group intending to seek a job following high school graduation, only four factors did not effect by the students' post-graduation plans. These factors included "father", "counselor", "other adults", and "friends". The "counselor" category did not show statistical significance for the group of students intending to enroll in a two- or four-year college or university and major in a food service-related area. All the other factors showed significant differences among the groups.

Analysis of the data using Fisher's LSD showed that responses from the groups of students which answered affirmatively to the questions regarding their intentions to seek a job related to the food service industry or to pursue a food service-related course of study following high school graduation were significantly different ( $p < .05$ ) than the groups responding negatively or with uncertainty. Students who responded affirmatively concerning their intention to pursue a food service-related course of study or food service-related job indicated a

greater percentage of "great influence" responses for nearly all of the investigated statistically significant factors than did the students choosing to seek employment or a college major in another area or who were uncertain of their plans. The influence ratings of the "jobs at which I have worked" and "expected wages" categories were slightly higher responses for the job seeking group than for the college bound population. The "liking the work" influencing factor was selected by a majority of the students with plans to pursue a food service-related job and to pursue further education in the field.

Students planning to terminate their food service-related education or experiences following graduation showed a greater number of individuals indicating "no influence" or "discouragement to enroll" from the various factors on their decision to enroll in the course than did the population intending to continue their association with the field. These data are shown on Table 6.

Table 6  
 Mean Percentages of Responses to Statistically  
 Significant Influencing Factors by the  
 Various Career Plan  
 Student Groups

	<u>Great Influence</u>	<u>No Influence</u>	<u>Discouragement To Enroll</u>
Intend to seek food service- related job following high school graduation.			
Yes:	30.61	28.69	2.4
No:	18.28	41.37	3.5
Not Certain:	16.81	35.56	2.4
Intend to major in a food service-related area at a two- or four-year college or uni- versity.			
Yes:	32.66	21.06	2.28
No:	16.78	43.36	3.89
Not Certain:	18.39	34.74	1.45

On the basis of this evidence the null hypothesis for the effect of selected demographic- and person-related variables on the influencing factors is rejected except for the "fathers", "counselors", "other adults," and "friends" categories when considering the post-high school graduation plans of job- seeking youths. This indicates that students holding various job-seeking plans responded significantly different to the degree of influence they perceived from all of the factors except for these four categories.

When considering the post-high school graduation plan for enrollment at an institution of higher education, the null hypothesis was

rejected for all factors with the exception of the "counselor" category. These data reveal that groups of students having different college enrollment plans responded significantly different from one another relative to the perceived degree of influence from all of the factors except one.

### Hypothesis III

There is no difference among the proportions of the students' responses with respect to post-high school graduation plans on the basis of: a) gender; b) head of household; c) racial or ethnic group; d) grade level in school; e) paid employment in a food service-related job; f) satisfaction with the decision to enroll in a food service-related course; g) grade level of decision to enroll in a food service-related course; and h) most important reason for enrolling in a food service-related course.

The purpose of this hypothesis was to ascertain if differences exist in students' post-high school plans as a consequence of various demographic- and person-related factors. The two post-high school plans to which the students responded were their intention to seek a job, related or unrelated to the food service industry and their intention to enroll in a two- or four-year college or university and to major or to not major in a food service-related area. Following a description of the student population with regard to post-high school plans, chi-square analysis is presented to show significant differences among students within each group.

Student population descriptions. Seven hundred fifty-one students responded affirmatively to the questionnaire item querying their intention to seek a job following high school graduation. Thirty-two

percent of this population stated that the job they plan to seek will be related to a food service area. Nearly 40 percent were uncertain if the job they will seek will be related to this industry. More than one-third of the students indicated that learning the skills to aid them getting a job was their primary reason for enrolling in the course.

Twenty-three percent of the non-college bound students expressed a desire to attend college and major in a food service-related area if the obstacles they perceive to their enrollment were to disappear. A slightly larger percentage of respondents stated that they would attend college but not major in a food service-related area. Only one-sixth of the responding population expressed that they would not attend college if the obstacles were to disappear because they desired no more formal education.

No single choice to the question regarding the most important reason for the decision to not enroll at an institution of higher education received a majority of the students' responses. Nearly 36 percent listed "other reasons" as the choice for non-enrollment plans. This was followed by the selection which indicated a desire to receive no more formal education. Non-completion of college entrance course requirements, low grade-point average and lack of money were indicated as obstacles by a lesser percentage of students.

Of the 513 students who chose college attendance as their primary post-high school graduation plan, approximately one-third indicated that they were uncertain concerning the field in which they intended to major. Nearly twice as many college-bound students intended to select an area other than food service as their major field. Slightly more than



26 percent of the respondents indicated that their primary reason for enrollment in the food service-related course in high school was to enable them to earn money while attending college. Descriptive data of the populations is shown in Table 7.

Table 7  
Student Population Post-High School  
Graduation Plans

<u>Questionnaire Item</u>	<u>N</u>	<u>Percentage</u>
Do you intend to seek a job related to food service following high school graduation (or completion of this course of study if you are an adult student)?		
a. Yes	239	31.8
b. No	217	28.9
c. I am not certain	296	39.4
What do you consider to be the single most important reason that you are not presently planning to enroll in a two- or four-year college or university?		
a. I do not want to go to school any more	143	22.2
b. I have not completed the high school courses necessary to meet the college entrance requirements	113	17.6
c. I do not have a high enough grade point average	57	8.9
d. I do not have enough money	99	15.4
e. Other reasons	231	35.9

Table 7  
Student Population Post-High School  
Graduation Plans

(continued)

<u>Questionnaire Item</u>	<u>N</u>	<u>Percentage</u>
If the reasons that prevent you from entering a two- or four-year college or university were to disappear would you then attend <u>AND</u> major in a food service-related area?		
a. Yes	173	23.3
b. No, I would go to college but not major in a food service-related area	180	24.3
c. No, I do not want to go to college	130	17.5
d. I am not certain	258	34.8
What is the most important reason that you are enrolled in a food service-related course?		
a. I want to learn the skills so I can get a job when I graduate from high school (or completion of this course of study if you are an adult student)	385	35.7
b. I want to learn the skills so I can earn money while attending a two- or four-year college or university	287	26.6
c. I think this is an easy way to complete the requirements for high school graduation	123	11.4
d. None of the above	284	26.3
If you plan to enroll in a two- or four-year college or university, do you intend to major in a food service-related area?		
a. Yes	171	21.8
b. No	342	43.6
c. I am not certain	272	34.6

Post-high school plan: Seek a job. Significant differences existed among the groups of students who responded positively, negatively or with indecision to the question regarding their plans to seek a job following high school graduation. A summary of this information is located in Table 8. The expanded chi square table is located in Appendix V.

Table 8

Chi Square Analysis of the Relationship of Various  
Demographic- and Person-related Factors to  
Students' Post-High School Graduation  
Plan to Seek a Job and and to Not  
Attend a Two- or Four-year  
College or University

<u>Variable</u>	<u>Degrees of Freedom</u>	<u>Raw Chi Square</u>
Gender	2	10.000**
Head of household	4	13.353*
Racial or ethnic group	8	9.307
Grade level in school	8	57.341***
Employment in food service-related area	2	7.604*
Satisfaction with decision to enroll in course	6	59.465***
Satisfaction with school in general	6	34.692***
Grade level of decision to enroll in food service-related course	8	46.445***

\* =  $p < .05$   
 \*\* =  $p < .01$   
 \*\*\* =  $p < .001$

The variability of responses from students planning to seek, to not seek, or who were uncertain of the direction of the job was found to be statistically significant for seven of the eight investigated demographic- and person-related factors. Responses to questions did not vary significantly according to the respondents' racial/ethnic group.

Gender. Nearly equal proportions of male and female students indicated a choice to seek a food service-related job following high school graduation. The statistical program titled "chibyec" was used to examine the contribution of each cell to the chi square.<sup>1</sup> The responses from students of both sexes who were undecided about the direction of the job they intend to seek contributed more than 50 percent of the chi square value.

Head of household. Approximately one-quarter of the respondents stated that a single female member heads the family in which they reside. Nearly 38 percent of these students intend to seek a job related to the food service industry. Forty-three percent of students from homes headed by a single male figure stated that they plan to find a job, but that it will be unrelated to the food service area. Students from two-parent homes expressed the greatest degree of uncertainty concerning the direction of the post-high school job.

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<sup>1</sup>Lathrop, Guy, "Chibyec Computer Program," California State University Statistical Laboratory, CSU-Chico, 1978.

Chi square cell contribution analysis revealed that two cells provided more than one-half of the raw chi square values. These cells were the ones comprising the responses of students who intend to seek a job unrelated to the food service industry and are from homes headed by a single female figure and by a single male figure.

Paid work experience. Previous paid work experience in the industry influenced students to anticipate that they will seek jobs related to the food service area. Chi square cell contribution analysis showed that the cell consisting of the responses from students with paid work experience in the food service area and who intended to seek a job in the field contributed 43 percent to the total raw chi square figure. Responses from students intending to seek a job outside the area and who had no paid work experience in the field contributed the smallest amount to the chi square value.

Satisfaction with decision to enroll in this course. Degree of satisfaction with the decision to enroll in the course of study was the highest for the individuals who intend to find a food service-related job and the lowest for the group of students planning to seek employment outside of the area. Nearly 25 percent of the students indicating that they are not satisfied with their decision also plan to locate a food service-related job.

Satisfaction with school in general. Students who intended to locate a food service-related job following high school graduation were more satisfied with school in general than were the other responding

groups. This finding was very highly significant ( $p < .001$ ). The chi square cell containing responses from this group of students comprised more than one-half of the raw chi square value. Forty percent of the students expressing dissatisfaction with school intend to find jobs in areas other than those related to the food service industry.

Grade level of decision to enroll in this course. Contributing 56 percent of the raw chi square value was the cell containing the affirmative responses from adult students concerning their intention to seek a job in the food service area. While adult students constituted only 5.6 percent of the responding student population, 78.6 percent of them expressed plans to seek a food service-related job. Only five percent of this group of respondents stated that the job they intend to seek would be unrelated to the food service industry. Nearly equal percentages of the 12th grade students intend to seek jobs in the food service area as well as intend to seek jobs in other areas. Tenth-grade students displayed a greater proportion of plans to seek jobs unrelated to the food service industry than to seek jobs in the area.

Post high school plan: Attend a two- or four-year college or university. Chi square statistical analysis of the data revealed that significant differences existed among the groups of students who responded positively, negatively or with indecision to the question regarding their plans to attend a two- or four-year college or university following high school graduation. A summary of this data is placed in Table 9. An expanded chi square table is located in Appendix W.

Statistical analysis revealed that three of the eight investigated demographic- and person-related factors showed non-significance according to the students' intentions to major in, not to major in, or their uncertainty of major field choice at an institution of higher education. The factors showing non-significance included the categories of "head of household", "race/ethnic group" and "paid employment in a food service-related job", the significance for the "Satisfaction of decision to enroll in the course" was at the  $p < .001$  level.

Table 9

Chi Square Analysis of the Relationship of Various  
Demographic- and Person-related Factors to  
Students' Post-High School Graduation  
Plan to Attend a Two- or Four-year  
College or University and Major  
in a Food Service-related  
Area

<u>Variable</u>	<u>Degrees of Freedom</u>	<u>Raw Chi Square</u>
Gender	2	14.359**
Head of household	4	5.925
Racial or ethnic group	8	13.562
Grade level in school	8	17.732*
Employment in food service-related area	2	5.539

Table 9  
(continued)

<u>Variable</u>	<u>Degrees of Freedom</u>	<u>Raw Chi Square</u>
Satisfaction with decision to enroll in course	6	50.919***
Satisfaction with school in general	6	35.120***
Grade level of decision to enroll in food service-related course	8	34.941***

\* =  $p < .05$   
 \*\* =  $p < .01$   
 \*\*\* =  $p < .001$

Gender. One hundred five (27.6 percent) of the male students indicated a desire to major in a food service area at an institution of higher education as compared with 66 female students, representing 16 percent of the female respondents. Thirty-seven percent of the female students displayed indecision about the major field of study as compared with thirty-two percent of the male students. Nearly one-half of the total number of students planned to enroll in a college major other than food service, compared with 21.7 percent who plan to select a food service major area. Analysis of the individual cell contributions showed that the two cells consisting of responses from male and female students who responded positively about their plans to major in a food service-related area comprised nearly 80 percent of the raw chi square value.



Grade level of decision to enroll in this course. Contributing more than twice as much as any other cell to the raw chi square value was the cell consisting of responses from the adult students who intend to major in a food service-related area. Students who arrived at the decision to enroll in a food service area following high school graduation showed a larger percentage (52.0) of individuals having plans to study food service in college than did the groups of students making this choice while still attending high school.

Satisfaction with decision to enroll in this course. Students who indicated that they were very satisfied with their decision to enroll in the course were nearly evenly distributed among those who plan to major in, not to major in a food service-related area, or who were uncertain about a major area. Generally, students less satisfied with the decision to enroll were also more likely to pursue a field of study other than food service.

Satisfaction with school in general. Nearly 40 percent of the students who were very satisfied with school also plan to seek a food service major in college while 33 percent of this population plan to major in another field. Fifteen percent of the students indicating their dissatisfaction with school in general plan to major in a food service area, in contrast to 61 percent of individuals not satisfied with school who intend to major in a field other than a food service-related one. Cell analysis indicated that one cell contributed nearly one-half of the raw chi square value. The cell comprised of responses from students intending to major

in a food service-related area and who are very satisfied with school in general contributed 16 of the 35 points to the raw chi square value.

On the basis of chi-square statistical analysis, the null hypothesis was rejected for the influence of selected demographic- and person-related factors on students' post-high school graduation plans to seek a job in a food service-related area except for the race/ethnic group variable. The null hypothesis was also rejected for the influence of these variables on the students' post-high school graduation plan to enroll at a two- or four-year college or university and major in a food service-related area except for the variables of "race/ethnic group", "head of household" and "paid employment in a food service area."

Comparison of Demographic- and Person-Related Factors of Students Planning to Attend College and Major in a Food Service Area and Students Planning to Seek a Job in the Food Service Industry.

Chi square analysis of the data showed that significant differences existed between the college-bound students indicating the choice of a food service major area and the work-bound students planning to seek a job in the food service industry. A summary of these data is located in Table 10. An expanded chi square table is placed in Appendix X.

Analysis of the data revealed that significant differences existed for five of the eight investigated factors. The five factors included the categories of "gender," "racial/ethnic group," "paid employment in a food service-related area," "satisfaction with decision to enroll in the course" and "grade level of decision to enroll in the course."

Inspection of the chi square cell contributions showed that the largest proportion of respondents stating plans to attend college and to

major in a food service-related area were male and were of White ethnic origin. Proportionally, the Hispanic population showed the greatest propensity towards seeking a job in the food service area.

Table 10

Chi Square Analysis of the Relationship of Various Demographic-  
and Person-related Factors to Students' Post High School  
Graduation Plans Plans to Seek a Food Service-related  
Job and to Major in a Food Service-related  
Area at a Two- or Four-year  
College or University

<u>Characteristics:</u>	<u>Degree of Freedom</u>	<u>Raw Chi Square</u>
Sex	1	4.054*
Head of Household	2	1.617
Race or Ethnic Group	4	16.244**
Grade in School	4	7.639
Employed in paying, food service-related job, not connected to school work	1	8.477**
Satisfaction with decision to enroll in course of study	3	8.133*
Satisfaction with school in general	3	1.016
Grade level of decision to enroll in food service-related course	4	11.702*

\* =  $p < .05$   
 \*\* =  $p < .01$   
 \*\*\* =  $p < .001$

A larger percentage of students who had previous paid work experience in the food service industry responded affirmatively to the plan to locate a job in this area than to major in the field at college. Considering the students stating a desire to seek a job in the area, 43 percent had paid work experience in it.

Students planning to major in a food service-related area or to locate a job in the industry generally made this career decision in the tenth and eleventh grades. However, nearly one-quarter of the college-bound students made the decision to enroll in the course in the first through ninth grades. Very few of the students deciding to enroll after high school graduation indicated plans to attend college and major in a food service-related area.

Students who were "very satisfied" with the decision to enroll in the course noted intentions to locate a food service-related job at a higher rate than did the college-bound students. However, the college-bound students noted "satisfied" with the decision at nearly twice the rate as the work-bound group.

The null hypotheses is rejected for the influence of all the listed variables except for the "head of household," "grade level in school" and "satisfaction with school in general." Only these factors did not show significant differences in responses from the two post-high school graduation plan populations.

#### Hypothesis IV

There is no difference among the proportions of the students' responses with respect to satisfaction with decision to enroll in a food service-related course and satisfaction with school in general.

The purpose of this hypothesis was to discover the congruency between the students' satisfaction with school in general and satisfaction with their enrollment in a food service-related course. The chi square statistical analysis was performed to ascertain significance of differences among the various categories of respondents. Significance of differences was determined to be at the  $p < .001$  level. The results of the chi square statistical analysis is located in Table 11. Appendix Y contains an expanded chi square table. Chi square cell analysis indicated that three cells, those comprised of responses from students who were "very satisfied" with school and with their decision to enroll in this course, students who were "not satisfied" with school in general and who were "slightly satisfied" and "not satisfied" with their decision to enroll in this course constituted 54 percent of the raw chi square value. Forty-seven percent of the students indicated that they were "very satisfied" with their decision to enroll in the food service course, while only 13 percent expressed a similar opinion about their satisfaction with school. The largest percentage (57.5) of respondents were "satisfied" with both their decision to enroll in the course and school in general.

