Abstract

HARRIS, MICHAEL LEE. The Types of Problems Encountered by Small Business Owners that Receive Counseling from Small Business Centers and the Relationship Between these Problems and Selected Business Characteristics: A Regional Analysis. (Under the direction of George Vaughan and Tony O’Driscoll)

The purpose of this study was to determine the types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and the relationship between these problems and selected business characteristics. The three independent variables were industry sector (retail or service), business development status (startup or operating), and owner’s gender (male or female). The type of problems encountered by small business owners was the dependent variable. Based on prior research by Ansoff (1965) and Chrisman and Leslie (1989), the classification system used to categorize business problems included administrative, operating, and strategic problems. The study was based on a survey research design and Pearson’s chi-square and lambda tests were used to indicate significance between variables and strength of association. The data were taken from the administrative records of eight Small Business Centers in eastern North Carolina and featured a random sample of 300 small businesses.

The findings of the study indicated that the majority of small business owners in the retail and service sectors in eastern North Carolina rely on counseling from Small Business Centers to help them resolve issues that are core to the development of a successful enterprise. The most common type of problems facing these business owners was strategic in nature (54%). The second most common type of problems experienced by these business owners was administrative (33.3%), followed by operating problems (12.7%). The only exception was with firms classified as operating. Administrative problems were more
common in operating firms, regardless of industry sector or gender. In all other combinations of independent variables (retail, service, startup, female-owned, and male-owned), strategic problems were more prevalent.

The types of problems encountered by small business owners in this study varied according to the developmental stage of their businesses, regardless of industry sector or gender. The results of the Pearson’s chi-square and lambda tests supported this conclusion. The only independent variable found to have a significant (p<.001) relationship with the type of problems experienced by small businesses included in the sample was business development status. Lambda indicated that the strength of the association between the type of problems and business development status was worth noting.

While industry sector and owner’s gender by themselves did not show a significant relationship with the type of problems, there was some evidence of significance when the variables were combined, and the significance level was changed to .10. A significant relationship (p<.10) existed between the type of problems and the industry sector and gender of clients that received counseling from Small Business Centers in eastern North Carolina, when controlling for male-owned firms (p<.064) and service firms (p<.053). There was also some evidence of significance between the type of problems and industry sector, business development status, and gender, when controlling for male-owned startup firms (p<.064) and startup retail firms (p<.078). However, lambda showed no strength in these associations.
THE TYPES OF PROBLEMS ENCOUNTERED BY SMALL BUSINESS OWNERS THAT RECEIVE COUNSELING FROM SMALL BUSINESS CENTERS AND THE RELATIONSHIP BETWEEN THESE PROBLEMS AND SELECTED BUSINESS CHARACTERISTICS: A REGIONAL ANALYSIS

by

MICHAEL LEE HARRIS

A dissertation presented to the Graduate Faculty of North Carolina State University in partial fulfillment of the requirements for the Degree of Doctor of Education

DEPARTMENT OF ADULT AND COMMUNITY COLLEGE EDUCATION

Raleigh

2004

APPROVED BY:

George Vaughan          Tony O’Driscoll
Co-Chair of Advisory Committee   Co-Chair of Advisory Committee

Virginia Lee          Ronald Shearon
Dedication

This research project is dedicated to my children. Fatherhood is my greatest achievement in life and the role that best defines who I am. It is my hope that they understand the importance of lifelong learning and use their talents to follow their dreams.
Biography

Michael Lee Harris was born on June 19, 1970 to the parents of Jack and Wanda Harris. In 1992, Michael graduated from East Carolina University with a Bachelor of Science in Business Administration, with a concentration in Marketing Management. The following year, Michael graduated from East Carolina University with a Master’s degree in Business Administration.

In 1995, Michael began working for the Department of English at East Carolina University. In 1997, he accepted a Lecturer’s position in the Department of Management at East Carolina University. From 1998 to 2000, Michael served as the International Student Advisor, while maintaining his role as Lecturer in the Department of Management. In 2000, he was chosen as the director of the Small Business Institute in the College of Business. Beginning the fall semester of 2004, Michael will hold the title of Assistant Professor in the Department of Management and Director of the Small Business Institute at East Carolina University. In his new role, Michael will have responsibilities in the areas of teaching, research, and service. He is particularly interested in research opportunities in the areas of entrepreneurship and small business management, educational leadership, and organizational learning.

In 1995, Michael married April Marie Pace of Wilmington, North Carolina. Their first child, Joshua Michael, was born on February 1, 2001. They are expecting their second child, Caleb Michael, in early September 2004. Michael’s greatest source of pride and sense of achievement comes from his family.
Acknowledgements

It is my belief that a dissertation is not an individual assignment, but rather a team project. I have been blessed with a team of supporters that deserve acknowledgement. My gratefulness cannot be expressed in mere words.

A dedicated dissertation committee is a requirement for success. I want to extend my gratitude to Drs. Virginia Lee, Ronald Shearon, and Craig Newborn. Thank you for your feedback and constant support. I would also like to thank Ms. Deborah Ware for her assistance in helping me better understand statistical applications and how to interpret significant findings.

I am especially grateful to the two members of my committee that provided me with the necessary tools to complete this project. To my chair, Dr. George Vaughan, I want to say thank you for instilling in me the importance of professionalism. You not only provided me with constant guidance and support, and a new appreciation of the writing process, but you also showed me the “right way” to do things. You are a true professional and I will use your lessons to help guide me in my career in higher education. Dr. Tony O’Driscoll, you were a great source of inspiration and strength. You provided constant encouragement and made me really understand the research process. I will always be grateful for your help in mentoring me through this process. You have a gift for providing thoughtful insight and making people believe they can accomplish their goals.

In addition to a supportive committee, I am grateful to the professionals in my life that have served as mentors and role models. I would like to thank Dr. Joe Tomkiewicz for his unwavering belief in my abilities. He has provided me with opportunities that I am forever grateful for. I would also like to thank Beth Eckstein, Marty Hackney, Judith Hunt,
Henry Peel, Ernie Uhr, Jim Westmoreland, and Carolyn Wilburn for their support. These are just a few of the professionals I look up to and admire. I am also grateful to Ms. Gayle Harvey and the directors of the Small Business Centers in eastern North Carolina for their willingness to participate in the project. They are wonderful people who provide an invaluable service to the region.