Table 11

Chi square Analysis of the Relationship of  
Satisfaction with School in General  
by Satisfaction of Student  
with Decision to Enroll  
in This Course

<u>Variable</u>	<u>Degrees of Freedom</u>	<u>Raw Chi Square</u>
Satisfaction with school in general	9	78.058***

\*\*\* =  $p < .001$

On the basis of this information, the null hypothesis was rejected. Students' responses relative to satisfaction with decision to enroll in a food service-related course and with school in general varied significantly from one another.

#### Hypothesis V

There is no difference between the proportions of the teachers' and the students' responses with respect to perceptions of: a) students' post-high school graduation plans to seek a job in a food service-related area; b) students' post-high school plans to attend a two- or four-year college or university and major in a food service-related area; c) single most important reason for students choosing to not attend an institution of higher education; d) student enrollment at an institution of higher education and major in a food service-related area if all obstacles to it were removed; e) the most important reason for enrolling in the food service-related course; and f) students' intention to enroll in another food service-related course.

The purpose of this hypothesis was to discover if teachers perceive accurately the students' plans relative to enrollment in another food service-related course and their post-high school graduation plans.

A summary of the results of the questionnaire items related to this hypothesis is shown in Table 12. The chi square analysis and the proportions tests are displayed in Appendices Z through BB.

Table 12  
Relationship of Teachers' and Students' Perceptions  
Relative to Students' Plans to Enroll in  
Food-Service Related Course and Their  
Post-High School Graduation Plans

<u>Variable:</u>	<u>Students</u> (%)	<u>Teachers</u> (%)
Student's intention to seek a job related to the food service industry.	31.8	37.0
Students' intention to major in a food service-related area at a two- or four-year college or university.**	21.8	9.5
Single most important reason students choose to not attend college:***		
Desires no more formal education.	22.2	50.0
Have not completed necessary courses.	17.6	24.3
Does not have a high enough grade point average.	8.9	9.5
Does not have enough money.	15.4	1.4
Other	35.9	14.9
Students' enrollment at an institution of higher education and major in food service-related area if all obstacles to it were removed.	23.3	21.9

Table 12  
(continued)

<u>Variable:</u>	<u>Students</u> <u>(%)</u>	<u>Teachers</u> <u>(%)</u>
The most important reason for enrolling in the food service-related course:***		
Learn the skills so student can get a job following graduation.	35.9	73.3
Earn money so student can attend college.	26.6	9.3
Easy way to complete requirements for high school graduation.	11.4	10.7
None of the listed reasons.	26.3	6.7
Intend to enroll in another food service-related course.	33.5	32.0

\*\* The difference or differences between means is significant ( $p < .01$ ).

\*\*\* The difference or differences between means is significant ( $p < .001$ ).

Analysis of the data revealed that teachers perceive that students have enrolled in the course to learn the skills which will enable them to get a job following graduation and that they intend to seek a job in a food service-related area more often than the students responded to these items. Teachers indicated this perception at twice the rate as did the students. Chi square cell contribution analysis of the data showed that the cell containing the response from teachers that students desire no more school contributed nearly one-half of the raw chi square value. More than one-quarter of the students indicated that their purpose in taking the food service course was to enable them to earn money so they



can attend college. Less than 10 percent of the teachers viewed similarly the students' purposes.

Showing statistically significant differences between the students' and teachers' groups were the students' intentions to attend a two- or four-year college or university and major in a food service-related area. Approximately 21 percent of the students indicated their intention to attend a two- or four-year college or university. Slightly less than ten percent of the teachers judged the students intentions in a like manner. Related to this was the responses of the two groups to the query concerning the students' main purpose for enrolling in the food service course. The student group indicated that a major purpose for enrollment was to make money while attending college. More than 25 percent of the college-bound responding population stated this to be their primary purpose for enrollment in the course. Less than ten percent of the teachers viewed the purpose similarly to the student group.

Very highly significant ( $p < .001$ ) differences were also noted between the groups relative to their perceptions regarding the single most important reason some of the students choose to not attend college. Chi square contribution indicated that the cell containing responses from teachers indicating that the most important reason students choose to not go to college is that they desire no more schooling accounted for 45 percent of the raw chi square value. One-half of the teachers indicated their perception that the students desired no more formal education; however, only 22 percent of the students responded in a like manner. Students selected the "other" category as the most important one for their plans to not attend college. Fifteen percent of the students

perceived a lack of money as an obstacle to their enrollment while this was indicated by only 1.4 percent of the teachers. Approximately nine percent of both groups felt that a low grade-point average was a hindering factor.

Teachers and students responded similarly concerning the rate of intention of students to enroll at a college if all the obstacles to it were removed. The difference between the groups was found to be non-significant. Also showing a non-significant difference was the groups' perceptions concerning the students' plans to enroll in another food service-related course. Approximately one-half of the students intend to take another food service-related course while in high school.

On the basis of this information the null hypothesis is rejected relative to the students post-high school graduation plans to seek a job or pursue additional formal education in a food service-related area and for the single most important reason students select to not attend college. Also rejected, on the basis of this information was the congruency between the groups on the most important reason students enrolled in the course.

#### Summary

This study was conducted to gain information concerning the various factors which may influence a student to enroll in a high school vocational education program. This information will enable administrators, educators and counselors to better understand the vocational selection process and thereby provide guidance to youth. The data presented was gathered by a statewide survey of all the ROC/P food

service-related course instructors and one section of students taught by each teacher. Table 13 shows a summary of this information. A further summary of the findings and conclusions and recommendations based on these findings are presented in Chapter 5.

Table 13  
Summary of Statistical Analyses of  
Null Hypotheses

<u>Hypothesis</u>	<u>Null Hypothesis Retained</u>	<u>Null Hypothesis Rejected</u>
I. There is no difference between the means of the teachers' and the students' responses with respect to the degree of importance of the the influencing persons and factors on the student's decision to enroll in a food service-related course. These persons and factors include:		
a) Mother/stepmother/guardian	X	
b) Father/stepfather/guardian		X
c) Sister(s) and/or brother(s)		X
d) Other family member	X	

Table 13  
(continued)

<u>Hypothesis</u>	<u>Null Hypothesis Retained</u>	<u>Null Hypothesis Rejected</u>
I. (continued)		
e) Teacher(s)		X
f) Counselor(s)		X
g) Other adult(s)		X
h) Friend(s)		X
i) Liking of the work required by the job.	X	
j) Hobbies	X	
k) Previous jobs		X
l) Expected wages		X
m) Anticipated ease of finding a job.		X
n) Fitting into desired lifestyle.		X
o) Observations of someone doing the job tasks.		X
p) Conversations with an employee in the field.		X
q) Job description materials	X	
r) Enrollment in occupational- or career-related course.		X
s) Results of job preference test.	X	
II. There is no difference between the means of the students' responses with respect to influencing persons or factors on the basis of:		
a) Gender		X

Table 13  
(continued)

<u>Hypothesis</u>	<u>Null Hypothesis Retained</u>	<u>Null Hypothesis Rejected</u>
II. (continued)		
b) Head of household		X
c) Racial or ethnic group		X
d) Satisfaction with decision to enroll in a food service-related course		X
e) Post-high school graduation plan categories		X
III. There is no difference among the students' responses with respect to post-high school graduation plans on the basis of:		
a) Gender		X
b) Head of household		X
c) Racial or ethnic group	X	
d) Grade level in school		X
e) Paid employment in a food service-related job.		X
f) Satisfaction with the decision to enroll in a food service-related course.		X
g) Grade level of decision to enroll in a food service-related course.		X
h) Most important reason for enrolling in a food service-related course.		X

Table 13  
(continued)

<u>Hypothesis</u>	<u>Null Hypothesis Retained</u>	<u>Null Hypothesis Rejected</u>
IV. There is no difference among the proportions of the students' responses with respect to satisfaction with decision to enroll in a food service-related course and satisfaction with school in general.		X
V. There is no difference between the proportions of the teachers' and the students' responses with respect to perceptions of:		
a) Student's post-high school graduation plans to seek a job in a food service-related area.		X
b) Students' post-high school plans to attend a two- or four-year college or university and major in a food service-related area.		X
c) Single most important reason for students choosing to not attend an institution of higher education.		X
d) Student enrollment at an institution of higher education and major in a food service-related area if all obstacles to it were removed.	X	
e) The most important reason for enrolling in the food service-related course.		X
f) Student's intention to enroll in another food service-related course.	X	

## CHAPTER 5

### Summary, Conclusions, Implications and Recommendations

In this chapter a brief summary of the study is presented. Findings are discussed, conclusions are drawn, implications of these conclusions and recommendations for future research concerning factors influencing the occupational choice process by students are included.

#### Summary

The importance of a satisfied and efficient work force has been noted throughout history and has been especially valued in the United States. For nearly 200 years Congress has voted to support vocational education, commencing with the Morrill Act in the 1860's and continuing to the present time. Millions of Americans have been recipients of these programs and have been of benefit to society by their increased productivity and contentment with their occupations. The California Regional Occupational Centers and Programs (ROC/P) train thousands of youth each year for the world of work.

Recognizing the importance of the choice of an occupation, several prominent theories concerning the development of the choice process and the factors influencing it have arisen. Commonalities among these theories are that the home environment impacts significantly on vocational selection and that the process is a developmental one; that is, it continues over a period of several years.

Many factors have been postulated to influence occupational choice, including the home and school environments, personal interest and job-related factors, as well as various forms of occupational information. The individual's social and economic statuses can be considered to arise from the family environment since the occupations of the parents are primarily responsible for the family's income and standing in a community. The family and the social environment dictate, to a large extent, the values and attitudes which impact significantly upon an individual's characteristics, including his vocational behaviors. The individual spends many of his most formative years in the school environment interacting with administrators, teachers, and counselors and peers. These persons may reinforce or alter the values and attitudes held by an individual, thereby influencing his educational and vocational choices. The modeling of roles by these persons also influences the individual's behaviors.

Personal interests in job-related tasks have been repeatedly noted by students as holding a position of primacy in the choice process. Occupational information, gained by work experience, knowledge of a field through an individual employed in the area, or through various media sources have been shown to increase the student's awareness of job.

This study was conducted to investigate the perceptions of students and teachers concerning the degree of influence that various persons and factors had on an individual's decision to enroll in a food service-related Regional Occupational Center/Program course. Variance in the patterns of these factors relative to post-high school graduation



plans was studied. Information also was gathered concerning the demographic- and person-related factors which may influence the selection of a post-high school graduation plan by a student.

Sixty-nine percent of the total population of Regional Occupational Course/Program food service-related teachers throughout California participated in the study conducted during the spring semester of 1984. One section of students instructed by each teacher completed the student questionnaires. The responding teachers constituted the teacher population. One thousand ninety-seven individuals (1,097) comprised the student population. Descriptive statistics, analysis of variance (ANOVA) and chi square were used to treat the data.

Descriptively, it was found that most of the teachers in the California Regional Occupational Course/Program are Caucasian and nearly all are female. The majority of the program enrollees are Caucasian. A smaller percentage of teachers are members of minority groups. Nearly equal numbers of male and female students responded to the study. Nearly one-half of the student population noted higher education plans and one-third indicated their intentions to pursue a job in the food-service industry following graduation.

Results of this study showed that teachers and students perceive differently the importance of nearly one-third of the 19 investigated person- and job-related factors which may influence a student to enroll in this course of study. Also revealed by this research were the differences in perceptions between the two groups relative to the students' post-high school graduation plans. However, students' and teachers'

judgements were in agreement for the factors related to current enrollment in the course.

The variance of the student population's responses to the influencing factors on the basis of selected demographic- and person-related factors was also studied. It was found that the students' responses concerning the influencing factors differed according to the investigated demographic- and person-related factors. Responses by the students relative to the importance of these factors also differed according to the students' indicated post-high school graduation plan except for the "racial/ethnic group" demographic category. Also revealed was the variance of students' responses in their satisfaction with the decision to enroll in this course and their satisfaction with school in general.

#### Findings and Conclusions

The data obtained from this research indicated that nearly one-half of the respondents stated that they plan to attend a two- or four-year college or university following high school graduation. This percentage is lower than the figure reported by the California Post-secondary Education Commission<sup>1</sup>. The Commission reported that their data showed that slightly more than 60 percent of the 1983 graduates enrolled in an institution of higher education during the fall semester following the high school graduation.

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<sup>1</sup>California Postsecondary Education Commission, California College - Going Rates, 1982 Update (Sacramento, Ca.: Office of State Printing, 1983), p. 5.

Three factors may, in part, explain this difference. First, the Commission findings are based on actual enrollment data while the results of this investigation by its design are based on the reported plans by students. When obtaining data relative to students' intentions, a concern exists about the follow-through with these plans. Dahl, studying a general student population in 1980 found that 87 percent of the individuals planning to attend college or to locate employment following graduation carried through with these plans, while the remaining population selected an alternative route.<sup>2</sup> It is not known if that rate of intention actualization is applicable to vocational program students. This topic would be an interesting and worthwhile one for a follow-up study.

Second, the Commission findings are based on the entire 1983 high school senior population throughout California while this statewide study researched only students enrolled in vocational food service courses. Students from the tenth through the twelfth grades as well as a very small number of adult students who returned to the school for the purpose of vocational preparation were included in this study. It is logical that high school senior and adult students may have more realistic post-graduation or post-program completion plans than do younger students. It is likely that the older students are in positions of more immediately confronting the challenges of college attendance (e.g. financial needs, academic ability). Since this investigation included the plans

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<sup>2</sup>R. W. Dahl, The Implementation of Educational Plans of Kentucky High School Graduates: Selected Results from the Kentucky Longitudinal Study (ERIC No. ED 211 0127, 1981), p. 12.

of younger students who may be looking at the college attendance issue less realistically, the college-going rate reported in this study may be inflated.

Third, the Commission data deals with information from students pursuing all high school programs, while this study was concerned only with students enrolled in a limited area vocational program. A basic purpose of vocational education is to train individuals for immediate gainful employment. It is highly likely that due to the purpose and nature of the vocational programs, the enrollees are more job-oriented than the overall student population. The vocational program students may have more immediate and definitive occupational plans than found in the overall population.

The finding of this study concerning the college-going plans of vocational program students is in congruence with the results of a Pennsylvania study also using a vocational program population.<sup>3</sup> Veres and Carmichael found 30 percent of the vocational population they studied to be aspiring to enroll at a college or university.<sup>4</sup> Nelken investigated the rate at which vocational students from a single Northern California county enroll at a college or university. He found that 48

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<sup>3</sup>Ralph Patrick, "Factors Related to Occupational Preference of Selected Vocational-Technical Education Students in Delaware County, Pennsylvania," Unpublished Doctoral Diss., University of Pittsburgh, 1980, p. 28.

<sup>4</sup>Helen C. Veres and Mary Margaret Carmichael, Expanding Student Opportunities in Occupational Education: Methods to Reduce Sex-Role Stereotyping in Program Choice (ERIC No. ED 217 180, 1981), p. 24.

percent of the vocational program students responding to the survey enrolled at a college or university following high school graduation.<sup>5</sup> Interestingly, the rate of vocational program students who plan to or who actually enroll at an institution of higher education may be greater than is assumed by many persons. A common attitude towards students enrolled in high school vocational programs is that they are of lesser academic ability.<sup>6</sup> While this study did not address the indices of academic ability (i.e. grade point average, Scholastic Aptitude Test score), few of the students in the investigation noted grade point average as a major deterrent to their college enrollment. It can also be assumed that students who have great difficulty with academic areas would not select a higher education post-high school route. This study did not differentiate between students' selection of two-year or a four-year institution. It is possible that affirmative responses to students' intentions to attend college may have been directed more towards the community college system which offers occupational as well as preparatory courses for bachelors' degrees.

Considering the numbers of students in this investigation as well as others reviewed in this study indicating an interest in higher education, it can be concluded the high school vocational education programs

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<sup>5</sup>Ira Nelken, "Results of ROP 'Five Years After' Survey," October 1982. Butte County Superintendent of Schools, Chico, California.

<sup>6</sup>Kathleen Goulet and Nancy W. Head, A Study of the Decision-Making Process of New Hampshire High School Seniors Class of 1980 (ERIC No. ED 191 405, 1980), p. 6.

can be fertile ground for college recruitment, particularly in the technical fields.

Analysis of the survey data revealed that students and teachers do not judge similarly the degree of importance of various demographic- and person-related influencing factors on the students' decision to enroll in the course. Thirteen of the 19 investigated influencing factors showed statistically different responses from the two groups, nine of which showed significance at the  $p .001$  level. It must be noted that these results may have occurred because teachers rated the influencing factors more highly than did the student population (as evidenced by the cumulative mean scores). Teachers also judged that fewer factors were discouragement ones or ones which had no influence on the decision than did the student group. Therefore, the overall ratings of this group are higher than those of the student population. It can be assumed that the teacher population felt that many and varied factors influence a student to enroll in the course. The students note fewer influential and more discouragement to enroll factors.

The student and teacher populations rated the order of importance of the influencing factors similarly to one another. From these data it can be concluded that teachers judge the relative placement of the influencing factors similarly to the student group; that is, they judge alike the student population, the most and least important factors.

The largest discrepancy between the mean values of the perceived importance of the various factors for the two groups occurred in the "counselor" category. Teachers rated counselors to be more important in the choice process than did the students. It appears that

teachers considered that counselors have been involved in the students' decision to enroll in the course to a greater extent than was perceived by the student population. Perceptions by the teacher population may result from the teachers' educationally-based attitude concerning the role of counselors while the students' responses may arise from their actual experience with counselors. The involvement of counselors in areas other than career guidance has been noted in other studies.<sup>7</sup>

The selection by the student group of "liking of the work required by the job" as being the most important factor in their decision to enroll in the course is in agreement with a previous study. In a 1974 Texas research study, Jones found that the related, though not identical category "my interests" was most often selected by students as having the greatest influence on occupational choice.<sup>8</sup> Generally students "like" doing tasks which are of interest to them.

The perception by the teacher group of "friends" having the largest influence on a students' decision to enroll in the course is in agreement with a study conducted by Hillison and Hagee. They found that the influence of peers on the occupational decision-making process was greater than the categories descriptive of home and family

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<sup>7</sup>Morgan V. Lewis and others, Nontraditional Vocational Educational Programs for Women. Final Report (ERIC No. ED 136 025, 1976), p. 150; Ruth M. Lungstrum, Selected Factors Related to Occupational Preference of High School Students Enrolled in Vocational Education Programs in the Wichita Public Schools (ERIC No. ED 074 267, 1973), p. 172.

<sup>8</sup>Charles B. Jones, An Analysis of Student Follow-up Data for Administrative Decision Making (ERIC No. ED 099 649, 1974), p. 26.



influences.<sup>9</sup> This finding has been supported by other studies.<sup>10</sup> Another researcher, Lisack, found that students consider parents to be the most helpful persons in formulating career plans; however, they ranked considerably lower when students were queried about the most important reason for the selection of an occupation.<sup>11</sup>

Other studies, notably those by Lungstrum, Patrick, Veres and Carmichael, and Mondart, Curtis and Dobbins, found parents to be important sources of career information or a significant influence on occupational choices.<sup>12</sup> Differences in the perceived importance of the parents between this study and others may result from this investigation asking of a related but different question. The emphasis of the question in this study was regarding the importance of the influence of the various factors in causing the student to enroll in a particular food service-related course. No other research study formed that particular

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<sup>9</sup>John Hillison and Gale Gagee, Career Information Needed by Classroom Teachers (ERIC No. ED 048 452, 1981), p. 18.

<sup>10</sup>C. L. Mondart, C. M. Curtis, and L. H. Dobbins, Educational and Occupational Aspirations and expectations of High School Youth (ERIC No. ED 048 452, 1970), p. 25; John L. Pietrofesa and Howard Spletz, Career Development: Theory and Research (New York: Grune and Shalton, 1979), pp. 87-88.

<sup>11</sup>J. P. Lisack, Educational and Employment Plans and Occupational Choices of Indiana High School Seniors in the Class of '75 (ERIC No. ED 120 565, 1975), p. 98.

<sup>12</sup>Ruth M. Lungstrum, Selected Factors Related to Occupational Preference High School Students Enrolled in Vocational Education Programs in the Wichita Public Schools (ERIC ED No. 074-257, 1973), p. 162; Patrick, p. 24; Mondart, Curtis & Dobbins, p. 43; Veres and Mary Carmichael, p. 25.



question. Categories relating to "my interests" or "liking of the work required by the job" were not choices in all of the studies. Additionally, the studies previously mentioned have been conducted using populations outside of California and in past years. The different populations and years of study may have affected the students' and teachers' perceptions concerning the importance of the influencing factors.

The student population displayed significantly different responses to the importance of the various influencing factors according to the demographic- and person-related categories of gender, person(s) heading household, racial/ethnic group, satisfaction with decision to enroll in the course and post-high school graduation plans. These findings are in agreement with a 1980 Rand Corporation study of 22,000 high school seniors. The authors of this study concluded that demographic and attitude factors varied significantly among students with different post-high school graduation plans.<sup>13</sup> Dahl reported a similar conclusion concerning students who state their intention to enroll at a college or university or to locate a job following graduation and who do not follow through with their stated plan.<sup>14</sup>

The gender and head of household variables showed the least impact, having statistically significant differences between the student

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<sup>13</sup>David E. Kanouse, Gus W. Haggstrom, Thomas J. Blaschke, James P. Kahan, William Lesowski and Peter Morrison, Effects of Post-secondary Experiences on Aspirations, Attitudes, and Self-Conceptions (ERIC No. ED 214 430, 1980), p. 8.

<sup>14</sup>Dahl, p. 13.

groups for only the "father/stepfather/guardian" category. This is an interesting finding because these factors may be used as rough indices of a family's socioeconomic status. Previous studies have shown that the socioeconomic status of the family is linearly related to educational attainment.<sup>15</sup> Highly significant differences in responses to the influencing factors were found among the groups indicating various degrees of satisfaction with their decision to enroll in the course and their post-high school graduation plans. Male students reported that "expected wages" was a more important influencing factor than did female students.

Results of this investigation showed that the students in the two gender groups responded significantly differently from one another concerning the influence of the "father/stepfather/guardian" category. This finding is in congruence with the results of studies conducted by Patrick, Veres and Carmichael, Mondart, Curtis and Dobbins, and Lungstrum.<sup>16</sup> These researchers found, as was discovered in this study, that students view the same-sex parent as being more influential

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<sup>15</sup>Richard Bendix, Seymour M. Lipset, and F. Theodore Malm, "Social Origins and Occupational Career Patterns," Industrial and Labor Relations Review 7 (1954), pp. 246-61; William T. Smelser, "Adolescent and Adult Occupational Choice as a Function of Family Socioeconomic History," Sociometry 26 (1963), pp. 393-409; R. M. Pavalko, Sociology of Occupations and Professions (Ithasca: F. E. Peacock, 1971), p. 51; William Sewell, "Inequalities of Opportunities for Higher Education," American Sociological Review 36 (1971), pp. 793-809; Andrew Kopan and Herbert Walbert, eds. Rethinking Educational Equality (Berkeley: McCutchan, 1974), p. 32.

<sup>16</sup>Patrick, p. 71; Veres and Carmichael, p. 24; Lungstrum, p. 165; Mondart, Curtis and Dobbins, p. 51.

in the decision-making process than the opposite-sex parent. This relationship may be due to a closer association and occupational sex role modeling between same sex student and parent.

Students from homes headed by a single female indicated to a significantly greater extent than other groups that the father had "no influence" on their decision to enroll in the course. This result may be an anticipated one. The father figure who is not present in the student's household is likely to have less influence on the various decisions made by the individual. Other published research studies reported in this investigation did not study the relationship between person(s) heading the students household and their influence on decisions made by the students.

The members of the various racial/ethnic groups responded significantly differently from one another concerning the influence of eight of the factors. The differences were noted particularly between the Black and the White student populations. Generally, the Asian/Pacific Islanders, Hispanic and Other racial categories responded similarly with the Black populations. This may indicate a similarity in the treatment of and expectations for minority populations by many individuals within and outside of the school setting. Black students reported more positively concerning the importance of the influence of the various factors than did White students except for two of the 19 categories of influencing factors. Further evidence in support of the apparently more positive attitude of the Black students is their lower rate of "no influence" responses to the various factors. These findings are supported by the studies conducted by Patrick. He also found

minority student populations to reveal that various factors were more instrumental in their career choice than was noted by the White population.<sup>17</sup> A possible explanation for this finding may be that the Black students have received more encouragement from the various person-related factors to enroll in a vocational course and to pursue this service-related occupational field. It would be interesting to discover if various individuals who are in positions of career influence to minority populations encourage their pursuit of service occupations. The minority students also perceived the various job-related factors (e.g. expected wages) to be positive ones. The White students who responded that many factors were not instrumental in their decision to enroll in the course may have received little encouragement, or they may wish not to acknowledge the influence of various person- and job-related factors on their decisions. It is possible that vocational programs may be considered as preparation for low status jobs among the various populations, particularly the White population, while the minority student populations may look upon the program as a means of enhancing their employability and as a means to achieve upward mobility.

Minority students reported that the "counselors" category had a very important influence on their decision to enroll in the course. This finding was significantly different from the influence perceived by the White group. One might conclude that minority students are more likely to talk with school counselors and to heed their advise than are

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<sup>17</sup>Patrick, p. 129.

individuals in the other population groups. It is likely that this population receives encouragement from their families and peers to respect the advice of counselors.

This study revealed that a large proportion of the respondents were satisfied with both their decisions to enroll in the course and with school in general. However, more students were satisfied with their decision to enroll in the course than were satisfied with school. Since a primary purpose of vocational programs is to prepare individuals for the world of work, it seems reasonable to conclude that the respondents perceived a greater degree of relevance from the food service program to their occupational goals than was noted from the general school curriculum. Also, individuals in vocational programs choose to enroll; therefore, they enter it as a result of their choice process. Since vocational program participation is voluntary, it is likely to be in an area of interest to the student and to be one for which he may have received encouragement to enroll, it is reasonable to conclude that satisfaction with the decision to enroll would be higher than the satisfaction with school in general. Completion of required courses for graduation may result in the student studying and participating in areas which are of little interest.

Individuals who expressed the greatest degree of satisfaction with the decision to enroll in the course also plan to pursue the food service field either through a job or a college major field. It is highly likely that these students clearly see the relevance of their study, enjoy the job tasks, and note advantages associated with the occupational field, therefore, wish to continue in it after high school graduation.

From the results of the survey, it can also be inferred that students who indicated plans to seek a job in the food service area or to pursue a food service major in college have been more influenced by the various person- and job-related factors than the students who indicated a non-food service related job or college major intention. One explanation for this finding may be that students intending to continue in a food service-related area may have received or may have been more receptive to encouragement to enroll. Alternatively, since it is likely that students continuing in the field enjoy the occupational tasks or advantages, their recollection of positive influences may be greater than that of other students.

Only the "counselors" category showed non-significant differences for the college bound groups. Four influencing factors including "fathers," "other adults," "counselor" and "friends" showed non-significant differences for the various job-seeking populations indicating their plans to seek a job in or to not seek a food service-related job. Other research reported in this investigation did not study the relationship between satisfaction with the decision to enroll in the course and with school in general to the perceived influence of various person- and job-related factors.

A larger number of the students surveyed intended to locate a job in the food service industry than to major in the field in college. This finding may be related to the lower number of vocational program students who intend to pursue higher education. Further evidence of the job-seeking populations' commitment to the occupational area was that a like proportion of the respondents stated that their primary reason for

enrollment in the course was to enable them to locate a job following high school graduation. As noted previously, a major purpose of vocational training is to prepare individuals for employment.

Nearly twice as many college-bound individuals stated that they intended to major in a non-food service related area than indicated that this would be their major area choice. This response was evidenced by a like proportion of the respondents who stated that learning the skills to enable them to earn money while in college was their primary reason for enrollment in the course. The food service industry is one which has a high rate of employee turnover and position availability. However, competition for jobs is great, especially in locations where many young people reside. The amount of money which can be earned through wages and tips makes the food service area an attractive one for college students. Participation in a high school-food service vocational course results in the individual being a more attractive potential employee. It may be inferred that students enroll in a vocational food service course of study to learn the job skills which will enable them to locate a job following graduation or which will enable them to earn money while attending college.

Nearly one-half of the non-college bound population stated that they would attend college if the obstacles to enrollment were removed; however, no definitive reason for their non-enrollment plans were discovered. From the students' responses it appears that the areas commonly held to be factors which may discourage enrollment at an institution of higher education (e.g., grade-point average, finances, college entrance requirements) were not perceived by most individuals in



this group to be responsible for their non-college enrollment plans. More than one-third of the respondents indicated that the major factor resulting in their non-enrollment plans was not listed as a choice on the questionnaire. It can be speculated that a number of factors such as marriage and family plans, intentions to join the military or attendance at private educational institutions may be included in this category.

Significant differences were found between the gender and the racial/ethnic groups relative to post-high school graduation plans. Male and White students indicated their intention to attend college and to major in a food service area to a greater extent than did other groups. These results are in congruence with previous findings. Dunne reported that female students more frequently aspire to lower-status jobs than do male students. She also concluded that women are most likely to follow sex-stereotypical occupational paths.<sup>18</sup> Male students may be aspiring to the managerial roles in the field while the female students may see the occupational area as one in which females perform the lower status jobs. Also, in concurrence with previous findings is that White students may hold aspirations for higher education to a greater extent than do members of other racial groups.<sup>19</sup> Minority populations may aspire to technical and service industries to a larger extent. Adult students and students who had been employed in paying food service-related jobs most

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<sup>18</sup>Faith Dunne, Aspirations and Attitudes among Rural High School Students: A Report from the Options Project (ERIC No. ED 152 454, 1977), p. 17.

<sup>19</sup>Patrick, p. 129.



often chose to pursue the field through a job following high school graduation. An explanation for this finding may be that these students perceived a greater need for more immediate remunerative employment as compared with those who attend college and delay the full-time employment and wage earnings.

Analysis of the results of this study showed that students and teachers did not similarly respond to several items concerning the students' post-high school graduation plans. Items showing differences between the groups included the most important factor discouraging college enrollment, the most important reason for students enrollment in the course and the students intentions to major in a food service-related area at a two- or four-year college or university. Some reasons for these discrepancies may include that teachers have a preconceived notion that vocational students are not college-bound; therefore, they do not interpret messages from the students as indicative of their desires for higher education. Teachers may be perpetuators of society's stereotypical image of vocation program trainees. Additionally, teachers may not provide the students with information and encouragement concerning career opportunities in the food service industry for individuals with post-high school educational experiences.

Neither students nor teachers considered a low grade-point average or non-completion of college entrance requirements to be major factors limiting students' enrollment in higher education. This may provide some evidence to refute the conception that vocational students are academically not able to perform at a higher education level.

Further evidence for the differences between students' and teachers' opinions concerning the likelihood of vocational students pursuing higher education is found in their response to the question querying the most important reason for students' enrollment in the course. Nearly three times as many students selected the "earn money while attending college" response than did teachers. In agreement with the contention that teachers do not view the students as academically oriented is the larger number of teachers than students who selected the choice of the "desires no more formal education" category for the question regarding the single most important reason students choose to not attend college.

Considering that nearly one-half of the vocational program students indicate an interest in college attendance, vocational program directors, school administrators, counselors, and teachers may be encouraged to urge vocational students to give consideration to furthering their education rather than merely accepting that these students do not have the ability or the interest to further their education. The pursuance of a college degree is not a major factor for many persons; however, information and encouragement concerning this career route should not be withheld from vocational program enrollees because of preconceived notions by school personnel. School officials may be encouraged to discover the nature of the areas causing students to limit their plans to attend two- and four-year colleges and, if possible, address these areas.

Teachers perceived correctly the students' intentions to enroll in another food service-related course while in high school and the desires

of the non-college bound group to attend a college or university if all obstacles to enrollment were removed. Teachers may have been able to assess accurately interest and motivation levels or they may have had some pre-enrollment or course sequence information. Further, they may have gained this information from conversations with the students.

In summary, five conclusions can be drawn from the survey data. These conclusions and their implications can be found in the following text.

Conclusion number 1. Notable differences exist between college-bound and non-college bound students. Some of these differences are listed below:

<u>College-Bound Population</u>	<u>Non-College Bound Population</u>
a) Enrolled in the course primarily to learn the job skills which will enable them to earn money while attending college.	a) Enrolled in the course primarily to learn the job skills which will enable them to locate a job in the food service industry.
b) Male and White students selected a food service college major to a larger extent than did other populations.	b) Female and minority populations were more likely to indicate the preference to locate a job in the food service industry.
c) A larger proportion of students intended to major in an area unrelated to the food service industry than related to it.	c) Nearly three-quarters of the students are undecided or intend to locate a job in the food service industry following graduation.

- d) Students intending to major in a food service-related area indicated a greater satisfaction with the decisions to enroll in the course and with school in general than did the students stating a college major area unrelated to the food service industry.
- d) Students intending to seek a job in the food service industry indicated greater satisfaction with the decisions to enroll in the course and with school in general than did the students stating a non-food service-related job plan.

Implications for conclusion number 1. This information suggests that students will be applying the job skills learned in the vocational program either while attending or seeking a job immediately after graduation. Because of these plans the students note relevance of the program information and its ability to help them to realize their career plans. This congruency leads to the high degree of satisfaction with the decisions noted by the individuals planning to continue their association with the food service-related industry. Also suggested by this information is that female and minority population members have fewer plans to pursue formal further education than white males. This may contribute to a continuation in society of white males having positions of responsibility.

The higher degrees of satisfaction noted by individuals with plans to continue their involvement with food service suggests that students are desirous of having high school coursework be applicable and relevant to their goals.