Finally, and most importantly, I want to thank my family. I am so fortunate to have a loving wife and supportive family. My wife April, above all others, was the driving force in helping me achieve my goals. You are my best friend and most loyal supporter. To my sons, Joshua and Caleb, you provided me with the inspiration to keep going until the task was completed. You offered your unconditional love throughout the process. I want to thank my entire family for always being there for me. Without you all, nothing else really matters. And lastly, I want to thank my Lord and Savior for making this all possible. I am living a dream everyday and I am so thankful.
# TABLE OF CONTENTS

LIST OF TABLES ................................................................................................. viii  

LIST OF FIGURES ............................................................................................... x  

CHAPTER ONE: INTRODUCTION ........................................................................... 1  
  
  Statement of the Problem .............................................................................. 16  
  Purpose of the Study ....................................................................................... 18  
  Research Questions & Hypotheses ................................................................. 24  
  Significance of the Study ............................................................................... 28  
  Limitations of the Study ............................................................................... 30  
  Definition of Terms ....................................................................................... 30  

CHAPTER TWO: REVIEW OF LITERATURE AND CONCEPTUAL  
  FRAMEWORK .................................................................................................. 32  
  
  Conceptual Framework .................................................................................. 34  
  Boone’s Programming Model ......................................................................... 34  
  Classification of Business Problems .............................................................. 36  
  Review of Literature ...................................................................................... 38  
  Community College Mission ........................................................................ 38  
  Economic Development Programs ................................................................. 45  
  Impact of Small Businesses .......................................................................... 51  
  Small Business Assistance Programs .............................................................. 53  
  Common Problems of Small Businesses ......................................................... 55  
  Importance of Small Business Assistance Programs .................................... 59  
  Small Business Assistance Programs in North Carolina .............................. 63  
  Summary ........................................................................................................ 66  

CHAPTER THREE: RESEARCH METHODOLOGY .............................................. 68  
  
  Research Design ............................................................................................ 68  
  Instrumentation .............................................................................................. 69  
  Validity and Reliability .................................................................................. 69  
  Population ....................................................................................................... 71  
  Data Collection ............................................................................................... 72  
  Statistical Analysis ......................................................................................... 74
CHAPTER FOUR: RESULTS AND FINDINGS………………………………77

Profile of Respondents........................................................................77
Responses to Research Questions and Testing of Hypotheses ..........80
Response to Research Question 1......................................................81
Response to Research Question 2.......................................................82
Response to Research Question 3.......................................................83
Response to Research Question 4.......................................................84
Response to Research Question 5.......................................................85
Response to Research Question 6.......................................................87
Response to Research Question 7.......................................................88
Response to Research Question 8 and Hypothesis 1......................92
Response to Research Question 9 and Hypothesis 2......................93
Response to Research Question 10 and Hypothesis 3....................94
Response to Research Question 11 and Hypotheses 4 and 5.........95
Response to Research Question 12 and Hypotheses 6 and 7.........98
Response to Research Question 13 and Hypotheses 8 and 9.........102
Response to Research Question 14 and Hypotheses 10, 11, and 12.105
Summary of Finding........................................................................111

CHAPTER FIVE: CONCLUSIONS, IMPLICATIONS AND
RECOMMENDATIONS........................................................................120

Conclusions...................................................................................121
Implications...................................................................................129
Recommendations..........................................................................132
Future Research.............................................................................136

REFERENCES..................................................................................139

APPENDICES....................................................................................161

Appendix A: Request for Counseling Form...............................161
Appendix B: Cover Letter and Project Summary.......................163
Appendix C: Panel of Experts.......................................................167
LIST OF TABLES

Table 1: Study Variables…………………………………………………………...19
Table 2: Boone’s Programming Model…………………………………………….35
Table 3: Problem Classification Categories………………………………………..71
Table 4: General Guidelines for Interpreting Lambda …………………………….76
Table 5: Industry Sector Breakdown …………………………………………….77
Table 6: Business Development Status Breakdown ………………………………78
Table 7: Gender Breakdown……………………………………………………….78
Table 8: Industry Sector and Business Development Status Breakdown ………….78
Table 9: Industry Sector and Gender Breakdown …………………………………79
Table 10: Business Development Status and Gender Breakdown …………………79
Table 11: Industry Sector, Business Development Status, and Gender Breakdown.79
Table 12: Business Problems Breakdown …………………………………………80
Table 13: Problems & Industry Sector Crosstabulation …………………………...81
Table 14: Problems and Business Development Status Crosstabulation…………...82
Table 15: Problems and Gender Crosstabulation…………………………………..83
Table 16: Problems & Industry Sector and
       Business Development Status Crosstabulation ……………………84
Table 17: Problems & Industry Sector and Gender Crosstabulation …………..86
Table 18: Problems & Business Development Status and Gender Crosstabulation..87
Table 19: Problems & Industry Sector, Business Development Status
       and Gender Crosstabulation ……………………………………………….89
Table 20: Pearson’s Chi-square and Lambda Results for Research Question 8……92
Table 21: Pearson’s Chi-square and Lambda Results for Research Question 9……93
LIST OF FIGURES

Figure 1: Classification of Business Problems……………………………………. 36
Chapter One

Introduction

The community college’s mission, by definition and practice, is the “most important element” of its existence (Bogart, 1994, p. 62). A review of the literature indicates that five major functions emanate from the mission of today’s comprehension community college (Myran, 1969; Breneman & Nelson, 1981; Cross, 1985; Tillery & Deegan, 1985; Cohen & Brawer, 1996). These functions include: (1) collegiate-academic transfer, (2) career education, (3) general education, (4) remedial education, and (5) community services.

Community service is the general category used to represent the outreach function of a community college. Economic development activities are typically positioned within the community services function at most community colleges (Myran, 1969; Harlacher, 1969; Katsinas & Lacey, 1989; Warford & Flynn, 2000). A number of researchers have incorporated an economic development component into their definition of the community service function of a community college (Myran, 1969; Raines, 1971; Gold & Charner, 1986; Commission on the Future of Community Colleges, 1988). Because of their interrelatedness, the terms economic development, community development, community services, and workforce development are often used interchangeably (Myran, 1969; Raines, 1971; Cohen & Brawer, 1996; Grubb, Badway, Bell, Bragg & Russman, 1997; Forde, 2002). As suggested by Katsinas and Lacey (1989), “Economic development in its essence is community development [authors’ italics]” (p. 68).

Various research suggests that an economic development component has become a legitimate part of the community college’s service mission (President’s Commission on
Higher Education, 1948; Harlacher, 1969; Myran, 1969; Gleazer, 1980; Commission on the Future of Community Colleges, 1988; Fairweather, 1988; Katsinas & Lacey, 1989; Long, 1989; Parnell, 1990; Warford & Flynn, 2000). A study by Day (1985) for the American Association of Community and Junior Colleges found that approximately 80% of all respondents reported some level of involvement in local and state economic development activities. The results of this study also indicate that almost 75% of respondents offer specialized training programs for local companies. In 1986, the American Association of State Colleges and Universities produced a report that focused on the role of higher education in economic development. In that publication, entitled *Issues in Higher Education and Economic Development*, the authors concluded that higher education is a significant resource in economic development (*Issues in Higher Education and Economic Development*, 1986).

A more current study by Dougherty and Bakia (1999) found that over 90% of community colleges participate in contract training and approximately one-third have programs aimed at assisting small business owners (pp. 8, 77). In a recent article in the *Community College Journal*, Forde (2002) suggests that community colleges, above all other agencies, are at the center of the economic and workforce development universe.

The creation of economic development programs by community colleges represents a “significant event” in the evolution of economic development activities (Long, 1989, p. 169). According to Long (1989) and Katsinas and Lacey (1989), economic development programs offered by community colleges include activities in the areas of workforce development, both general and customized, technology transfer, small business assistance, and business partnerships. Additional research by Parnell (1990), Zeiss (1994), Grubb, Badway, Bell, Bragg, and Russman (1997), Dougherty and Bakia (1999), Warford and Flynn (2000), and
Forde (2002) found similar results. One such similarity is that community colleges have developed service programs aimed specifically at meeting the needs of small business owners. These researchers all agreed that small business assistance programs are an important component of a community college’s economic development activities. Entrepreneurs often turn to community colleges for information and answers before making a commitment to start a new business venture (Warford & Flynn, 2000).

Small business assistance programs are important because of the vital role small businesses play in the national economy. Some of the benefits associated with small businesses include job growth, technological innovation, economic diversity, increased local spending, and greater regional loyalty (Luke, Ventriss, Reed & Reed, 1988). Since the 1970s, research has recognized the importance of small businesses in economic development, especially in the area of job growth. In a study of 5.6 million businesses between 1969 and 1976, Birch (1979) found that 80% of new jobs were created by businesses with 100 or fewer employees, with two-thirds of these jobs created by businesses with 20 or fewer employees. Similarly, Edmunds (1980) found that 94% of job creation between 1970 and 1977 came from small businesses. A 1985 study by Touche Ross and Company found that community leaders in cities with a population of 30,000 residents or greater consider small businesses to be more important than large companies in the overall economic health of the region.

More recent research on small businesses by the Small Business Administration (SBA) Office of Advocacy shows that more than 99% of all current employers are classified as small businesses and they employ 51% of private-sector workers (SBA Office of Advocacy, May 2002). The Small Business Administration defines a small business as one with fewer than 500 employees (SBA Office of Advocacy, May 2002). However,
approximately 90% of small businesses employ less than 20 people (Perry, 2001). The Office of Advocacy estimates that approximately 22.4 million small businesses existed in 2001. In addition to the number of workers currently employed in small firms, approximately two-thirds to three-quarters of new jobs are expected to come from small businesses (SBA Office of Advocacy, May 2002). From 1998 to 1999, small businesses accounted for 67.4% of new job creation, or a total of 1.74 million new jobs. Prior to that period, the largest employment increase between 1990 and 1995 was experienced by businesses with one to four employees (Acs, Tarpley & Phillips, 1998).

In addition to their national prominence, small businesses also form the backbone of the North Carolina economy. According to the Small Business and Technology Development Center, 98% of businesses in the state are classified as small businesses (Small Business and Technology Development Center, 2001). Approximately 77% of these businesses employ less than ten employees and half have fewer than five employees. There were a total of 157,199 small businesses in North Carolina in 1998, employing 1,523,916 workers. In addition, 48% of all new jobs in North Carolina that year were created by small businesses. By 2001, the number of small businesses in North Carolina rose to 370,000, with 62% of these being sole proprietorships with no employees (Small Business and Technology Development Center, 2001). A recent report by the North Carolina Rural Economic Center, entitled Saying “Yes” to Small Business, indicates that more than two out of three new jobs in the state are created by businesses with fewer than 100 employees (NC Rural Economic Center, 2001). These jobs generate $14.5 billion in annual wages. The importance of small businesses is even more profound in the 85 rural counties in North Carolina. In these 85 counties, approximately 70% of all businesses have fewer than 10 employees.
While the statistics demonstrate the importance of small businesses in the national economy, as well as the economy of North Carolina, these firms are faced with serious challenges. Research points out that small businesses are often younger than larger businesses and are more likely to be located in rural areas with less access to resources (Headd, 2000). Small businesses also have a higher percentage of workers with less than a high school diploma and ones whose highest degree is the high school diploma than large companies. These challenges can create a strategic disadvantage by limiting the ability of small firms to attract qualified workers. According to the SBA Office of Advocacy, approximately 66% of small businesses survive their first two years of existence. However, the survival rate drops to only 39.5% after six years of operation. Research by Dawitt (1983) found that 81% of all small businesses fail after ten years. In 2001 alone, over 585,000 small businesses in the United States ceased operations (SBA Office of Advocacy, May 2002).

While all businesses, both large and small, are faced with critical issues, small businesses are especially susceptible to closure because owners often lack all the necessary skills and resources to ensure long term survival. Vesper (1990) suggests that entrepreneurs must possess capabilities in the areas of planning, product development, marketing, personnel management, general management, and finance and marketing. Prior research has offered mixed results as to the primary problems faced by small business owners. According to some research, managerial incompetence and the inability of entrepreneurs to obtain adequate financial resources are two of the most significant challenges facing small businesses (Dun & Bradstreet, 1981; Roitman, Emshoff & Robinson, 1982; Robinson, 1982; Bruno, Liedecker & Harder, 1987; Luke, Ventriss, Reed & Reed, 1988; Zimmerer & Scarborough, 1998; Fry, Stoner & Weinzimmer, 1999). Other research has indicated that
small business assistance programs best serve clients in the areas of marketing (Nahavandi & Chesteen, 1988; Kuratko & Hodgetts, 1989) or business operations (Hoy, 1982; Khan & Rocha, 1982; Solomon & Weaver, 1983; Chrisman & Leslie, 1989; Chrisman & McMullan, 2000).

Chrisman and Leslie (1989) argue that small business owners benefit more from administrative and operating assistance than from the strategic assistance provided by small business assistance programs. Typical administrative problems faced by small businesses include accounting, personnel, and general management issues. Operating problems are more commonly found in the functional areas of a business, such as marketing, production, operations, and inventory control (Chrisman & Leslie, p. 42). According to Chrisman and Leslie (1989), counseling from small business assistance programs helps clients identify methods to reduce costs and improve efficiency more than increase sales (p. 47). The creation of cost-cutting measures takes considerable less time and effort and these measures often show immediate results. Chrisman and Leslie, however, did not disregard the importance of strategic assistance. The challenge is finding small business assistance programs with personnel that possess the necessary industry knowledge and experience to offer such assistance. They acknowledge that strategic issues are often at the root of many business failures.

Effective strategic planning requires that owners possess both managerial and technical skills to examine their businesses’ internal and external environment. In order for a small business to acquire a business loan or attract potential investors, the owner must develop an organized business plan. Many small business owners are very competent in their chosen profession, but lack the managerial or technical skills to create an effective plan
Most financial institutions are wary of funding new ventures. This problem is compounded when the owner lacks adequate planning for the operations of the business. This situation, according to Roitman, Emshoff, and Robinson (1982), creates an environment that prohibits small businesses from bringing their innovative ideas to fruition. Often the managerial and technical expertise is the “missing link” that ensures small businesses attract enough startup capital to get their products or service into the marketplace (Luke, Ventriss, Reed & Reed, 1988, p. 82). When owners engage in systematic planning, they are able to provide a clearer direction for the business and generally make better decisions (Schwenk & Shrader, 1993; Fry, Stoner & Weinzimmer, 1999). Research by Rue and Ibrahim (1998) found that sophisticated strategic planning often allows small businesses to experience higher growth rates.

The value of using outside sources for managerial, technical, and strategic knowledge has been supported by research since the 1960s. Studies by Krentzman and Samaras (1960), Buchele (1965), Gilmore (1971), and Still (1974) have emphasized the value of using outside sources to provide professional counseling for small businesses. However, the use of outside sources to provided specialized assistance has risen over the past two decades as the business environment has become more competitive and complex (Holtz, 1985; Fry, Stoner & Weinzimmer, 1999). More recent research by Robinson (1982), Franklin and Goodwin (1983), Roitman, Emshoff and Robinson (1984), Bracker and Pearson (1985), Chrisman, Nelson, Hoy, and Robinson (1985), Luke, Ventriss, Reed, and Reed (1988), Chrisman and Leslie (1989), Terpstra and Olson (1993), Carter, Gartner, and Reynolds (1996), Chrisman (1999), Fry, Stoner, Weinzimmer (1999), and Chrisman and McMullan (2000) has demonstrated the importance of small business assistance programs. As pointed out by
Krueger and Carsrud (1993), business counselors often assume important roles for their clients, such as facilitator, trainer, and mentor.