Conclusion number 2. Approximately 50 percent of the non-college bound youths would attend college if the obstacles related to their enrollment were to be removed. The factors commonly thought to hinder college enrollment (insufficient grade-point average, lack of

finances or non-completion of college entrance course requirements) were not perceived to be such by the majority of the surveyed student population.

Implications of conclusion number 2. It appears that there is interest among the non-college bound students for higher education. Information concerning the factors which this population noted as hindering them from pursuing further formal education would allow school personnel to address these issues. This process would allow students to more clearly make decisions concerning their post-high school graduation plans. Since many of the non-college bound individuals are female and minority population students, encouragement of this group to obtain higher education could be instrumental in improving the social and economic statuses of these groups.

Conclusion number 3. Notable differences exist between the responses of teachers and students to some of the survey instrument items. Some differences are listed below:

- | <u>Teacher Population</u>  | <u>Student Population</u>  |
|--|--|
| a) Judged students to be more job-oriented and oriented towards obtaining higher education.  | a) Nearly one half of the students intend to pursue a higher educational goal.   |
| b) Indicated that students enrolled in the course primarily to learn the job skills which will enable them to locate a job following graduation. | b) Indicated two primary purposes for enrollment in the course to learn job skills which: one, will enable them to locate a job following school graduation, and two, enable them to earn money while attending college. |

- |  |  |
|--|--|
| c) Stated that the primary reason students choose not to attend college is that they desire no more formal education.  | c) Stated that reasons other than those listed on the survey instrument constituted the major reason for their non-enrollment plans. |
| d) Generally noted the most and least important influencing factors similarly with students; however, friends were selected to be the greatest encouragement factor for course enrollment. | d) Selected "liking of the work required by the job" to be the greatest encouragement factor for course enrollment.                  |
| e) Judged the degree of influence from many factors significantly different than the student group. Teachers indicated that many of the factors were quite helpful.                        | e) Rated the degree of influence from the various factors lower than was noted by the teacher population.                            |
| f) Judged counselors to be an important influencing factor for course enrollment.  | f) Perceived little influence from counselors for course enrollment.   |

Implications of conclusion number 3. Teachers generally do not accurately assess the students' post-high school graduation plan and the factors related to it. Because of this incorrect assessment, teachers may not be providing students with the kind of information and encouragement which would allow the individuals to make clear career decisions. The teacher population may be significantly contributing to a notion by society that vocational students do not attend institutions of higher education following graduation.

Conclusion number 4. Notable differences exist between minority populations and White students relative to their responses to the survey instrument items listed below:

<u>White Student Population</u>	<u>Minority Student Population</u>
a) Generally indicated less influence from the various factors.	a) Indicated that the various influencing factors had been important in their decisions to enroll in the course.
b) More likely to attend college.	b) More likely to seek employment following high school graduation.

Implications of conclusion number 4. It appears from the information that minority populations are receptive to the influence of various persons concerning their occupational plans. However, the data indicate that the influence may lead to a continuation of minority populations in lower status jobs and of the White population in higher status occupations.

Conclusion number 5. Notable differences exist between gender groups relative to their responses to the survey instrument items.

<u>Male Students</u>	<u>Female Students</u>
a) Influenced by fathers to a larger extent than female students.	a) Indicated little influence from the father figure. This was particularly noted by respondents from homes headed by a single female.
b) More likely to pursue a food service college major.	b) More likely to seek employment in the food service industry.

- c) Considered the influence of "expected wages" to be important.
- c) Forty percent stated that expected wages had "no influence on their decision to enroll in the course."

Implications of conclusion number 5. The data suggest that students are more likely to be receptive to occupational influence by the parent of the same sex. This "occupational role modeling" may be one of the reasons female students have fewer plans to continue their formal education beyond high school. The data also suggest that the absence of the father from the home greatly limits the effectiveness of that individual's influence on career decisions of female students.

The essence of this study is that there appears to be considerable interest among vocational program students towards higher education. The school personnel who are most likely to have direct contact with the students are generally unaware and, therefore, ineffective in broadening the students' occupational horizons.

Secondary school and higher education personnel should make available to vocational program enrollees information about job opportunities in the industry for individuals who have continued their formal education beyond high school as well as for those who have not continued the process. This will allow the students to make clearer decisions concerning their post-high school graduation plans.

Vocational programs often have a disproportional share of minority population students. Encouragement of these students to pursue higher education may be one factor which could contribute to an elevation of these groups in the social system in the United States.



Results of this study suggest that many of the students who enrolled in food service-related courses have plans to use the learned skills in job situations. Students holding plans to apply the knowledge noted great satisfaction with the decision to enroll in the course and satisfaction with school in general. Relevance of coursework to the goals is important to the students' perceived satisfaction with the decision to enroll in the course.

#### Recommendations for Further Research

In view of the findings of this study, the following recommendations for further study are made:

1. It is recommended that this study be replicated to determine the consistency of these findings. Specifically, research should be conducted to ascertain the consistency of the percentage of students indicating higher education and work related plans. A replication study might also give evidence concerning the consistency of this population's judgement in some important areas: influencing factors as well as the factors limiting enrollment at an institution of higher education.
2. It is recommended that this study be replicated using different occupational area students and who are located in various sections of the country. This should/might provide for a sense of universality of these findings, giving

evidence concerning the generalization of the results of this study to all vocational students.

3. A follow-up study should be conducted to determine whether the students who indicated college attendance plans and plans to pursue a food service-related area actualize these intentions. Information concerning the actualization of the job seeking plans would also be beneficial. Dahl provided information about the fulfillment of college going plans by a general student population. It is known that vocational students differ from the general student population in some respects. However, no research has addressed the follow-through of job or college plans specifically by the vocational student population.
4. A study should be made to investigate further the reasons judged by the non-college bound population as the most important reason for their choice to not further their education. This study speculated concerning these reasons; however, no explanation was provided. Information about the limiting factors should be useful to school personnel. This information might allow the personnel to directly address these points and allow the vocational students to make appropriate decisions regarding their desires to enter or not enter institutions of higher education.

5. The teacher population judged the influencing factors investigated to be of greater importance on the decision to enroll in the course than did the student population. Information concerning this discrepancy might give additional evidence about the attitudes of the groups concerning the factors impacting upon the students' decision to enroll in the course. This should provide school personnel with a better understanding of students and how they react to factors influencing their career choices. This could result in improved counseling techniques and interpretation of information. Additionally, students judged counselors to be less influential in the decision-making process than was judged by teachers. It would be worthwhile to investigate why this difference occurred. Speculation concerning this finding was offered in this report. Evidence concerning the discrepancy in the judged influence of the counselors could result in a clarification of the roles of counselors to students and teachers, and a communication of the expectations of teachers and students for school counselors.
6. It is recommended that a study be undertaken to determine what proportion of vocational program enrollees have taken job preference tests and if the test results had a significant effect on the students' decisions to enroll in the course. The lower level of importance ascribed to this factor in this study by both students and teachers may have resulted

because job preference tests may not been taken by many of the students, thereby providing a false influence rating for this factor. A study utilizing only students who had participated in a job preference test might more accurately assess the influence of this factor.

7. It would be useful to study the reasons that vocational teachers judge their students to have work-oriented post-high school graduation plans when a larger proportion of the students are desirous of obtaining higher education. This might provide information concerning a means of combating a notion concerning the ability and aptitude of students enrolled in vocational education programs. The encouragement by teachers of vocational students, typically minority and female, may serve as a means for raising the socioeconomic status of these individuals.

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APPENDIX A

QUESTIONNAIRE FOR TEACHERS

Questionnaire for Teachers

199

INSTRUCTIONS:

USING THE PENCIL PROVIDED TO YOU, PLEASE CIRCLE THE RESPONSE WHICH MOST CLOSELY MATCHES YOUR ANSWER TO THE QUESTION. THE PENCIL IS YOURS TO KEEP WITH MY THANKS FOR COMPLETING THE QUESTIONNAIRE THOUGHTFULLY.

- 1) Sex:
  - a. Male
  - b. Female
  
- 2) Have you taught food service-related courses in a program that is not connected to the ROP/C system?
  - a. Yes
  - b. No
  
- 3) Race or ethnic Group:
  - a. Black
  - b. Asian-Pacific Islander
  - c. Hispanic
  - d. Caucasian-White
  - e. Other
  
- 4) Number of year of teaching experience in food service-related ROP/C:
  - a. Less than 1 year
  - b. 1-3 years
  - c. 4-6 years
  - d. 7-10 years
  - e. More than 10 years
  
- 5) Present employment is a:
  - a. Full-time teaching assignment
  - b. Part-time teaching assignment
  
- 6) Credential authorizing you to teach this food service section is a:
  - a. Designated subject credential
  - b. Single subject credential
  - c. Special secondary credential
  - d. General secondary credential
  - e. Other

- 7) What is the total number of food service sections which you teach this semester:
- 1 section
  - 2 sections
  - 3 sections
  - 4 sections
  - 5 or more sections
- 8) What is the total number of students enrolled in all the sections of food service courses that you teach this semester?
- 10 or fewer students
  - 11-25 students
  - 26-50 students
  - 51-75 students
  - more than 75 students
- 9) What percentage of students enrolled in this food service section do you estimate intend to seek a job related to the food service field and not go to college after high school graduation (or completion of the course of study for adult students)?
- Less than 25 percent
  - 25-50 percent
  - 51-75 percent
  - More than 75 percent
- 10) What percentage of students enrolled in this food service section do you estimate intend to enroll in a two- or four-year college or university AND major in a food service-related area?
- Less than 5 percent
  - 5-10 percent
  - 11-15 percent
  - 16-25 percent
  - More than 25 percent
- 11) What do you consider to be the single most important reason many of the students do NOT go to a two- or four-year college or university.
- They do not want to go to any more school
  - The jobs at which they want to work do not require a college degree
  - They think their grade point average is not high enough for admission
  - They think they have not completed the courses necessary for admission
  - Other



- 12) Of the students enrolled in this section who are not planning to attend a two- or four-year college or university after graduation (or completion of the course of study for adult students) what percent do you estimate would attend AND major in a food service-related area if all the obstacles to their enrollment were to disappear?
- a. Less than 10 percent
  - b. 10-25 percent
  - c. 26-50 percent
  - d. 51-75 percent
  - e. over 75 percent
- 13) What do you consider to be the most important reason that your students have enrolled in this food service-related course?
- a. They want to learn the skills so they can get jobs when they graduate from high school
  - b. They want to learn the skills so they can earn money while attending a two- or four-year college or university
  - c. They think it is an easy way to complete the requirements for high school graduation
  - d. None of the above
- 14) What percentage of the students enrolled in this course do you estimate are enrolled in it for the primary purpose of completing the high school graduation requirements?
- a. Less than 10 percent
  - b. 10-25 percent
  - c. 26-50 percent
  - d. 51-75 percent
  - e. More than 75 percent

\*\*\*\*\*

PLEASE TURN THE PAGE TO CONTINUE THE QUESTIONNAIRE

USING THE FOLLOWING SCALE, PLEASE RATE THE DEGREE OF INFLUENCE THAT YOU THINK THE PERSONS AND JOB RELATED FACTORS LISTED BELOW HAVE HAD IN INFLUENCING THE STUDENTS TO ENROLL IN THIS FOOD SERVICE-RELATED COURSE. PLEASE PLACE A CHECK MARK (✓) IN THE APPROPRIATE BOX.

- A = Great influence on decision to enroll
- B = Moderate influence on decision to enroll
- C = Slight influence on decision to enroll
- D = No influence on decision to enroll
- E = Discouraged student from enrolling

	Great Influence	Moderate Influence	Slight Influence	No Influence	Discouraged Student
	A	B	C	D	E
15) Mother/Stepmother/Guardian	[ ]	[ ]	[ ]	[ ]	[ ]
16) Father/Stepfather/Guardian	[ ]	[ ]	[ ]	[ ]	[ ]
17) Sister(s) and/or brother(s)	[ ]	[ ]	[ ]	[ ]	[ ]
18) Other family member(s)	[ ]	[ ]	[ ]	[ ]	[ ]
19) Teacher(s)	[ ]	[ ]	[ ]	[ ]	[ ]
20) Counselor(s)	[ ]	[ ]	[ ]	[ ]	[ ]
21) Other adult(s)	[ ]	[ ]	[ ]	[ ]	[ ]
22) Friend(s)	[ ]	[ ]	[ ]	[ ]	[ ]
23) They like doing the work required by the job	[ ]	[ ]	[ ]	[ ]	[ ]
24) Their hobbies	[ ]	[ ]	[ ]	[ ]	[ ]
25) Jobs at which they have worked	[ ]	[ ]	[ ]	[ ]	[ ]
26) Wages they will receive	[ ]	[ ]	[ ]	[ ]	[ ]
27) They think it will be easy to get a job	[ ]	[ ]	[ ]	[ ]	[ ]
28) It fits in with what they want to do with their lives	[ ]	[ ]	[ ]	[ ]	[ ]
29) They liked what they saw when they watched someone doing the job tasks	[ ]	[ ]	[ ]	[ ]	[ ]
30) Their talks with person(s) who is or has been in the job area	[ ]	[ ]	[ ]	[ ]	[ ]
31) Reading or looking at materials telling about jobs in the area	[ ]	[ ]	[ ]	[ ]	[ ]
32) Their enrollment in an occu- pational or career related course	[ ]	[ ]	[ ]	[ ]	[ ]
33) Results of a job preference test	[ ]	[ ]	[ ]	[ ]	[ ]

APPENDIX B

QUESTIONNAIRE FOR STUDENTS

INSTRUCTIONS:

USING THE PENCIL PROVIDED TO YOU, PLEASE CIRCLE THE RESPONSE WHICH MOST CLOSELY MATCHES YOUR ANSWER TO THE QUESTION. THE PENCIL IS YOURS TO KEEP WITH MY THANKS FOR COMPLETING THE QUESTIONNAIRE THOUGHTFULLY.

- 1) Sex:
  - a. Male
  - b. Female
  
- 2) Is the household in which you live headed by a:
  - a. Single female
  - b. Single male
  - c. Both male and female
  
- 3) Race or ethnic Group:
  - a. Black
  - b. Asian-Pacific Islander
  - c. Hispanic
  - d. White-Caucasian
  - e. Other
  
- 4) Grade in school:
  - a. 10th grade
  - b. 11th grade
  - c. 12th grade
  - d. I am an adult student enrolled only in ROP/C courses
  - e. Other
  
- 5) Are you now, or have you been employed in a paying, food service-related job, not connected to your school work:
  - a. Yes
  - b. No
  
- 6) How satisfied are you with your decision to enroll in this food service course?
  - a. Very satisfied
  - b. Satisfied
  - c. Slightly satisfied
  - d. Not satisfied

- 7) How satisfied are you with school in general?
- Very satisfied
  - Satisfied
  - Slightly satisfied
  - Not satisfied
- 8) When did you first decide to enroll in a high school food service course?
- 1-9th grades
  - 10th grade
  - 11th grade
  - 12th grade
  - After high school graduation
- 9) IF YOU INTEND TO FIND A JOB AND NOT GO TO COLLEGE AFTER GRADUATION, PLEASE ANSWER THIS QUESTION, THEN GO TO QUESTION #11 AND COMPLETE THE QUESTIONNAIRE.
- Do you intend to seek a job related to food service following high school graduation (or completion of this course of study if you are an adult student)
- Yes
  - No
  - I am not certain
- 10) IF YOU INTEND TO GO TO A TWO-OR-FOUR-YEAR COLLEGE OR UNIVERSITY AFTER GRADUATION, (OR COMPLETION OF THIS COURSE OF STUDY IF YOU ARE AN ADULT STUDENT) PLEASE ANSWER THIS QUESTION THEN GO TO QUESTION #13 AND COMPLETE THE QUESTIONNAIRE.
- Do you intend to major in a food service-related area?
- Yes
  - No
  - I am not certain
- 11) What do you consider to be the single most important reason that you are not presently planning to enroll in a two- or four-year college or university?
- I do not want to go to any more school
  - I have not completed the high school courses necessary to meet the college entrance requirements
  - I do not have a high enough grade point average
  - I do not have enough money
  - Other reasons

- 12) If the reasons that prevent you from entering a two- or four-year college or university were to disappear would you then attend AND major in a food service-related area?
- a. Yes
  - b. No, I would go to college but not major in a food service-related area
  - c. No, I do not want to go to college
  - d. I am not certain
- 13) What is the most important reason that you are enrolled in a food service-related course?
- a. I want to learn the skills so I can get a job when I graduate from high school (or completion of this course study if you are an adult student)
  - b. I want to learn the skills so I can earn money while attending a two-or-four year college or university
  - c. I think this is an easy way to complete the requirements for high school graduation
  - d. None of the above
- 14) Do you intend to take another food service-related course during high school?
- a. Yes
  - b. No, I don't want to take another food service-related course
  - c. No, only because there is not another one offered, or I have taken all the courses offered here
  - d. I am not certain

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PLEASE TURN THE PAGE TO CONTINUE THE QUESTIONNAIRE

USING THE FOLLOWING SCALE, PLEASE LIST THE DEGREE OF INFLUENCE YOU THINK THE PERSONS OR JOB-RELATED FACTORS LISTED BELOW HAVE HAD IN INFLUENCING YOU TO ENROLL IN A FOOD SERVICE-RELATED COURSE. PLEASE PLACE A CHECK MARK (✓) IN THE APPROPRIATE BOX.

- A. Great influence on decision to enroll  
 B. Moderate influence on decision to enroll  
 C. Slight influence on decision to enroll  
 D. No influence on decision to enroll  
 E. Discouraged me from enrolling

	Great Influence				
	Moderate Influence		Slight Influence		No Influence
	A	B	C	D	E
15) Mother/Stepmother/Guardian	[ ]	[ ]	[ ]	[ ]	[ ]
16) Father/Stepfather/Guardian	[ ]	[ ]	[ ]	[ ]	[ ]
17) Sister(s) and/or brother(s)	[ ]	[ ]	[ ]	[ ]	[ ]
18) Other family member(s)	[ ]	[ ]	[ ]	[ ]	[ ]
19) Teacher(s)	[ ]	[ ]	[ ]	[ ]	[ ]
20) Counselor(s)	[ ]	[ ]	[ ]	[ ]	[ ]
21) Other adult(s)	[ ]	[ ]	[ ]	[ ]	[ ]
22) Friend(s)	[ ]	[ ]	[ ]	[ ]	[ ]
23) I like doing the work	[ ]	[ ]	[ ]	[ ]	[ ]
24) My hobbies	[ ]	[ ]	[ ]	[ ]	[ ]
25) Jobs at which I have worked	[ ]	[ ]	[ ]	[ ]	[ ]
26) Wages I will receive	[ ]	[ ]	[ ]	[ ]	[ ]
27) I think it will be easy to get a job	[ ]	[ ]	[ ]	[ ]	[ ]
28) It fits in with what I want to do with my life	[ ]	[ ]	[ ]	[ ]	[ ]
29) I liked what I saw when I watched someone doing the job	[ ]	[ ]	[ ]	[ ]	[ ]
30) My talks with someone who is or has worked in the job area	[ ]	[ ]	[ ]	[ ]	[ ]
31) My reading of or looking at materials telling about jobs in this area	[ ]	[ ]	[ ]	[ ]	[ ]
32) My enrollment in an occupational or career related course	[ ]	[ ]	[ ]	[ ]	[ ]
33) Results of a job preference test	[ ]	[ ]	[ ]	[ ]	[ ]

APPENDIX C

LETTER TO PROGRAM AND CENTER  
DIRECTORS



California State University, Chico  
Chico, California 95929-0002



Department of Home Economics  
(916) 895-6805

March 12, 1984

(name and address)

Dear (name):

During the past two years I have been studying the various person- and job-related factors which cause students to select and to enroll in various Regional Occupational Programs' and Centers' job preparation courses. As a final component to this study I am surveying ROP/C teachers of food service-related courses as well as one section of their students. The purpose of the survey is to determine the degree of influence these factors have had on the students' course choice. I will be drawing relationships between the patterns of influencing factors and the students' post-high school plans as well as the congruence between teachers' and students' perceptions of these factors. I will mail you a summarization of the results of this study when it is completed, in about ten months.

I am enclosing with this letter a sample packet of the questionnaires identical to that being sent to your food service-related teacher(s). All individual responses will be confidential. Data will be described on the basis of responses of all the teachers and of all the students on a state-wide basis. In no instance will data be shown or be reported on the basis of an individual program, county or region. I do need to maintain a coding system, however, so I can remain in contact with teachers who may forget to respond.

The results of this study will be of value to you as directors and superintendents, and also to your teachers and counselors. The ultimate recipient of the worthiness of this study is, of course, the student. The professional educators who better understand the career choice process are in a more effective position to advise, counsel, and guide young people in this important decision process.

If I can be of assistance to you in any way or answer any questions about this study, please feel free to call me (916) 895-6805 (message) or (916) 345-9927 (home). I appreciate your willingness to contribute to the information concerning student career choice which will be made available to professional educators.

Sincerely,

Faye C. Johnson  
Assistant Professor

FCJ/cb  
Enc: Questionnaires (sample packet)

APPENDIX D

LETTER TO REGIONAL OCCUPATION  
PROGRAM/CENTER INSTRUCTORS

California State University, Chico  
Chico, California 95929-0002



Department of Home Economics  
(916) 895-6805

March 13, 1984

(name and address)

Dear Instructor (last name):

For the past two years I have conducted research on how a young person makes a career choice. In order to complete this research and obtain additional information for the Regional Occupation Programs/Centers, would you assist me in evaluating the importance educators and students place on various persons and job related factors before they enroll in a food service-related course of study.

Please take ten minutes at the most, to give this questionnaire to your first weekly class section. Everything necessary to administer the questionnaire is contained in this packet. Enclosed you will find two questionnaires. The questionnaire edged in yellow is for you to complete; the other questionnaires are for the students to complete.

Please give each student a questionnaire and pencil. Questions 1 through 14 are demographic in nature and questions 15 through 33 relate to influential persons and job factors. The appropriate response in questions 1 through 14 should be circled, and in questions 15 through 33 checked ( ). The pencils are for you and the students to keep with my compliments. After the questionnaires have been completed please place them in the stamped, self-addressed envelope and return it to me.

Please be assured that all responses are confidential. All information will be pooled to present the results in terms of "Statewide Educators," and "Statewide Students' responses." The printed numbers on the forms are for record keeping purposes.

Your prompt completion of the questionnaires and their return to me by MARCH 24, 1984 would enable me to begin data analysis by April 1st. If you would like a summarization of the completed study, enclose the attached mailing label with the questionnaires and return them to me.

I sincerely appreciate you taking time from your busy schedule to complete this study. If you have any questions please feel free to call me at (916) 895-6805.

Sincerely,

Faye C. Johnson  
Assistant Professor

FJ/wp:dad  
Enclosures: Student & Teacher Questionnaires

APPENDIX E  
THANK YOU LETTERS TO  
INSTRUCTORS

California State University, Chico  
Chico, California 95929-0002



Department of Home Economics  
(916) 895-6805

April 2, 1984

(name and address)

Dear Instructor (name):

Thank you for completing and returning the questionnaires I recently sent you. I appreciate the assistance that you and your students have provided.

If you returned the mailing label, bearing your name and address, along with the questionnaires, you will be receiving a summarization of the completed study in the fall. If you forgot to return the label and would like to be advised of the results, please let me know and I will arrange for you to receive a copy.

Again, thank you for your assistance. It is through cooperative efforts of many people, such as yourself, that we educators can better understand the career selection process students utilize in making wise choices in this important area.

Sincerely,

Faye C. Johnson  
Assistant Professor

FCJ/wp:dad

APPENDIX F

REMINDER LETTER TO INSTRUCTORS

California State University, Chico  
Chico, California 95929-0002



Department of Home Economics  
(916) 895-6805

April 2, 1984

(name and address)

Dear Instructor (last name):

Three weeks ago I mailed you a packet containing several questionnaires concerning methods of student career selection. As you will recall, these questionnaires are a part of an important research study dealing specifically with how Regional Occupation Program/Center food service students decide to enter this course of study.

Approximately one-half of the questionnaires have been completed and returned. I am pleased and excited about this rate of response, however, valid statistical results require a greater percentage of participation. If you put the packet aside intending to complete it later, please make plans to administer the survey soon, perhaps within the next five days. Completion of the questionnaire should require only about ten minutes of your time. If you did not receive the packet or have misplaced it, please indicate the same on the enclosed post card and I will furnish additional materials. In the event you have already mailed the completed questionnaires to me, please indicate this on the enclosed post card.

In return for your assistance and upon request, a summarization of the study results will be mailed to you. If you would like to receive the summarization, please return to me the mailing label, bearing your name and address, along with the completed packet of materials.

I am excited about the additional information regarding the career choice selection process that will be generated by this study. It is through the joint efforts of many people, such as yourself, that educators will be better equipped to understand and guide students.

Please feel free to contact me (916-895-6805) if I can answer any questions or be of assistance to you. I look forward to receiving your completed questionnaires.

Sincerely,

Faye C. Johnson  
Assistant Professor

FCJ/wp:dad  
Enc: Post-card

APPENDIX G  
RESPONSE POST-CARD TO  
INSTRUCTORS



Please indicate below the status of the questionnaires which were sent to you in March.

\_\_\_\_\_ The questionnaires will be completed and returned to you within one week.

\_\_\_\_\_ The completed questionnaires have already been returned.

\_\_\_\_\_ Please send an additional packet of materials in order that the questionnaires may be completed.

APPENDIX H

LETTER TO PILOT STUDY

PROGRAM DIRECTORS

California State University, Chico  
Chico, California 95929-0002



Department of Home Economics  
(916) 895-6805

February 17, 1984

(name and address)

Dear (name):

These questionnaires are being sent to you as a result of our telephone conversation in which I asked permission to include the two Shasta Trinity food service Regional Occupation Program teachers in a pilot study. If you approve of their participation, I would appreciate your giving each one a copy of the questionnaire and a computer sheet for them to complete and return to me. I have also enclosed a short question sheet regarding the clarity of the questionnaire.

In order to determine the reliability of the instrument, I will need to ask them to repeat the completion of the questionnaire in two weeks. To determine the consistency of responses evoked by the questionnaire I need to compare the responses of each person of the two tests. Therefore, I need some way of knowing which questionnaire came from which teacher. Perhaps one teacher could be designated "teacher 1" and the other "teacher 2."

If you have questions please feel free to call:

Faye Johnson (916) 345-9927 or (916) 895-6805

or

Walter Beeler, Director, Butte County Regional Occupational Program, (916) 534-4743.

We would appreciate having your responses by February 28, 1984.

I appreciate your assistance with this study. It will contribute useful information to the investigation of career choice by food service students.

Sincerely,

Faye C. Johnson  
Assistant Professor

FCJ/cb

Enc: Survey Questionnaire  
Computer Sheet  
Question Sheet

APPENDIX I

LETTER TO PILOT STUDY  
INSTRUCTORS



February 22, 1984

(name and address)

Dear Instructor (name):

I am conducting a research study which will give valuable information to Regional Occupation Program/Center teachers and students. The study deals with the relative degree of influence various persons and factors have on causing a student to enter food service-related Regional Occupational Program/Center courses while in high school. Knowledge of these factors will result in a better understanding of why individuals select this career path. Important, too, is the question of whether students and teachers perceive the importance of these persons and factors similarly.

In order to have confidence in the findings of this study, I need to establish that the instrument is statistically accurate. I am asking you to be a part of the team from which this determination will be made. Two items need to be determined: 1) if the questionnaire and the letter to the teachers are clear and easy to understand, and 2) if the questions on the survey sheets are stated in a way which will cause you to respond to the question in the same way at a later date. To accomplish the first part, please write any comments you wish directly on the questionnaire. Especially, you may wish to respond to the clarity, relevance and ease of understanding of each item and item response. A question sheet is also provided if you wish to make other or more extensive comments. The second part of the determination will be made by sending you this questionnaire, again, in about two weeks, then comparing your responses on the two questionnaires.

I have enclosed in this packet the survey questionnaire as well as the computer sheet and question sheet. Please place these in the stamped, self-addressed envelop and return to me by March 5, 1984.

Again, I appreciate your willingness to assist me in making this important information available.

Sincerely,

Faye C. Johnson  
Assistant Professor

FCJ/cb

Enc: Survey Questionnaire  
Computer Sheet  
Question Sheet

APPENDIX J

RELIABILITY COEFFICIENTS FOR SURVEY INSTRUMENT  
COMPLETED BY PILOT STUDY STUDENT POPULATION

Reliability Coefficients for Survey Instrument  
Completed by Pilot Study Student Population

<u>Item</u>	<u>Reliability Coefficients</u>
1. Sex	1.0
2. Race or ethnic Group	1.0
3. Grade in school	1.0
4. Employment in a paying, food service-related job, not connected to school work	1.0
5. Satisfaction with decision to enroll in this food service course	.66
6. Satisfaction with school in general	.94
7. Grade level of first decision to enroll in a high school food service course	.96
8. Intention to seek a job related to food service following high school graduation (or completion of this course of study)	.71
9. Intention to major in a food service-related area	.68
10. Single most important reason for plans to not enroll in a two- or four-year college or university	.49
11. Intention to attend a two- or four-year college or university and major in a food service- related area if obstacles were to disappear	.52
12. Most important reason for enrollment in a food service-related course	.96
13. Intention to take another food service- related course during high school	.53

<u>The Influence Of:</u>	<u>Reliability Coefficient</u>
14. Mother/Stepmother/Guardian	.49
15. Father/Stepfather/Guardian	.77
16. Sister(s) and/or brother(s)	.83
17. Other family member(s)	.86
18. Teacher(s)	.61
19. Counselor(s)	.76
20. Other adult(s)	.76
21. Friend(s)	.53
22. I like doing the work	.67
23. My hobbies	.56
24. Jobs at which I have worked	.71
25. Wages I will receive	.72
26. I think it will be easy to get a job	.83
27. It fits in with what I want to do with my life	.42
28. I liked what I saw when I watched someone doing the job	.64
29. My talks with someone who is or has worked in the job area	.61
30. My reading of or looking at materials telling about jobs in this area	.39
31. My enrollment in an occupational or career related course	.64
32. Results of a job preference test	.56



APPENDIX K

RELIABILITY COEFFICIENTS FOR SURVEY INSTRUMENT  
COMPLETED BY TEACHER POPULATION

Reliability Coefficients for Survey Instrument  
Completed by Teacher Population

<u>Item</u>	<u>Reliability Coefficient</u>
1. Sex	1.0
2. Race or ethnic Group	1.0
3. Number of years of teaching experience in food service-related ROC/P	.97
4. Present employment assignment	1.0
5. Credential authorizing the teaching of <u>this</u> food service section	.81
6. Total number of food service section taught by instructor this semester	1.0
7. Total number of students enrolled in all the sections of food service courses taught by instructor	1.0
8. Estimate of percentage of students enrolled which intend to seek a job related to the food service field and not go to college after graduation (or completion of the course of study)	.85
9. Estimate of percentage of students enrolled which intend to enroll in a two- or four-year college or university <u>AND</u> major in a food service-related area	.50
10. Single most important reason many of the students do <u>NOT</u> go to a two- or four-year college or university	.94
11. Estimate of percentage of non-college-bound population which would attend <u>AND</u> major in a food service-related area if all the obstacles to enrollment were to disappear	.82
12. Most important reason that your students have enrolled in this food service-related course	1.0

13. Estimate of percentage of the students enrolled in course for the primary purpose of completing the high school graduation requirements .78

<u>The Influence Of:</u>	<u>Reliability Coefficient</u>
14. Mother/Stepmother/Guardian	.73
15. Father/Stepfather/Guardian	.90
16. Sister(s) and/or brother(s)	.77
17. Other family member(s)	.44
18. Teacher(s)	.63
19. Counselor(s)	.71
20. Other adult(s)	.70
21. Friend(s)	.63
22. I like doing the work	.46
23. My hobbies	.94
24. Jobs at which I have worked	.87
25. Wages I will receive	.63
26. I think it will be easy to get a job	.91
27. It fits in with what I want to do with my life	.91
28. I liked what I saw when I watched someone doing the job	.59
29. My talks with someone who is or has worked in the job area	.44
30. My reading of or looking at materials telling about jobs in this area	.87
31. My enrollment in an occupational or career related course	.69
32. Results of a job preference test	.74

APPENDIX L

QUESTIONNAIRE QUESTION SHEET  
FOR TEACHERS AND STUDENTS



APPENDIX M

RELATIONSHIP OF THE TEACHERS' AND THE STUDENTS' RESPONSES  
WITH RESPECT TO THE DEGREE OF IMPORTANCE OF THE  
INFLUENCING PERSONS AND FACTORS ON THE  
STUDENTS' DECISION TO ENROLL IN A  
FOOD SERVICE-RELATED COURSE

	Mean Value <sup>a</sup>	1	2	3	4	5
Mother/ stepmother/ guardian	Students:	2.7	=====			
	Teachers:	2.4	=====			
Father/ stepfather/ guardian	Students:	3.0	=====			
	Teachers:	2.6	=====			
Sister(s) and/or brother(s)	Students:	3.2	=====			
	Teachers:	2.8	=====			
Other family member	Students:	3.2	=====			
	Teachers:	3.2	=====			
Teacher(s)	Students:	2.8	=====			
	Teachers:	2.1	=====			
Counselor(s)	Students:	2.8	=====			
	Teachers:	2.0	=====			
Other adult(s)	Students:	3.0	=====			
	Teachers:	2.6	=====			
Friend(s)	Students:	2.6	=====			
	Teachers:	1.8	=====			
Liking of the work required by the job	Students:	2.1	=====			
	Teachers:	2.0	=====			
Hobbies	Students:	2.6	=====			
	Teachers:	2.7	=====			
Previous jobs	Students:	2.9	=====			
	Teachers:	2.2	=====			
Expected wages	Students:	2.7	=====			
	Teachers:	2.1	=====			
Anticipated ease of find- ing a job	Students:	2.6	=====			
	Teachers:	2.0	=====			