Chrisman (1999) examined the use of the counseling service offered by Small Business Development Centers by entrepreneurs with the intentions of starting a new business venture. The results indicate that counseling offered by the staff at Small Business Development Centers positively influences the likelihood that individuals with entrepreneurial intentions actually start a business. Furthermore, this research suggests that entrepreneurs that draw upon outside sources of knowledge have a “start-up advantage” over ones that do not use these resources (Chrisman, p. 9). The findings of this study indicate that 60% to 78% of entrepreneurs that use the counseling service provided by Small Business Development Centers actually started a business, compared to 48% of the general population that started a new venture without any assistance (Chrisman, p. 10).

Chrisman (1999) believes that two advantages are achieved when business owners rely on help from outside sources. For one, the assistance provided by these programs better prepares the entrepreneur for the challenges of opening a new business. Secondly, it signals that a business owner is committed to the venture, which often leads to a better understanding of the relationship between proper planning and business success (Chrisman, 1999). These advantages are due to an increase in the business owner’s tacit knowledge resulting from interaction with critical knowledge resources within the local community. In the business environment, tacit knowledge is often referred to as the general know-how needed to effectively operate a business (Chrisman, 1999). Experience is a key factor that leads to a greater level of tacit knowledge. Chrisman (1999) points out that outside sources can
provide business owners with a “sounding board” for new ideas and an extensive network of contacts that offer complimentary skills (p. 5).

Research by Chrisman and McMullan (2000) supports Chrisman’s findings in his 1999 study. This second project focused more on the long-term advantages gained by businesses that use assistance programs during their start-up period. Based on a sample of 169 clients that received counseling from Small Business Development Centers, Chrisman and McMullan found that the survival rate for clients receiving counseling was higher than the national average. The positive growth rates of these businesses, combined with their level of satisfaction with the counseling, provides further evidence that counseling from small business assistance programs can lead to a competitive advantage. Chrisman and McMullan (2000) concluded that outside assistance has a positive influence on a business’ long-term ability to “survive, grow, and innovate” (p. 51).

North Carolina is fortunate to have a number of colleges and universities that are dedicated to serving the needs of small business owners. The University of North Carolina System consists of 16 member institutions, ranging from research universities to schools with a regional focus. The North Carolina Community College System is made up of 58 institutions that serve all 100 counties within the state. Both systems have specialized service programs that provide confidential counseling to nascent entrepreneurs and established business owners.

The Small Business and Technology Development Centers in North Carolina are based on a cooperative effort between the Small Business Administration and the University of North Carolina System (Small Business and Technology Development Center, March 10, 2003, www.sbtdc.org). First developed in North Carolina in 1984, there are currently 17
Small Business and Technology Development Centers located throughout the state, and each center is directly associated with a university. The Small Business and Technology Development Center in Greenville is associated with East Carolina University and is responsible for serving the eastern region of North Carolina. These centers offer services aimed directly at small businesses within their geographical region. The services offered by Small Business and Technology Development Centers include confidential business counseling, government procurement and technology development programs, research services, and educational workshops and seminars on various business topics (Small Business and Technology Development Center, March 10, 2003, www.sbtde.org).

In addition to its university system, North Carolina has used its community college system as a strong economic development tool (Campbell & Faircloth, 1982; Scott, 1987; Katsinas & Lacey, 1989; Lancaster, 1998; Dougherty & Bakia, 1999). A 1988 report produced by MDC, Inc., a private nonprofit research organization, argued that the North Carolina Community College System is the state’s “economic bridge” to the twenty-first century (MDC, Inc., 1988, p. 3). In a later publication, Grubb, Badway, Bell, Bragg and Russman (1997) praised the North Carolina system for its adoption of a service-oriented culture that encourages entrepreneurial market-oriented activities.

The primary community college program in North Carolina aimed specifically at serving the needs of small business owners is the Small Business Center. Small Business Centers were first established on eight community college campuses in 1984 (Economic and Workforce Development Annual Report, 2001). By 1994, all 58 community colleges had established a Small Business Center. This network of centers represents one of the largest state sponsored small business assistance systems of its type in country. The mission of the
Small Business Center Network is to increase the “success rate and the number of viable small businesses in North Carolina by providing quality, readily accessible assistance to prospective and existing small business owners and their employees” (North Carolina Community College System, February 1, 2003, www.ncccs.cc.nc.us).

To accomplish this mission, each Small Business Center offers three services to small business owners. They sponsor workshops and seminars on various business topics, such as how to write a business plan or effectively market your business. These centers also provide free confidential business counseling for existing business owners and emerging entrepreneurs. The third service provided by a Small Business Center is access to a business resource center. The focus of this study was on the confidential counseling service offered at Small Business Centers. Approximately 58,000 clients received confidential counseling from Small Business Centers from 1995 to 2000 (North Carolina Community College System, 2000a, p. 44). That equates to an average of 11,600 businesses served collectively per year by these centers.

The design of Small Business Centers is similar to that of Small Business and Technology Development Centers. Both programs were created in response to a growing need to offer managerial and technical assistance to small business owners (Luke, Ventriss, Reed & Reed, 1988; Dougherty & Bakia, 1999). There are, however, two critical differences in these programs. For one, Small Business Centers have been established at each of the 58 community colleges in the North Carolina system, allowing these centers to serve a much smaller region than Small Business and Technology Development Centers. A second important difference is how these programs are funded. Whereas Small Business and Technology Development Centers are funded by federal dollars accompanied by matching
state funds, Small Business Centers are completely funded by a continuous grant from the North Carolina General Assembly (Small Business Center Network Program Guidelines, 1998). This funding arrangement allows for better coordination between the state economic development plan and the services offered by Small Business Centers. Currently, each center receives $65,000 from the General Assembly to be used for the director’s salary, instructional and contractual services, marketing, and general administrative costs. Interestingly, each Small Business Center receives the same level of funding, regardless of its level of activity or size of its local population.

In order to maximize the effectiveness of the services offered by Small Business Centers, the directors of these centers must be aware of the most critical needs within their region. Once the needs have been identified, the counseling process can be tailored in a manner that best assists each client. This is important because of the diversity associated with small businesses. As noted by Greenfield (1987), small businesses are structurally, economically, and statistically different than their larger counterparts and need programs that can combine specialization with flexibility and affordability. Because of these requirements, broad economic development programs often do not provide the necessary attention needed by these business owners (Luke, Ventriss, Reed & Reed, 1988). Small business owners typically need individualized attention to help them resolve the issues affecting their organizations. An important component of an effective small business assistance program is its ability to offer specialized counseling at little or no cost (Robinson, 1982; Chrisman & Leslie, 1989; Doughtery & Bakia, 1999; Warford & Flynn, 2000).