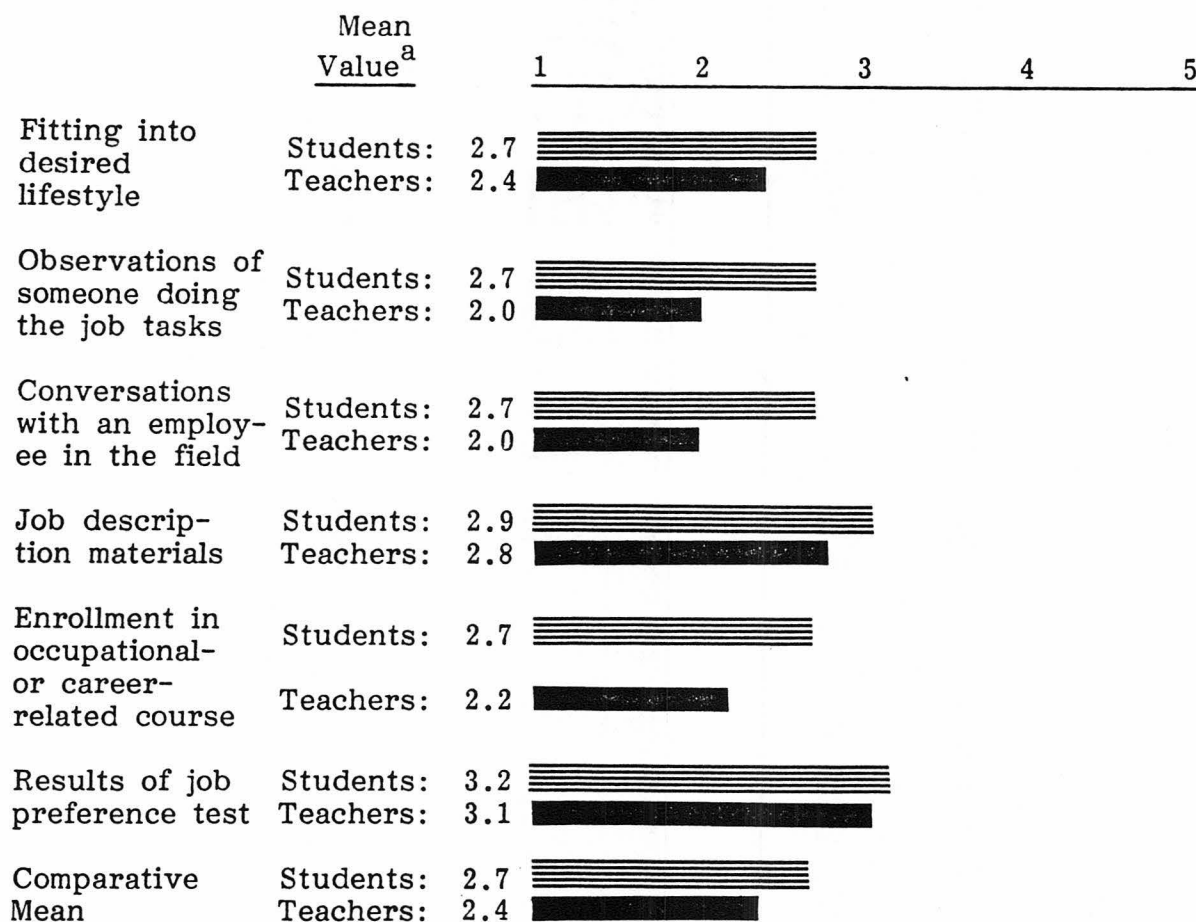


Figure 1: Relationship of the teachers' and the students' responses with respect to the degree of importance of the the influencing persons and factors on the student's decision to enroll in a food service-related course.

- a:
- 1 = great influence
  - 2 = moderate influence
  - 3 = slight influence
  - 4 = no influence
  - 5 = discouraged



APPENDIX N

ANOVA FOR THE RELATIONSHIP OF SEX TO THE PERCEIVED  
DEGREE OF IMPORTANCE OF VARIOUS PERSON- AND  
JOB-RELATED FACTORS ON THE STUDENTS'  
DECISION TO ENROLL IN A FOOD  
SERVICE-RELATED COURSE

ANOVA for the Relationship of Sex to the Perceived  
Degree of Importance of Various Person- And  
Job-related Factors on the Students'  
Decision to Enroll in a Food  
Service-related Course

	<u>Mean Value<sup>a</sup></u>	<u>F-ratio</u>	<u>p</u>
Mother/stepmother/guardian	2.665	2.570	0.109
Father/stepfather/guardian	2.979	3.953	0.047*
Sister(s) and/or brother(s)	3.190	0.146	0.702
Other family member	3.199	0.354	0.552
Teacher(s)	2.811	0.259	0.611
Counselor(s)	2.826	0.377	0.539
Other adult(s)	3.022	1.251	0.264
Friend(s)	2.597	1.266	0.261
Liking of the work required by the job	2.067	0.102	0.750
Hobbies	2.628	0.000	0.986
Previous jobs	2.860	0.128	0.721
Expected wages	2.736	6.725	0.010*
Anticipated ease of finding a job	2.639	0.097	0.756
Fitting into desired lifestyle	2.735	3.380	0.066
Observations of someone doing the job tasks	2.712	0.009	0.925
Conversations with an employee in the field	2.684	0.761	0.383
Job description materials	2.947	0.156	0.693
Enrollment in occupational or career-related course	2.786	1.491	0.222
Results of job preference test	3.157	0.643	0.423

\* =  $p < .05$

a: 1 = great influence  
2 = moderate influence  
3 = slight influence

4 = no influence  
5 = discouragement

APPENDIX O

ANOVA FOR THE RELATIONSHIP OF HEAD OF HOUSEHOLD TO THE PERCEIVED  
DEGREE OF IMPORTANCE OF VARIOUS PERSON- AND JOB-RELATED  
FACTORS ON THE STUDENTS' DECISION TO ENROLL  
IN A FOOD SERVICE-RELATED COURSE

ANOVA for the Relationship of Head of Household to the Perceived  
Degree of Importance of Various Person- and Job-related  
Factors on the Students' Decision to Enroll  
In a Food Service-related Course

	<u>Mean Value<sup>a</sup></u>	<u>F-ratio</u>	<u>p</u>
Mother/stepmother/guardian	2.664	1.421	0.242
Father/stepfather/guardian	2.978	17.741	.000***
Sister(s) and/or brother(s)	3.187	0.591	0.554
Other family member	3.196	0.563	0.570
Teacher(s)	2.808	0.971	0.379
Counselor(s)	2.825	1.034	0.356
Other adult(s)	3.020	0.494	0.610
Friend(s)	2.595	0.762	0.467
Liking of the work required by the job	2.065	0.550	0.577
Hobbies	2.628	0.059	0.943
Previous jobs	2.861	0.733	0.481
Expected wages	2.735	1.344	0.261
Anticipated ease of finding a job	2.638	0.123	0.885
Fitting into desired lifestyle	2.732	0.503	0.605
Observations of someone doing the job tasks	2.711	0.592	0.554
Conversations with an employee in the field	2.683	1.041	0.354
Job description materials	2.946	1.380	0.252
Enrollment in occupational- or career related course	2.784	1.600	0.203
Results of job preference test	3.156	0.067	0.935

\*\*\* =  $p < .001$

a: 1 = great influence  
2 = moderate influence  
3 = slight influence

4 = no influence  
5 = discouragement

APPENDIX P

ANOVA FOR THE RELATIONSHIP OF RACE/ETHNIC GROUP TO THE  
PERCEIVED DEGREE OF IMPORTANCE OF VARIOUS  
PERSON- AND JOB-RELATED FACTORS ON THE  
STUDENTS' DECISION TO ENROLL IN A  
FOOD SERVICE-RELATED COURSE

ANOVA for the Relationship of Race/Ethnic Group to the  
Perceived Degree of Importance of Various  
Person- and Job-related Factors on the  
Students' Decision to Enroll in a  
Food Service-related Course

	<u>Mean Value</u> <sup>a</sup>	<u>F-ratio</u>	<u>p</u>
Mother/stepmother/guardian	2.661	2.034	0.088
Father/stepfather/guardian	2.977	1.495	0.202
Sister(s) and/or brother(s)	3.187	5.030	0.001**
Other family member	3.194	2.836	0.024*
Teacher(s)	2.809	2.172	0.070
Counselor(s)	2.821	3.986	0.003**
Other adult(s)	3.015	1.239	0.293
Friend(s)	2.592	1.250	0.288
Liking of the work required by the job	2.069	2.100	0.079
Hobbies	2.624	1.640	0.162
Previous jobs	2.860	1.490	0.203
Expected wages	2.728	5.281	.000***
Anticipated ease of finding a job	2.750	3.754	0.005**
Fitting into desired lifestyle	2.730	1.684	0.152
Observations of someone doing the job tasks	2.715	3.710	0.005**
Conversations with an employee in the field	2.685	1.142	0.335
Job description materials	2.950	8.347	.000***
Enrollment in occupational- or career-related course	2.784	6.810	.000***
Results of job preference test	3.155	3.893	0.004**

\* =  $p < .05$   
 \*\* =  $p < .01$   
 \*\*\* =  $p < .001$

a: 1 = great influence  
 2 = moderate influence  
 3 = slight influence

4 = no influence  
 5 = discouragement

APPENDIX Q

ANOVA FOR THE RELATIONSHIP OF SATISFACTION OF DECISION TO ENROLL  
IN THIS COURSE TO THE PERCEIVED DEGREE OF IMPORTANCE OF  
VARIOUS PERSON- AND JOB-RELATED FACTORS NOTED ON THE  
STUDENTS' DECISION TO ENROLL IN A  
FOOD SERVICE-RELATED COURSE

ANOVA for the Relationship of Satisfaction of Decision to Enroll  
In this Course to the Perceived Degree of Importance of  
Various Person- and Job-related Factors Noted on the  
Students' Decision to Enroll in a  
Food Service-related Course

	<u>Mean Value</u> <sup>a</sup>	<u>F-ratio</u>	<u>p</u>
Mother/stepmother/guardian	2.662	11.506	.000***
Father/stepfather/guardian	2.976	7.693	.000***
Sister(s) and/or brother(s)	3.185	9.706	.000***
Other family member	3.193	8.630	.000***
Teacher(s)	2.805	16.989	.000***
Counselor(s)	2.822	4.490	.004**
Other adult(s)	3.020	12.918	.000***
Friend(s)	2.591	14.549	.000***
Liking of the work required by the job	2.062	72.869	.000***
Hobbies	2.625	13.520	.000***
Previous jobs	2.857	9.387	.000***
Expected wages	2.735	10.639	.000***
Anticipated ease of finding a job	2.639	11.299	.000***
Fitting into desired lifestyle	2.733	26.242	.000***
Observations of someone doing the job tasks	2.709	30.448	.000***
Conversations with an employee in the field	2.683	23.584	.000***
Job description materials	2.946	20.608	.000***
Enrollment in occupational- or career-related course	2.784	25.981	.000***
Results of job preference test	3.153	12.294	.000***

\*\* =  $p < .01$   
\*\*\* =  $p < .001$

a: 1 = great influence  
2 = moderate influence  
3 = slight influence

4 = no influence  
5 = discouragement



APPENDIX R

ANOVA FOR THE RELATIONSHIP OF INTENTION TO SEEK A FOOD SERVICE-RELATED JOB TO THE PERCEIVED DEGREE OF IMPORTANCE OF VARIOUS PERSON- AND JOB-RELATED FACTORS ON THE STUDENTS' DECISION TO ENROLL IN A FOOD SERVICE-RELATED COURSE

ANOVA for the Relationship of Intention to Seek a Food Service-  
Related Job to the Perceived Degree of Importance of  
Various Person- and Job-related Factors on the  
Students' Decision to Enroll in a Food  
Service-related Course

	<u>Mean Value<sup>a</sup></u>	<u>F-ratio</u>	<u>p</u>
Mother/stepmother/ guardian	2.630	4.402	0.013*
Father/stepfather/guardian	2.963	2.888	0.056
Sister(s) and/or brother(s)	3.161	3.093	0.046*
Other family member	3.149	4.446	0.012*
Teacher(s)	2.780	3.662	0.026*
Counselor(s)	2.792	1.811	0.164
Other adult(s)	3.003	2.451	0.087
Friend(s)	2.609	1.546	0.214
Liking of the work required by the job	2.055	17.293	.000***
Hobbies	2.613	6.328	0.002**
Previous jobs	2.854	7.466	0.001**
Expected wages	2.684	9.826	.000***
Anticipated ease of finding a job	2.647	13.105	.000***
Fitting into desired lifestyle	2.729	34.711	.000***
Observations of someone doing the job tasks	2.660	12.022	.000***
Conversations with an employee in the field	2.659	14.009	.000***
Job description materials	2.940	15.740	.000***
Enrollment in occupational- or career-related course	2.767	26.218	.000***
Results of job preference test	3.093	6.232	0.002**

\* =  $p < .05$   
 \*\* =  $p < .01$   
 \*\*\* =  $p < .001$

a: 1 = great influence  
 2 = moderate influence  
 3 = slight influence

4 = no influence  
 5 = discouragement

APPENDIX S

ANOVA FOR THE RELATIONSHIP OF INTENTION TO MAJOR IN A FOOD  
SERVICE-RELATED AREA TO THE PERCEIVED DEGREE OF  
IMPORTANCE OF VARIOUS PERSON- AND JOB-RELATED  
FACTORS ON STUDENTS' DECISION TO ENROLL  
IN A FOOD SERVICE-RELATED COURSE

ANOVA for the Relationship of Intention to Major in a Food  
Service-related Area to the Perceived Degree of  
Importance of Various Person- and Job-related  
Factors on Students' Decision to Enroll  
In a Food Service-related Course

	Mean Value <sup>a</sup>	F-ratio	p
Mother/stepmother/guardian	2.634	12.559	.000***
Father/stepfather/guardian	2.959	15.601	.000***
Sister(s) and/or brother(s)	3.127	9.306	.000***
Other family member	3.151	11.600	.000***
Teacher(s)	2.769	13.980	.000***
Counselor(s)	2.742	1.883	.153
Other adult(s)	2.994	15.019	.000***
Friend(s)	2.550	6.294	.002**
Liking of the work required by the job	2.065	29.945	.000***
Hobbies	2.610	14.514	.000***
Previous jobs	2.843	8.860	.000***
Expected wages	2.720	13.709	.000***
Anticipated ease of finding a job	2.588	20.916	.000***
Fitting into desired lifestyle	2.710	99.714	.000***
Observations of someone doing the job tasks	2.703	25.140	.000***
Conversations with an employee in the field	2.666	20.791	.000***
Job description materials	2.916	27.254	.000***
Enrollment in occupational- or career-related course	2.776	44.200	.000***
Results of job preference test	3.117	17.252	.000***

\*\* =  $p < .01$   
\*\*\* =  $p < .001$

a: 1 = great influence  
2 = moderate influence  
3 = slight influence


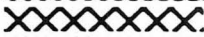











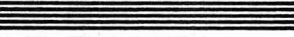


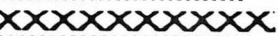




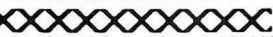



4 = no influence  
5 = discouragement

APPENDIX T

INFLUENCE OF VARIOUS PERSON- AND JOB-RELATED FACTORS ON A  
STUDENT'S DECISION TO ENROLL IN A FOOD SERVICE-RELATED  
COURSE ON THE BASIS OF RACE/ETHNIC GROUP

	Mean Value <sup>a</sup>	1	2	3	4	5
<b>Mother/stepmother/ guardian</b>						
Black	2.4					
Asian/Pacific Islander	2.2					
Hispanic	2.6					
White	2.7					
Other	2.7					
<b>Father/stepfather/ guardian</b>						
Black	2.9					
Asian/Pacific Islander	2.8					
Hispanic	2.8					
White	3.0					
Other	2.9					
<b>Sister(s) and/or brother(s)</b>						
Black	2.9					
Asian/Pacific Islander	3.1					
Hispanic	3.0					
White	3.3					
Other	3.2					
<b>Other family member</b>						
Black	3.0					
Asian/Pacific Islander	3.4					
Hispanic	3.0					
White	2.3					
Other	3.2					
<b>Teacher(s)</b>						
Black	2.6					
Asian/Pacific Islander	2.9					
Hispanic	2.8					
White	2.9					
Other	2.6					
<b>Counselor(s)</b>						
Black	2.5					
Asian/Pacific Islander	2.7					
Hispanic	2.7					
White	2.9					
Other	2.6					

	Mean Value <sup>a</sup>	1	2	3	4	5
<b>Other adult(s)</b>						
Black	3.0					
Asian/Pacific Islander	2.6					
Hispanic	3.0					
White	3.1					
Other	2.9					
<b>Friend(s)</b>						
Black	2.4					
Asian/Pacific Islander	2.7					
Hispanic	2.5					
White	2.6					
Other	2.6					
<b>Liking of the work required by the job</b>						
Black	2.0					
Asian/Pacific Islander	1.9					
Hispanic	1.9					
White	2.1					
Other	2.2					
<b>Hobbies</b>						
Black	2.5					
Asian/Pacific Islander	2.6					
Hispanic	2.5					
White	2.7					
Other	2.6					
<b>Previous jobs</b>						
Black	2.9					
Asian/Pacific Islander	2.7					
Hispanic	2.7					
White	2.9					
Other	2.9					
<b>Expected wages</b>						
Black	2.6					
Asian/Pacific Islander	2.3					
Hispanic	2.4					
White	2.8					
Other	2.7					