In order to be effective, business counselors must understand the dynamics of a small business. Relationships within these organizations tend to be more personal and emotions
often play a role in managerial decisions (Greenfield, 1987). While research has 
demonstrated the effectiveness of outside assistance in solving the problems of small 
businesses, gaining access as an outsider can be a difficult process. Greenfield (1987) warns 
that small businesses are “not miniature large companies,” and should not be treated as such 
(p. 3).

In order to successfully assist small business owners, Greenfield (1987) suggests that 
a business counselor understand probabilities and personalities. Providers of small business 
assistance services must become familiar with the common problems encountered by small 
business owners. This type of knowledge improves the ability of a business counselor to 
quickly identify the problems facing each client and begin working on feasible solutions. In 
addition, the business counselor needs to understand the personalities of small business 
owners. These individuals often assume multiple roles and are emotionally attached to the 
business. An effective business counselor must not only have the ability to diagnose the 
problems of small businesses, but also understand how to communicate with clients in a 
manner that encourages them to actually implement suggested recommendations.

An identifying mark of the community college has been its willingness to develop 
programs based on the most critical needs of its community. Various research has 
emphasized the importance of identifying, assessing, and analyzing needs when developing 
community programs (Lippitt, Watson & Westley, 1958; Knowles, 1970; Tyler, 1971; Houle, 
(1995) suggest that a needs assessment is the foundation for program planning because it 
allows an organization to establish priorities for the allocation of its resources. According to
Queeney (1995), a proper needs assessment guides an adult educator in defining the content, target audience, and optimal delivery method for an educational program.

Boone (1985) developed a programming model to be used in developing programs for adult learners. The programming model developed by Boone is based on three connected subprocesses: (1) planning, (2) design and implementation, and (3) evaluation and accountability. Boone stresses the critical connection between thorough planning and the design, implementation, and evaluation of adult education programs (Boone, 1985). In the planning subprocess, Boone emphasizes that adult educators must interact with learners in the target publics to identify their most critical needs. Boone calls for an “active partnership” between adult educators and the learners in a target public to uncover their true needs (p. 117). Once the expressed needs of a target public have been determined, they are then translated into the design of a program and used to develop implementation strategies (Boone, p. 45). Boone has combined the three subprocesses of his model to provide a “holistic approach” to creating adult programs (p. 64). A community college that is actively involved in economic development must be willing to use a proven programming model to develop successful programs.

While the economic development programs offered by various state and local agencies have worked collectively to create a good business climate in North Carolina, the majority of success has been achieved in the Piedmont area of the state (Maley, 2002). The Triangle and Triad regions of the Piedmont are known nationally for their strong business environment. The eastern and western regions of North Carolina have not experienced the same level of growth and prosperity. State and local agencies must continue to focus their
efforts on developing programs and services aimed specifically at improving the business
environment outside of the Piedmont region (Maley, p. 107).

Eastern North Carolina is currently in the midst of a transformation from the
industrial age to a knowledge economy (Luger & Steward, 2003). Many organizations,
especially small businesses, are experiencing the growing pains associated with the change
from a manufacturing base to a greater reliance on the service and retail sectors (NC
to the North Carolina Department of Commerce, the business failure rate in the eastern
region is above the state average, while the business startup rate in the region is below the
state average (NC Department of Commerce, March 10, 2003,
www.cmedis.commerce.state.nc.us). Both the per capita income rate and the average wage
rate in this region are approximately 13% below the state average. In addition, the
unemployment rate and poverty rate in the region are above the state average. Despite the
existence of 15 institutions of higher learning, only 13.8% of the region’s population has a
college degree (NC Department of Commerce, March 10, 2003,
www.cmedis.commerce.state.nc.us).

Lugar and Steward (2003) argue that a collective effort of all regional stakeholders is
needed to ensure the eastern region of North Carolina successfully completes its
transformation. The effort must be built around a common direction, strict accountability,
and strategic investments to build the necessary infrastructure to improve the region’s
competitiveness (Luger & Steward, p. 49). Small Business Centers play an important role in
this process by providing personalized counseling aimed at helping small business owners
overcome their most critical problems. The business failure rate in eastern North Carolina indicates that many new and young businesses are in dire need of such assistance.

Problem Statement

Small businesses are faced with various obstacles to success. The six year survival rate for small businesses is only 39.5%, and it lowers to less than 20% after ten years (SBA Office of Advocacy, May 2002). However, research has shown that counseling from outside agencies often has a positive affect on the performance of smaller firms (Robinson, 1982; Chrisman, Nelson, Hoy, & Robinson, 1985; Chrisman & Leslie; 1989; Terpstra & Olson, 1993; Chrisman, 1999; Fry, Stoner & Weinzimmer, 1999; Chrisman & McMullan, 2000). Like many other regions in the United States, eastern North Carolina relies heavily on small businesses to provide jobs and economic growth. Creating a success environment for small businesses is needed to help the eastern region complete its transformation from a traditional reliance on agriculture and manufacturing to a greater emphasis on the retail and service sectors (Luger & Steward, 2003).

Because of the importance of small businesses to the regional economy, state and local agencies provide small business assistance programs that promote business creation and development. There are 11 Small Business Centers in the eastern region of North Carolina that provide confidential counseling to help small business owners overcome various challenges, especially common in a firm’s first few years of existence. Research is needed to uncover the types of problems commonly encountered by small business owners that use Small Business Centers and to determine if these problems are somehow related to certain features of the business.
While many of the studies previously mentioned acknowledge the existence, and effectiveness, of small business assistance programs at community colleges, few have critically examined the relationship between characteristics of businesses that use the programs and the types of problems most commonly encountered by these clients. Wilms (1993) and Johnson (1995) have suggested that more in-depth studies are needed to assess various relationships between the services offered by Small Business Centers and the clientele that uses these services. If the directors of Small Business Centers are better able to anticipate problems faced by small businesses, they have a better chance of offering effective counseling that serves the needs of local business owners.

The financial crisis facing the state of North Carolina is forcing many of the state’s service agencies, including institutions of higher education, to engage in a more detailed analysis of their programs. According to The North Carolina Budget and Tax Center, the budgetary shortfall in the 2001-2002 fiscal year exceeded $500 million. The state’s universities and community colleges experienced a 2.7% budget cut in 2001-2002, while other human service agencies were faced with cuts in excess of 30% to 40% (BTC Reports, January 2002, pp. 2-3). A 2003 report by the John Locke Foundation, entitled *Perspective on NC Budget*, offered a gloomy forecast for the state’s financial situation over the next few years. According to this report, North Carolina is currently facing a projected $1 billion budget deficit in 2003, with the possibility of an even greater deficit the following year (Cordato, 2003).

Small Business Centers receive all their funding directly from the General Assembly and must demonstrate value in order to maintain, or possibly improve, their level of funding (North Carolina Community College System, February 1, 2003, www.ncccs.cc.nc.us). The
insights gained from this study can be used by Small Business Center directors in eastern North Carolina to create a better counseling service aimed at meeting the most critical needs of their target publics, thereby demonstrating a high level of value within the region. In order to be effective, small business assistance programs must develop a proper match between the needs of their clients and their program offerings (Franklin & Goodwin, 1983; Roitman, Emshoff, & Robinson, 1984; Nahavandi & Chesteen, 1988; Chrisman, 1999). As pointed out by Chrisman and Leslie (1989), a better understanding of the problems faced by small business leads to more effective outside assistance that can have a direct impact on the management practices of small firms. Without such help, many small business owners are unable to overcome their problems and achieve long-term success (Dodge & Robbins, 1992; Gynawali & Fogel, 1994; Rice & Matthews, 1995).

Purpose of Study

The purpose of this study was to determine the type of problems encountered by small businesses that receive confidential counseling from Small Business Centers in the eastern region of North Carolina and the relationship between these problems and selected business characteristics. This study featured three independent variables and one dependent variable, as seen on the following page in Table 1. As pointed out by Queeney (1995), an analysis of multiple indicators leads to a more comprehensive understanding of educational needs.
Table 1. Study Variables

<table>
<thead>
<tr>
<th>INDEPENDENT VARIABLES</th>
<th>DEPENDENT VARIABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Industry Sector</strong></td>
<td><strong>Types of Business Problems</strong></td>
</tr>
<tr>
<td>Retail</td>
<td>Administrative</td>
</tr>
<tr>
<td>Service</td>
<td>Operating</td>
</tr>
<tr>
<td><strong>Business Development Status</strong></td>
<td>Strategic</td>
</tr>
<tr>
<td>Start-up</td>
<td></td>
</tr>
<tr>
<td>Operating</td>
<td></td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td></td>
</tr>
</tbody>
</table>

The use of industry sectors as an independent variable has been included in previous studies on small business assistance programs by Vozikis and Glueck (1980), Khan and Rocha (1982), Robinson (1982), Vasu (1989), Dodge and Robbins (1992), Terpstra and Olson (1993), Wilms (1993), Donckels & Lambrecht (1997), and Dougherty and Bakia (1999). Khan and Rocha (1982) and Dougherty and Bakia (1999) found that problems encountered by clients using small business assistance programs varied according to industry sector. Vozikis and Glueck (1980) used firms from the retail and service sectors in their research on the different types of problems encountered by small businesses. In today’s economy, the retail and service sectors comprise two largest segments of small businesses in eastern North Carolina, and according to Luger and Steward (2003), will play a substantial role in the transformation of the economy in eastern North Carolina. In addition, the majority of Small Business Centers clients served in eastern North Carolina come from retail and service industries. Interestingly, research by Brush and Chaganti (1999) indicates that
there are fewer obstacles for establishing ventures in the retail and service sectors, but the failure rate is typically higher in these sectors. This magnifies the importance of gaining a better understanding of the problems faced by business owners in retail and service industries.

The other independent variables used in the study were business development status and the gender of the business owners that receive counseling from Small Business Centers. As pointed out by Rice and Matthews (1995), business counselors must understand the developmental phase of their clients in order to effectively identify and serve their most critical needs. Research by Olson (1987), Kazanjian (1988), Nahavandi and Chesteen (1988), Kuratko and Hodgetts (1989), Dodge and Robbins (1992), and Terpstra and Olson (1993) examined the types of problems most prevalent in the different developmental stages of a small business. Olson (1987) proposes that a start-up business is more apt to encounter problems related to product creation and development. Kazanjian (1988), Nahavandi and Chesteen (1988), Kuratko and Hodgetts (1989), Dodge and Robbins (1992), and Terpstra and Olson (1993) found that problems in the areas of marketing and capital acquisition are the most prevalent in the startup phase of a small business. Conversely, Olson (1987) and Kuratko and Hodgetts (1989) discovered that strategic, administrative, and managerial problems are more prevalent in an organization’s growth stage. Dodge and Robbins (1992) suggest that external problems become less important and internal problems increase as a small business moves through its developmental cycle. However, Dodge and Robbins warn that problems may carry over from stage to stage if they are not properly resolved in a timely manner.
The organizational development stages created by Dodge and Robbins (1992) were used for this study. These four stages include: (1) formation, (2) early growth, (3) later growth, and (4) stability (pp. 28-29). In the formation stage, business owners develop a business plan and attract financial support to allow their ideas to become a reality. Although a high level of uncertainty is still present, the early growth stage is often characterized by steadily increasing sales and business owners are keenly aware of customer demands. During the later growth stage sales begin to level out, often due to new competition and the narrowing of the gap between the active market and the total potential market. During this stage business owners are generally faced with the crucial decision of whether or not they should expand their operations. In the stability stage, Dodge and Robbins suggest that a business operates like a small bureaucracy (p. 29). In this stage business owners are typically searching for ways to regain their early momentum. The developmental stages used by Dodge and Robbins are similar to the ones used by Small Business Centers. In this study, the analysis will focus on the startup and early growth. The categories used by Small Business Centers to represent these stages are startup and operating. The majority of clients that use the counseling service of Small Business Centers are new or young businesses (North Carolina Community College System, 2000a).

In addition to industry sector and business development status, this study used the business owner’s gender as an independent variable. Various research has analyzed the differences between male-owned and female-owned businesses (Cuba, DeCenzo & Anish, 1983; Hisrich & Brush, 1984, 1987; Kaplan, 1988; Loscocco, Robinson, Hall & Allen, 1991; Chaganti & Parasuraman, 1996). Welsh and Young (1984) found that women often have less business experience than their male counterparts. Due to the differences in experience levels,
female entrepreneurs tend to have weaker financial skills and only adequate marketing and operating skills (Hisrich & Brush, 1984). Reese (1992) examined the business networks of female entrepreneurs and discovered that women tend to have small networks and spend less time cultivating relationships within their professional network. While female entrepreneurs may lack certain skills, Hisrich and Brush (1984) found that women are creative thinkers and possess strong people skills. In addition, research has provided evidence that female entrepreneurs do not require more assistance than male entrepreneurs (Chrisman, Carsrud, DeCastro & Herron, 1990) and there is no significant difference in the failure rates of male-owned and female-owned businesses (Watson, 2003).

Some research has shown that female-owned businesses generally perform lower than male-owned businesses (Cuba, DeCenzo & Anish, 1983; Hisrich & Brush, 1984, 1987; Loscocco, Robinson, Hall & Allen, 1991). Other findings have shown that female business owners place less emphasis on financial objectives (Hisrich & Brush, 1987; Kaplan, 1988) and rely less on systematic practices (Cuba, DeCenzo & Anish, 1983; Hisrich & Brush, 1987; Brush, 1992). A more recent study found differences between the management practices of men and women (Chaganti & Parasuraman, 1996). A review of prior studies has shown differences in the methods used by men and women to operate their businesses. These differences may indicate that male and female entrepreneurs encounter unique problems and require different types of counseling from small business assistance programs offered by community colleges.

The increasing numbers of self-employed women highlights the importance of understanding these differences. According to the Business Women’s Network, women will own approximately 50% of all businesses by 2005 (Business Women’s Network, 1999).
Some community colleges have adopted a Small Business Development Center for Women to specifically serve the growing number of women business owners (Lariviere, 2001).