	Mean Value <sup>a</sup>	1	2	3	4	5
<b>Anticipated ease of finding a job</b>						
Black	2.4					
Asian/Pacific Islander	2.2					
Hispanic	2.5					
White	2.7					
Other	2.8					
<b>Fitting into desired lifestyle</b>						
Black	2.6					
Asian/Pacific Islander	2.5					
Hispanic	2.7					
White	2.8					
Other	2.5					
<b>Observations of someone doing the job tasks</b>						
Black	2.4					
Asian/Pacific Islander	2.7					
Hispanic	2.6					
White	2.8					
Other	2.6					
<b>Conversations with an employee in the field</b>						
Black	2.5					
Asian/Pacific Islander	2.7					
Hispanic	2.6					
White	2.7					
Other	2.6					
<b>Job description materials</b>						
Black	2.5					
Asian/Pacific Islander	2.7					
Hispanic	2.8					
White	3.1					
Other	2.9					



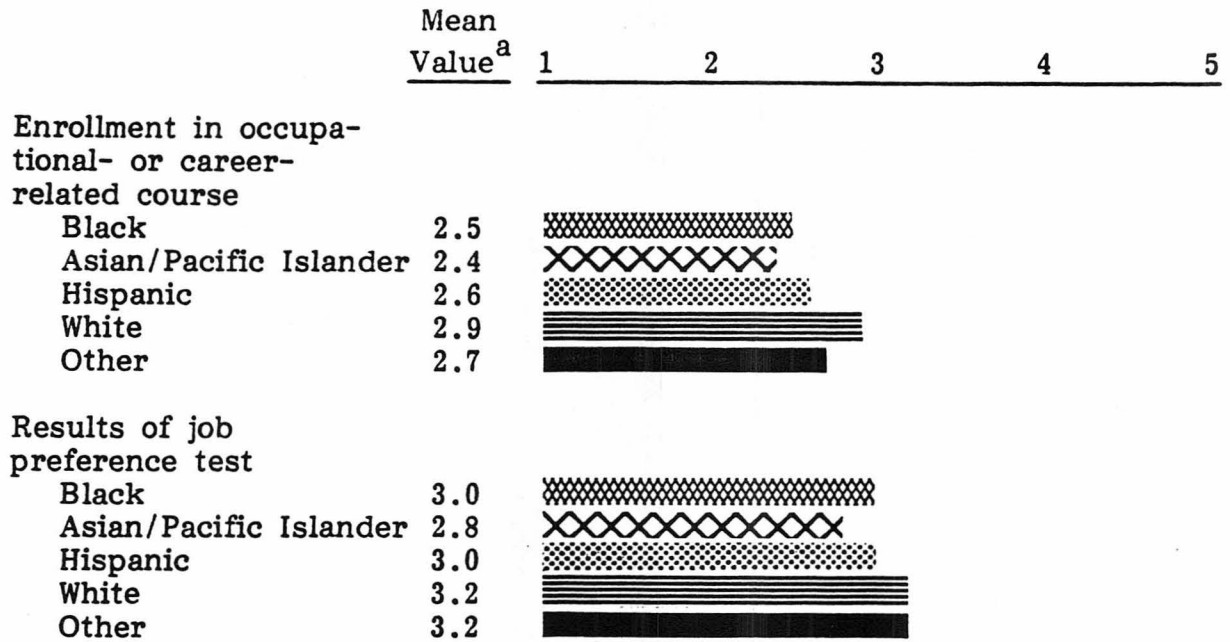


Figure 2: Influence of Various Person- and Job-Related Factors on a Student's Decision to Enroll in a Food Service-related Course on the Basis of Race/Ethnic Group.

- a:
- 1 = great influence
  - 2 = moderate influence
  - 3 = slight influence
  - 4 = no influence
  - 5 = discouraged

APPENDIX U

RELATIONSHIP OF RACE TO THE STUDENTS' PERCEPTIONS OF THE  
IMPORTANCE OF VARIOUS INFLUENCING FACTORS WHICH SHOWED  
STATISTICAL SIGNIFICANCE AMONG THE GROUPS ON  
THEIR DECISION TO ENROLL IN A FOOD  
SERVICE-RELATED COURSE

Relationship of Race to the Students' Perceptions of the Importance of  
Various Influencing Factors which Showed Statistical Significance  
Among the Groups on Their Decision to Enroll in a Food  
Service-related Course

	<u>BLACK</u> (Percentage)					<u>ASIAN/ PACIFIC ISLANDER</u> (Percentage)				
	Moder-		Slight Influ- ence	No Influ- ence	Discour- agement	Moder-		Slight Influ- ence	No Influ- ence	Discour- agement
	Great Influ- ence	ate Influ- ence				Great Influ- ence	ate Influ- ence			
Sister(s) and/ or brother(s)	21	17	14	45	5	21	6	18	53	3
Other family member	21	16	10	51	3	9	6	19	63	3
Counselor(s)	30	21	15	32	2	24	18	27	32	0
Expected wages	22	22	18	30	9	32	24	27	15	3
Anticipated ease of find- ing a job	28	28	22	19	3	29	29	32	9	0
Observations of someone doing the job tasks	27	30	18	22	3	21	24	27	27	3
Job description materials	25	30	18	25	3	21	21	26	32	0
Enrollment in occupational- or career-related course	28	25	21	26	1	31	19	31	19	0
Results of job preference test	18	15	23	39	6	18	18	32	32	0
Comparative Mean	25	23	18	32	4	23	18	24	31	1

Relationship of Race to the Students' Perceptions of the Importance of  
Various Influencing Factors which Showed Statistical Significance  
Among the Groups on Their Decision to Enroll in a Food  
Service-related Course

(continued)

	<u>HISPANIC</u> (Percentage)					<u>WHITE</u> (Percentage)				
		Moder-				Moder-				
	Great Influ- <u>ence</u>	ate Influ- <u>ence</u>	Slight Influ- <u>ence</u>	No Influ- <u>ence</u>	Discour- agement	Great Influ- <u>ence</u>	ate Influ- <u>ence</u>	Slight Influ- <u>ence</u>	No Influ- <u>ence</u>	Discour- agement
Sister(s) and/ or brother(s)	19	17	16	47	1	11	12	14	60	3
Other family member	18	16	14	49	3	10	16	14	58	3
Counselor(s)	25	22	16	35	2	18	18	19	43	2
Expected wages	26	30	19	22	2	18	24	16	38	4
Anticipated ease of find- ing a job	21	30	26	22	2	16	28	27	27	2
Observations of someone doing the job tasks	23	26	23	26	2	18	20	26	34	2
Job description materials	17	26	22	32	3	10	19	26	43	2
Enrollment in occupational- or career-related course	21	32	18	27	2	15	21	23	39	2
Results of job preference test	13	24	19	39	5	9	16	19	53	3
Comparative Mean	20	20	19	33	2	14	20	20	44	2

Relationship of Race to the Students' Perceptions of the Importance of  
Various Influencing Factors which Showed Statistical Significance  
Among the Groups on Their Decision to Enroll in a Food  
Service-related Course

(continued)

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	<u>OTHER</u>				
	(Percentage)				
	<u>Great</u>	Moder-	<u>Slight</u>	<u>No</u>	<u>Discour-</u>
	<u>Influ-</u>	ate	<u>Influ-</u>	<u>Influ-</u>	<u>agement</u>
	<u>ence</u>	<u>Influ-</u>	<u>ence</u>	<u>ence</u>	<u>agement</u>
	<u>ence</u>	<u>ence</u>	<u>ence</u>	<u>ence</u>	<u>agement</u>
Sister(s) and/or brother(s)	12	15	22	47	5
Other family member	17	12	12	57	3
Counselor(s)	28	21	18	30	3
Expected wages	19	26	21	28	5
Anticipated ease of finding a job	22	22	25	23	8
Observations of some- one doing the job tasks	23	25	28	20	5
Job description materials	9	27	31	29	5
Enrollment in occupational- or career-related course	22	22	25	27	3
Results of job preference test	9	12	30	42	5
Comparative Mean	18	21	22	32	5

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APPENDIX V

CHI SQUARE ANALYSIS OF THE RELATIONSHIP OF VARIOUS DEMOGRAPHIC-  
AND PERSON-RELATED FACTORS TO STUDENTS' POST-HIGH SCHOOL  
GRADUATION PLANS TO SEEK A JOB IN THE FOOD SERVICE AREA  
AND TO NOT ATTEND A TWO- OR FOUR-YEAR  
COLLEGE OR UNIVERSITY

(EXPANDED TABLE)

Chi Square Analysis of the Relationship of Various Demographic-  
And Person-related Factors to Students' Post-High School  
Graduation Plans to Seek a Job in the Food Service Area  
and to Not Attend a Two- or Four-year  
College or University

(Expanded Table)

		<u>Yes</u>	<u>No</u>	<u>Not Certain</u>	<u>Row Total</u>	<u>Raw Chi Square</u>	<u>df</u>	<u>p</u>
Gender								
Male	(Row Percent)	(33.3)	(28.8)	(33.9)				
	Total Percent	16.5	16.3	16.8	49.6			
Female	(Row Percent)	(30.2)	(25.1)	(44.7)				
	Total Percent	15.2	12.7	22.5	50.4			
Total (%)		31.7	28.9	39.3	100.0	10.000	2	.007**
Head of household								
Single Female	(Row Percent)	(37.9)	(21.3)	(40.8)				
	Total Percent	8.8	4.9	9.5	23.2			
Single Male	(Row Percent)	(31.1)	(42.6)	(26.2)				
	Total Percent	2.5	3.5	2.1	8.1			
Male & Female Total	(Row Percent)	(29.7)	(29.7)	(40.6)				
	Total Percent	20.4	20.4	27.9	68.7			
Total (%)		31.7	28.8	39.5	100.0	13.353	4	.010*
Racial or ethnic group								
Black	(Row Percent)	(34.4)	(29.0)	(36.6)				
	Total Percent	4.3	3.6	4.5	12.4			
Asian/ Pacific Islander	(Row Percent)	(52.2)	(17.4)	(30.4)				
	Total Percent	1.6	0.5	0.9	3.1			
Hispanic	(Row Percent)	(32.7)	(24.7)	(42.7)				
	Total Percent	6.6	4.9	8.6	20.1			
White	(Row Percent)	(31.1)	(29.0)	(39.2)				
	Total Percent	18.4	17.6	23.3	59.4			
Other	(Row Percent)	(21.1)	(39.5)	(39.5)				
	Total Percent	1.1	2.0	2.0	5.1			
Total (%)		32.0	28.7	39.3	100.0	9.307	8	.317

Chi Square Analysis of the Relationship of Various Demographic-  
And Person-related Factors to Students' Post-High School  
Graduation Plans to Seek a Job in the Food Service Area  
and to Not Attend a Two- or Four-year  
College or University

(Expanded Table)

(continued)

		<u>Yes</u>	<u>No</u>	<u>Not Certain</u>	<u>Row Total</u>	<u>Raw Chi Square</u>	<u>df</u>	<u>p</u>
Grade level in school								
10th Grade	(Row Percent)	(23.3)	(32.9)	(43.8)				
	Total Percent	4.5	6.4	8.5	19.4			
11th Grade	(Row Percent)	(29.3)	(25.5)	(45.2)				
	Total Percent	11.3	9.9	17.4	38.6			
12th Grade	(Row Percent)	(32.0)	(33.2)	(34.8)				
	Total Percent	10.7	11.7	11.6	33.3			
Adult Student	(Row Percent)	(78.6)	(4.8)	(16.3)				
	Total Percent	4.4	0.3	0.9	5.6			
Other	(Row Percent)	(26.1)	(43.5)	(30.4)				
	Total Percent	0.8	1.3	0.9	3.1			
Total (%)		31.7	28.9	39.4	100.0	57.341	8	.000***
Paid employment in a food service- related job								
Yes	(Row Percent)	(38.0)	(26.6)	(35.4)				
	Total Percent	13.7	9.6	12.8	36.0			
No	(Row Percent)	(28.3)	(30.1)	(41.6)				
	Total Percent	18.1	19.3	26.6	64.0			
Total (%)		31.8	28.9	39.4	100.0	7.604	2	.022*



Chi Square Analysis of the Relationship of Various Demographic-  
And Person-related Factors to Students' Post-High School  
Graduation Plans to Seek a Job in the Food Service Area  
and to Not Attend a Two- or Four-year  
College or University

(Expanded Table)

(continued)

		<u>Yes</u>	<u>No</u>	<u>Not Certain</u>	<u>Row Total</u>	<u>Raw Chi Square</u>	<u>df</u>	<u>p</u>
Satisfaction with the decision to enroll in a food service-related course								
Very Satisfied	(Row Percent)	(42.1)	(19.0)	(38.9)				
	Total Percent	19.2	8.7	17.7	45.6			
Satisfied	(Row Percent)	(24.2)	(32.8)	(43.0)				
	Total Percent	10.8	14.7	19.2	44.7			
Slightly Satisfied	(Row Percent)	(17.9)	(58.9)	(23.2)				
	Total Percent	1.3	4.4	1.7	7.5			
Not Satisfied	(Row Percent)	(23.5)	(47.1)	(29.4)				
	Total Percent	0.5	1.1	0.7	2.3			
Total (%)		31.9	28.8	39.3	100.0	59.465	6	.000***
Satisfaction with school in general								
Very Satisfied	(Row Percent)	(54.9)	(16.5)	(28.6)				
	Total Percent	6.7	2.0	3.5	12.2			
Satisfied	(Row Percent)	(30.5)	(27.2)	(42.3)				
	Total Percent	16.3	14.5	22.6	53.4			
Slightly Satisfied	(Row Percent)	(24.0)	(33.9)	(42.1)				
	Total Percent	5.5	7.8	9.7	23.0			
Not Satisfied	(Row Percent)	(27.1)	(40.0)	(32.9)				
	Total Percent	3.1	4.6	3.8	11.4			
Total (%)		31.6	28.9	39.5	100.0	34.692	6	.000***

Chi Square Analysis of the Relationship of Various Demographic-  
And Person-related Factors to Students' Post-High School  
Graduation Plans to Seek a Job in the Food Service Area  
and to Not Attend a Two- or Four-year  
College or University

(Expanded Table)

(continued)

		<u>Yes</u>	<u>No</u>	<u>Not Certain</u>	<u>Row Total</u>	<u>Raw Chi Square</u>	<u>df</u>	<u>p</u>
Grade level of decision to enroll in a food service- related course								
1st-9th Grade	(Row Percent)	(28.0)	(29.6)	(42.4)				
	Total Percent	4.7	5.0	7.1	16.8			
10th Grade	(Row Percent)	(29.4)	(29.4)	(41.3)				
	Total Percent	8.6	8.6	12.1	29.3			
11th Grade	(Row Percent)	(27.2)	(28.4)	(44.4)				
	Total Percent	8.9	9.3	14.5	32.6			
12th Grade	(Row Percent)	(33.3)	(35.0)	(31.6)				
	Total Percent	5.2	5.5	5.0	15.7			
After High School Graduation	(Row Percent)	(76.2)	(9.5)	(14.3)				
	Total Percent	4.3	0.5	0.8	5.6			
Total (%)		31.7	28.9	39.5	100.0	46.445	8	.000***

\* =  $p < .05$

\*\* =  $p < .01$

\*\*\* =  $p < .001$

APPENDIX W

CHI SQUARE ANALYSIS OF THE RELATIONSHIP OF VARIOUS DEMOGRAPHIC  
AND PERSON-RELATED FACTORS TO STUDENTS' POST-HIGH SCHOOL  
GRADUATION PLANS TO ATTEND A TWO- OR FOUR-YEAR  
COLLEGE OR UNIVERSITY AND MAJOR IN A FOOD  
SERVICE-RELATED AREA

(EXPANDED TABLE)

Chi Square Analysis of the Relationship of Various Demographic  
And Person-related Factors to Students' Post-High School  
Graduation Plans to Attend a Two- or Four-year  
College or University and Major in a Food  
Service-related Area

(Expanded Table)

		<u>Yes</u>	<u>No</u>	<u>Not Certain</u>	<u>Row Total</u>	<u>Raw Chi Square</u>	<u>df</u>	<u>p</u>
Gender								
Male	(Row Percent)	(27.6)	(40.4)	(32.0)				
	Total Percent	13.4	19.6	15.6	48.6			
Female	(Row Percent)	(16.4)	(46.7)	(37.0)				
	Total Percent	8.4	24.0	19.0	51.4			
Total (%)		21.8	43.6	34.6	100.0	14.359	2	.001**
Head of household								
Single Female	(Row Percent)	(22.2)	(42.2)	(35.6)				
	Total Percent	5.1	9.7	8.2	23.0			
Single Male	(Row Percent)	(30.6)	(45.8)	(23.6)				
	Total Percent	2.8	4.2	2.2	9.2			
Male & Female Total	(Row Percent)	(20.5)	(43.5)	(36.0)				
	Total Percent	13.9	29.5	24.4	67.8			
Total (%)		21.8	43.4	34.7	100.0	5.925	4	.205
Racial or ethnic group								
Black	(Row Percent)	(26.7)	(35.6)	(37.6)				
	Total Percent	3.5	4.6	4.9	13.0			
Asian/ Pacific Islander	(Row Percent)	(19.4)	(48.4)	(32.3)				
	Total Percent	0.8	1.9	1.3	4.0			
Hispanic	(Row Percent)	(15.6)	(46.7)	(37.8)				
	Total Percent	2.7	8.1	6.5	17.3			
White	(Row Percent)	(21.3)	(44.7)	(34.1)				
	Total Percent	2.6	26.4	20.2	59.2			
Other	(Row Percent)	(37.3)	(35.3)	(27.5)				
	Total Percent	2.4	2.3	1.8	6.5			
Total (%)		22.0	43.7	34.7	100.0	13.562	8	.094