The dependent variable used in the study was the type of problems encountered by small business owners. The type of counseling provided by the staff of a Small Business Center depends on the problems facing their clients. Prior research has attempted to categorize the multitude of problems faced by small business owners. Early research by Dearborn and Simon (1958) classified small business problems into three general categories: (1) sales, marketing, or distribution, (2) clarifying the organization, and (3) human or employee relations. Vozikis and Glueck (1980) found that most organizational problems fall into the functional areas of finance, management, marketing, or operations. Later research by Kazanjian (1988) and Walsh (1988) also divided small business problems into distinct categories. Kazanjian (1988) created six problem classes for small business: (1) sales/marketing, (2) production, (3) people, (4) cost and financial controls, (5) organizational roles and responsibilities, and (6) administrative burdens. The five categories developed by Walsh (1988) include: (1) accounting-finance, (2) human relations, (3) marketing, (4) internal management, and (5) external management.

For the purpose of this study, the problem classification scheme developed by Chrisman and Leslie was used. In a 1989 study, Chrisman and Leslie examined the types of problems commonly encountered by small businesses that received counseling from Small Business Development Centers. Based on their findings, Chrisman and Leslie categorized the diverse problems faced by business owners into three distinct areas: (1) administrative, (2) operating, and (3) strategic.
The objective of this study was stated in 14 research questions and 12 corresponding hypotheses. Phillips (1997) supports the use of hypothesis testing to analyze human development programs. The questions and hypotheses for this study are as follows:

Research Question 1

What types of problems are encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina based on their industry sector (retail or service)?

Research Question 2

What types of business problems are encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina based on their business development status (operating or startup)?

Research Question 3

What types of problems are encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina based on their gender (female or male)?

Research Question 4

What types of problems are encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina based on both their industry sector and business development status?

Research Question 5

What types of problems are encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina based on both their industry sector and gender?
Research Question 6

What types of problems are encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina based on both their business development status and the gender?

Research Question 7

What types of problems are encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina based on their industry sector, business development status, and the gender?

Research Question 8

Is there a relationship between the types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and their industry sector?

Research Hypothesis 1: There is no relationship between the types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and their industry sector.

Research Question 9

Is there a relationship between the types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and their business development status?

Research Hypothesis 2: There is no relationship between the types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and their business development status.

Research Question 10

Is there a relationship between types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and their gender?
Research Hypothesis 3: There is no relationship between the types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and their gender.

Research Question 11

Is there a relationship between the types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and both their industry sector and business development status?

Research Hypothesis 4: There is no relationship between the types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and their industry sector, when controlling for business development status.

Research Hypothesis 5: There is no relationship between the types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and their business development status, when controlling for industry sector.

Research Question 12

Is there a relationship between the types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and both their industry sector and gender?

Research Hypothesis 6: There is no relationship between the types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and their industry sector, when controlling for gender.

Research Hypothesis 7: There is no relationship between the types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and their gender, when controlling for industry sector.
Research Question 13

Is there a relationship between the types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and both their business development status and gender?

Research Hypothesis 8: There is no relationship between the types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and their business development status, when controlling for gender.

Research Hypothesis 9: There is no relationship between the types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and their gender, when controlling for business development status.

Research Question 14

Is there a relationship between the types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and their industry sector, business development status, and gender?

Research Hypothesis 10: There is no relationship between the types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and their industry sector, when controlling for business development status and gender.

Research Hypothesis 11: There is no relationship between the types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and their business development status, when controlling for industry sector and gender.

Research Hypothesis 12: There is no relationship between the types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and their gender, when controlling for industry sector and business development status.
Significance of the Study

At the 1998 NILIE Conference, Martin Lancaster, president of the North Carolina Community College System, gave a keynote address on the important role community colleges play in the state’s strategic economic development plan (Lancaster, 1998). Lancaster argues that no other institution has played a more “significant role” in supporting economic development in North Carolina than the North Carolina Community College System (Lancaster, p. 2). Community colleges have developed an assortment of economic development programs, such as customized workforce training, Tech-prep programs, and Small Business Centers, to help the state adapt to the challenges of a global economy. The creation of effective economic development programs requires community college leaders who understand that success in economic development and education are interrelated (Lancaster, p. 6).

As previously discussed, small business owners often lack sufficient resources and experience, especially in administrative, operational, and strategic areas, to take advantage of growth opportunities (Chrisman & Leslie, 1989). Likewise, many entrepreneurs with promising ideas lack the appropriate assistance to help them turn their ideas into a legitimate business opportunity. This is especially true in the eastern region of North Carolina, where the business failure rate is above the state average and the startup rate is below the state average (NC Department of Commerce, March 10, 2003, www.nccommerce.com/econscan). A recent report from the North Carolina Rural Economic Center indicates that communities often do not invest the same level of resources in the development of their small business sector as they do in industrial recruitment (NC Rural Economic Center, 2001). Similarly, in a 2003 report from the W. K. Kellogg Foundation, entitled Mapping Rural Entrepreneurship,
the authors found that many states do not provide adequate programs to meet the needs of owners of startup businesses. Small business assistance programs, such as Small Business Centers, are needed because they provide effective counseling to assist current owners or aspiring entrepreneurs with the development and implementation of practical solutions for their business problems.

Lancaster (1998) warns that stewards of public funds have become increasingly careful in how they appropriate state monies. This type of environment requires state policymakers to develop priorities and invest accordingly. Past research on Small Business Centers has focused on the number of clients served, client satisfaction levels, and the types of programs offered by the centers (Wilms, 1993; Johnson, 1995). Lacking, however, is adequate research on the types of problems encountered by clients of Small Business Centers and the relationships between these problems and selected business characteristics.

Reynolds and White (1997) believe that the “entrepreneurial engine” is a powerful source of economic growth and innovation in the United States (p. 2). In accordance, assistance must be provided to encourage nascent entrepreneurs to start new ventures and help existing business owners survive ongoing challenges. The knowledge gained from this study can provide the directors of Small Business Centers with more information about the most critical needs of their target publics. Directors can then tailor the counseling service around the most prevalent needs within their communities. A second potential benefit is the development of more appropriate workshops and seminars for prospective business owners. Thirdly, this knowledge may allow centers within close geographical proximity to work together in a synergistic manner to offer more efficient services to the eastern region as a whole. As budgetary constraints continue, economic development professionals must be
keenly aware of their customers’ needs and be able to serve these needs if their programs are
to continue to receive an appropriate level of funding (Alfred, 1991; Dougherty & Bakia,
1999).

Limitations of the Study

A limitation of this study involved the accuracy of the records examined. While the
records reflect the Small Business Center director’s assessment of the clients’ problems at the
time of their first meeting, it is possible that the initial diagnosis is inaccurate. Also, because
the records used in this study were taken from multiple Small Business Centers, it is possible
that each center’s director does not classify problems in the same manner. Another possible
limitation involves the natural cycles of the business economy. Some problems are linked to
the external business environment and this may affect the types of problems encountered by
clients that used the counseling service of Small Business Centers during the 2001-2002 and
2002-2003 academic years.

Definition of Concepts and Terms

Business counseling—For the study, business counseling is one-on-one assistance
provide for existing and future business owners on various aspects of starting and operating a
business venture (North Carolina Community College System, October 15, 2003,
www.ncccs.cc.nc.us).

Business development status—The organizational development stages created by
Dodge and Robbins (1992) include: (1) formation, (2) early growth, (3) later growth, and (4)
stability (pp. 28-29). In this study, the analysis will focus on the startup and early growth.
The categories used by Small Business Centers to represent these stages are startup and operating.