Chi Square Analysis of the Relationship of Various Demographic  
And Person-related Factors to Students' Post-High School  
Graduation Plans to Attend a Two- or Four-year  
College or University and Major in a Food  
Service-related Area

(Expanded Table)

(continued)

		<u>Yes</u>	<u>No</u>	<u>Not Certain</u>	<u>Row Total</u>	<u>Raw Chi Square</u>	<u>df</u>	<u>p</u>
Grade level in school								
	(Row Percent)	(16.4)	(48.7)	(34.9)				
10th Grade	Total Percent	3.2	9.4	6.8	19.4			
	(Row Percent)	(23.6)	(37.6)	(38.5)				
11th Grade	Total Percent	8.7	13.9	14.2	36.7			
	(Row Percent)	(20.0)	(48.6)	(31.4)				
12 Grade	Total Percent	7.4	18.0	11.6	37.0			
	(Row Percent)	(42.9)	(28.6)	(28.6)				
Adult Student	Total Percent	1.5	1.0	1.0	3.6			
	(Row Percent)	(26.9)	(38.5)	(34.6)				
Other	Total Percent	0.9	1.3	1.1	3.3			
Total (%)		21.7	43.6	34.7	100.0	17.732	8	.023*
Paid employment in a food service- related job								
	(Row Percent)	(26.1)	(40.8)	(33.0)				
Yes	Total Percent	10.2	15.9	12.9	39.0			
	(Row Percent)	(19.0)	(45.2)	(35.8)				
No	Total Percent	11.6	27.6	21.8	61.0			
Total (%)		21.8	43.5	34.7	100.0	5.539	2	.063

Chi Square Analysis of the Relationship of Various Demographic  
And Person-related Factors to Students' Post-High School  
Graduation Plans to Attend a Two- or Four-year  
College or University and Major in a Food  
Service-related Area

(Expanded Table)

(continued)

		<u>Yes</u>	<u>No</u>	<u>Not Certain</u>	<u>Row Total</u>	<u>Raw Chi Square</u>	<u>df</u>	<u>p</u>
Satisfaction with the decision to enroll in a food service-related course								
Very Satisfied	(Row Percent)	(30.3)	(34.3)	(35.4)				
	Total Percent	14.3	16.2	16.7	47.3			
Satisfied	(Row Percent)	(13.4)	(48.7)	(37.9)				
	Total Percent	5.7	20.8	16.2	42.8			
Slightly Satisfied	(Row Percent)	(15.0)	(66.7)	(18.3)				
	Total Percent	1.1	5.1	1.4	7.7			
Not Satisfied	(Row Percent)	(27.8)	(61.1)	(11.1)				
	Total Percent	0.6	1.4	0.3	2.3			
Total (%)		21.8	43.6	34.6	100.0	50.919	6	.000***
Satisfaction with school in general								
Very Satisfied	(Row Percent)	(39.1)	(33.0)	(27.8)				
	Total Percent	5.8	4.9	4.1	14.7			
Satisfied	(Row Percent)	(19.2)	(41.7)	(39.1)				
	Total Percent	10.6	23.0	21.6	55.2			
Slightly Satisfied	(Row Percent)	(19.2)	(47.4)	(33.3)				
	Total Percent	3.8	9.5	6.6	19.9			
Not Satisfied	(Row Percent)	(15.2)	(60.8)	(24.1)				
	Total Percent	1.5	6.1	2.4	10.1			
Total (%)		21.7	43.5	34.8	100.0	35.120	6	.000***

Chi Square Analysis of the Relationship of Various Demographic  
And Person-related Factors to Students' Post-High School  
Graduation Plans to Attend a Two- or Four-year  
College or University and Major in a Food  
Service-related Area

(Expanded Table)

(continued)

		<u>Yes</u>	<u>No</u>	<u>Not Certain</u>	<u>Row Total</u>	<u>Raw Chi Square</u>	<u>df</u>	<u>p</u>
Grade level of decision to enroll in a food service- related course								
1st-9th Grade	(Row Percent)	(25.0)	(44.3)	(30.7)				
	Total Percent	4.5	7.9	5.5	17.9			
10th Grade	(Row Percent)	(26.2)	(37.6)	(36.2)				
	Total Percent	7.7	11.0	10.6	29.3			
11th Grade	(Row Percent)	(18.4)	(42.0)	(39.6)				
	Total Percent	5.8	13.2	12.4	31.4			
12th Grade	(Row Percent)	(12.7)	(57.7)	(29.6)				
	Total Percent	2.3	10.5	5.4	18.2			
After High School Graduation	(Row Percent)	(52.0)	(28.0)	(20.0)				
	Total Percent	1.7	0.9	0.6	3.2			
Total (%)		21.9	43.5	34.6	100.0	34.941	8	.000***

\* =  $p < .05$   
 \*\* =  $p < .01$   
 \*\*\* =  $p < .001$

APPENDIX X

CHI SQUARE ANALYSIS OF THE RELATIONSHIP OF VARIOUS DEMOGRAPHIC-  
AND PERSON-RELATED FACTORS TO STUDENTS' POST-HIGH SCHOOL  
GRADUATION PLANS TO SEEK A FOOD SERVICE-RELATED  
JOB AND TO MAJOR IN A FOOD SERVICE-RELATED  
AREA AT A TWO- OR FOUR-YEAR  
COLLEGE OR UNIVERSITY

(EXPANDED TABLE)



Chi Square Analysis of the Relationship of Various Demographic-  
And Person-related Factors to Students' Post-High School  
Graduation Plans to Seek a Food Service-related  
Job and to Major in a Food Service-related  
Area at a Two- or Four-year  
College or University

(Expanded Table)

		Food Service <u>Job</u>	Food Service <u>Major</u>	Row Total	Raw Chi Square	df	p
Gender							
Male	(Row Percent)	(72.9)	(27.1)				
	Total Percent	40.3	14.9	55.2			
Female	(Row Percent)	(82.6)	(17.4)				
	Total Percent	37.0	7.7	44.8			
Total (%)		77.3	22.7	100.0	4.054	2	.044*
Head of Household							
Single Female	(Row Percent)	(81.5)	(18.5)				
	Total Percent	21.4	4.9	26.3			
Single Male	(Row Percent)	(70.4)	(29.6)				
	Total Percent	6.2	2.6	8.8			
Male & Female	(Row Percent)	(76.5)	(23.5)				
	Total Percent	49.7	15.3	64.9			
Total (%)		77.3	22.7	100.0	1.617	2	.4454
Racial or ethnic group							
Black	(Row Percent)	(82.1)	(17.9)				
	Total Percent	10.4	2.3	12.6			
Asian/ Pacific Islander	(Row Percent)	(80.0)	20.0				
	Total Percent	3.9	1.0				
Hispanic	(Row Percent)	(89.1)	(10.9)				
	Total Percent	15.9	1.9	17.8			
White	(Row Percent)	(75.8)	(24.2)				
	Total Percent	44.7	14.2	58.9			
Other	(Row Percent)	(44.4)	(55.6)				
	Total Percent	2.6	3.2	5.8			
Total (%)		77.3	22.7	100.0	16.244	4	.003**

Chi Square Analysis of the Relationship of Various Demographic-  
And Person-related Factors to Students' Post-High School  
Graduation Plans to Seek a Food Service-related  
Job and to Major in a Food Service-related  
Area at a Two- or Four-year  
College or University

(Expanded Table)

(continued)

		Food Service <u>Job</u>	Food Service <u>Major</u>	Row Total	Raw Chi Square	df	p
Grade level in school							
10th Grade	(Row Percent)	(77.3)	(22.7)				
	Total Percent	11.0	3.2	14.3			
11th Grade	(Row Percent)	(77.3)	(22.7)				
	Total Percent	27.6	8.1	35.7			
12th Grade	(Row Percent)	(72.7)	(27.3)				
	Total Percent	26.0	9.7	35.7			
Adult Student	(Row Percent)	(94.3)	(5.7)				
	Total Percent	10.7	0.6	11.4			
Other	(Row Percent)	(66.7)	(33.3)				
	Total Percent	1.9	1.0	2.9			
Total (%)		77.3	22.7	100.0	7.639	4	.106
Paid employment in a food service-related job							
Yes	(Row Percent)	(70.1)	(29.9)				
	Total Percent	33.3	14.2	47.5			
No	(Row Percent)	(84.0)	(16.0)				
	Total Percent	44.0	8.4	52.5			
Total (%)		77.3	22.7	100.0	8.477	1	.004**

Chi Square Analysis of the Relationship of Various Demographic-  
And Person-related Factors to Students' Post-High School  
Graduation Plans to Seek a Food Service-related  
Job and to Major in a Food Service-related  
Area at a Two- or Four-year  
College or University

(Expanded Table)

(continued)

		Food Service <u>Job</u>	Food Service <u>Major</u>	Row Total	Raw Chi Square	df	p
Satisfaction with the de- cision to enroll in a food service-related course							
Very Satisfied	(Row Percent)	(72.4)	(27.6)				
	Total Percent	46.6	17.8	64.4			
Satisfied	(Row Percent)	(87.1)	(12.9)				
	Total Percent	26.2	3.9	30.1			
Slightly Satisfied	(Row Percent)	(83.3)	(16.7)				
	Total Percent	3.2	0.6	3.8			
Not Satisfied	(Row Percent)	(80.0)	(20.0)				
	Total Percent	1.3	0.3	1.6			
Total (%)		77.3	22.7	100.0	8.133	3	.043*
Satisfaction with school in general							
Very Satisfied	(Row Percent)	(73.5)	(26.5)				
	Total Percent	16.4	5.9	22.3			
Satisfied	(Row Percent)	(78.1)	(21.9)				
	Total Percent	39.7	11.1	50.8			
Slightly Satisfied	(Row Percent)	(75.9)	(24.1)				
	Total Percent	13.4	4.3	17.7			
Not Satisfied	(Row Percent)	(82.1)	(17.9)				
	Total Percent	7.5	1.6	9.2			
Total (%)		77.0	23.0	100.0	1.016	3	.797

Chi Square Analysis of the Relationship of Various Demographic-  
And Person-related Factors to Students' Post-High School  
Graduation Plans to Seek a Food Service-related  
Job and to Major in a Food Service-related  
Area at a Two- or Four-year  
College or University

(Expanded Table)

(continued)

		Food Service <u>Job</u>	Food Service <u>Major</u>	Row Total	Raw Chi Square	df	p
Grade level of decision to enroll in a food service-related course							
1st-9th Grade	(Row Percent)	(67.3)	(32.7)				
	Total Percent	11.4	5.6				
10th Grade	(Row Percent)	(74.4)	(25.6)				
	Total Percent	20.9	7.2	28.1			
11th Grade	(Row Percent)	(75.0)	(25.0)				
	Total Percent	21.6	7.2	28.8			
12th Grade	(Row Percent)	(83.0)	(17.0)				
	Total Percent	12.7	2.6	15.4			
After High School Graduation	(Row Percent)	(97.0)	(3.0)				
	Total Percent	10.5	0.3	10.8			
Total (%)		77.1	22.9	100.0	11.702	4	.020*

\* =  $p < .05$

\*\* =  $p < .01$

\*\*\* =  $p < .001$

APPENDIX Y

CHI SQUARE ANALYSIS OF THE RELATIONSHIP OF SATISFACTION WITH  
SCHOOL IN GENERAL BY SATISFACTION OF STUDENT WITH  
DECISION TO ENROLL IN THIS COURSE

(EXPANDED TABLE)

Chi Square Analysis of the Relationship of Satisfaction with  
School in General by Satisfaction of Student with  
Decision to Enroll in This Course

(Expanded Table)

		Very	Slightly	Not			Raw		
		Satis-	Satis-	Satis-	Satis-	Row	Chi		
		<u>fied</u>	<u>fied</u>	<u>fied</u>	<u>fied</u>	<u>Total</u>	<u>Square</u>	<u>df</u>	<u>p</u>
Satisfaction with school in general									
Very	(Row Percent)	(20.0)	(8.0)	(1.4)	(13.6)				
Satisfied	Total Percent	9.3	3.6	0.1	0.3	13.3			
Satisfied	(Row Percent)	(53.2)	(57.2)	(40.3)	(40.9)				
	Total Percent	24.7	25.8	2.7	0.8	54.0			
Slightly	(Row Percent)	(19.2)	(22.7)	(33.3)	(9.1)				
Satisfied	Total Percent	9.0	10.2	2.2	0.2	21.5			
Not	(Row Percent)	(7.5)	(11.8)	(25.0)	(36.4)				
Satisfied	Total Percent	3.5	5.3	1.7	0.7	11.2			
Total (%)		46.5	44.8	6.6	2.0	100.0	78.058	9	.000***

\*\*\* =  $p < .001$

APPENDIX Z

CHI SQUARE ANALYSIS OF THE TEACHERS' AND STUDENTS'  
PERCEPTIONS OF THE SINGLE MOST IMPORTANT  
REASON STUDENTS PLAN TO NOT ATTEND  
COLLEGE

(EXPANDED TABLE)

Chi Square Analysis of the Teachers' and Students'  
Perceptions of the Single Most Important  
Reason Students Plan to Not Attend  
College

(Expanded Table)

	<u>Teacher</u>	<u>Student</u>	<u>Row Total</u>	<u>Raw Chi Square</u>	<u>df</u>	<u>p</u>
Desire no more formal education						
(Column Percent)	(50.5)	(22.2)				
Total Percent	5.2	19.9	25.1			
Have not completed college entrance requirements						
(Column Percent)	(24.3)	(17.6)				
Total Percent	2.5	15.8	18.3			
Do not have high enough grade point average						
(Column Percent)	(9.5)	(8.9)				
Total Percent	1.0	7.9	8.9			
Do not have enough money						
(Column Percent)	(1.4)	(15.4)				
Total Percent	0.1	13.8	13.9			
Other reasons						
(Column Percent)	(14.9)	(35.9)				
Total Percent	1.5	32.2	33.8			
Column Total	10.3	89.7	100.0	40.160	4	.000***

\*\*\* =  $p < .001$



APPENDIX AA

CHI SQUARE ANALYSIS OF THE TEACHERS' AND STUDENTS'  
PERCEPTIONS OF THE SINGLE MOST IMPORTANT  
REASON STUDENTS ENROLL IN  
THIS COURSE

(EXPANDED TABLE)

Chi Square Analysis of the Teachers' and Students'  
Perceptions of the Single Most Important  
Reason Students Enroll in  
This Course

(Expanded Table)

	<u>Teacher</u>	<u>Student</u>	<u>Row Total</u>	<u>Raw Chi Square</u>	<u>df</u>	<u>p</u>
Learn the job skills so student can get a job						
	(Column Percent)	(73.3)	(35.7)			
	Total Percent	4.8	33.4	38.1		
Learn job skills so student can earn money while going to college						
	(Column Percent)	(9.3)	(26.6)			
	Total Percent	0.6	24.9	25.5		
Considered to be an easy way to complete high school graduation requirements						
	(Column Percent)	(10.7)	(11.4)			
	Total Percent	0.7	10.7	11.4		
None of the stated responses						
	(Column Percent)	(6.7)	(26.3)			
	Total Percent	0.4	24.6	25.0		
Column Total:	6.5	93.5	100.0	45.129	3	.000***

\*\*\* =  $p < .001$

APPENDIX BB

PROPORTIONS TEST ANALYSIS FOR SIGNIFICANCE OF  
DIFFERENCES BETWEEN TEACHERS' AND  
STUDENTS' PERCEPTIONS OF  
STUDENT'S POST-HIGH  
SCHOOL GRADUATION  
PLANS

Proportions Test Analysis for Significance of  
Differences Between Teachers' and  
Students' Perceptions of  
Students' Post-High  
School Graduation  
Plans

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	<u>P-1</u>	<u>P-2</u>	<u>Difference</u>	<u>z-score</u>	<u>p</u>
Students' intentions to seek A food service-related job	.318	.370	-.052	-.882	ns <sup>a</sup>
Students' intentions to attend college and major in a food service-related area	.218	-.095	.123	3.324	.01*
Students' would attend college and major in a food service- related area if obstacles to enrollment were removed	.233	.219	.143	.281	ns <sup>a</sup>
Students' intentions to enroll in another high school food service-related course	.335	.320	-.015	.273	ns <sup>a</sup>

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\* =  $p < .05$   
ns<sup>a</sup> = not significant