Nascent entrepreneurs—Individuals currently taking explicit steps to start a new business (Reynolds & White, 1997, p. 40).

Small business—The Small Business Administration’s Office of Advocacy defines a small business as one with fewer than 500 employees (SBA Office of Advocacy, 2002, p. 1). However, as pointed out by Perry (2001), approximately 90% of these businesses employ less than 20 people, and around half have less than 5 employees.

Small Business Center—A small business assistance program created by the North Carolina Community College System to “increase the success rate and the number of viable small businesses in North Carolina by providing quality, readily accessible assistance to prospective and existing small business owners and their employees” (North Carolina Community College System, February 1, 2003, www.ncccs.cc.nc.us). Small Business Centers are located at each of the 58 community colleges in North Carolina and offer the following three services: (1) professional workshop and seminars, (2) confidential business counseling, and (3) access to a resource library.

Tacit knowledge—in a business environment, tacit knowledge is referred to as the general know-how needed to effectively operate a business (Chrisman, 1999).
Chapter 2

Conceptual Framework and Literature Review

One component of a community college’s mission is its community service function. As a part of this function, many community colleges have developed successful economic development programs that meet critical needs of their local constituents, including small businesses. Past research on the economic development activities of community colleges has focused on institutional mission (Harlacher, 1969; Myran, 1969; Merson, 1971; Raines, 1971; Gleazer, 1980; Parnell, 1985, 1990), types of programs (Katsinas & Lacey, 1989; Long, 1989; Zeiss, 1994; Bender & Carter, 1994; Grubb, Badway, Bell, Bragg, & Russman, 1997; Dougherty & Bakia, 1999; Warford & Flynn, 2000; Forde, 2002), and strategic alignment with state economic development plans (Liner, 1987; Luke, Ventris, Reed, & Reed, 1988; Melville & Chmura, 1991; Dougherty & Bakia, 1999).

Small businesses play a vital role in the national economy, but have faced significant challenges over the past two decades as the business environment has become more competitive and complex (Holtz, 1985; Fry, Stoner & Weinzimmer, 1999). Prior studies have analyzed small businesses to develop classification schemes for commonly encountered problems (Dearborn & Simon, 1958; Ansoff, 1965; Vozikis & Glueck, 1980; Kazanjian, 1988; Walsh, 1988; Chrisman & Leslie, 1989). Research has also shown that programs and services provided by small business assistance programs have been effective in helping small business owners solve their problems (Krentzman & Samaras, 1960; Buchele, 1965; Gilmore, 1971; Still, 1974; Robinson, 1982; Franklin & Goodwin, 1983; Roitman, Emshoff & Robinson, 1984; Bracker & Pearson, 1985; Chrisman, Nelson, Hoy & Robinson, 1985;

According to Parnell (1990), it takes a collaborative effort between national, state, and local agencies to create programs capable of providing the necessary assistance needed by small businesses throughout the country. However, Forde (2002) argues that the community college has positioned itself at the “center of the economic and workforce development universe” (p. 32). A small business assistance program created by the North Carolina Community College System is the Small Business Center. Small Business Centers are affiliated with all of the 58 community colleges in North Carolina. Each Small Business Center offers confidential counseling to local small business owners.

The purpose of this chapter is to introduce the conceptual framework that guided this research project. This chapter also provides an extensive review of literature that further supports the value of this study. The review includes a synthesis of research that demonstrates a link between the mission of the community college and economic development programs. Research on the various types of economic development programs is also provided, especially in the area of small business assistance. Further analysis focuses on the importance of small businesses in the national economy, the common problems encountered by entrepreneurs, and the effectiveness of counseling from small business assistance programs.
Conceptual Framework

Atwell, Vaughan, and Sullins (1982) suggest that economic development programs offered by community college should be comprised of “organized educational activities” that meet the needs of their local communities (p. 22). One of the critical challenges in eastern North Carolina is to create effective programs aimed at serving the needs of small business owners. As previously discussed, small businesses play an important role in eastern North Carolina, yet the business failure rate in the region is above the state average and the business startup rate is below the state average (NC Department of Commerce, March 10, 2003, www.nccommerce.com/econscan). Research has indicated a definite need in the area of small business assistance in eastern North Carolina.

Boone (1985) created a conceptual framework for the development of effective educational programs. As seen in Table 2 on the following page, Boone’s model is based on the following three subprocesses: (1) planning, (2) design and implementation, and (3) evaluation and accountability. An objective of the planning subprocess is to identify and link with publics to the degree that an accurate assessment and analysis of the educational needs is attained (p. 68). The expressed needs of a target public are then translated into macro needs, objectives, and learning outcomes and used to design and implement effective educational programs (Boone, p. 60). An accurate needs assessment allows adult educators to create programs aimed at the publics for which it has the learning resources.
Table 2. Boone’s Programming Model

<table>
<thead>
<tr>
<th>Planning</th>
<th>Design &amp; Implementation</th>
<th>Evaluation &amp; Accountability</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Renewal Process:</td>
<td>I. Designing the Planned Program: Translating expressed needs into macro needs,</td>
<td>I. Measuring program outputs and assessing program inputs.</td>
</tr>
<tr>
<td>Understanding of and commitment to the functions of the</td>
<td>macro objectives, and macro outcomes.</td>
<td>II. Using findings for program revisions, organizational renewals,</td>
</tr>
<tr>
<td>organization (mission, philosophy &amp; objectives).</td>
<td></td>
<td>and for accounting to publics, parent organizations, funding sources, the profession,</td>
</tr>
<tr>
<td>II. Linkage:</td>
<td>Implementation of the Planned Program:</td>
<td>and governing bodies.</td>
</tr>
<tr>
<td>Identification,</td>
<td>Developing plans of action.</td>
<td></td>
</tr>
<tr>
<td>assessment, and analysis of needs specific to target publics.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: (Boone, 1985, p. 61)

Boone (1985) warns against trying to define a target public’s needs without developing an active partnership with the learners. A common mistake made by many adult educators is to define what they believe to be the needs of their target publics and then create “canned” programs based on their perceptions (Boone, p. 117). Many educational workshops, seminars, and lecturer series have been based on this approach. However, the counseling service provided by Small Business Centers relies on interaction between adult educators (Small Business Center directors) and learners (small business owners) to identify the most critical problems facing these small businesses. The knowledge gained from this interaction is then used to tailor the counseling process to the true needs of each small business owner. Boone encourages the use of survey methodology as an effective tool in diagnosing the most critical educational needs of a target public.
Chrisman and Leslie (1989) examined the types of problems commonly encountered by small business owners. Based on prior research by Ansoff (1965), Chrisman and Leslie used three distinct categories to classify small business problems: (1) administrative, (2) operating, and (3) strategic (see Figure 1).

**Figure 1. Classification of Business Problems**

Administrative problems deal with the organization of a business and its ability to acquire and develop resources (Chrisman & Leslie, p. 42). The organization component is concerned with issues such as work and information flow, location of facilities, and the structuring of authority and responsibilities. The other component of administrative problems involves the acquisition and development of important resources, such as raw materials, equipment, capital, or labor. Examples of administrative problems faced by small businesses include accounting, finance, personnel, and general management issues. Operating problems generally revolve around the functional areas of a business, such as marketing, production, and operations (Chrisman & Leslie, p. 42). Some of the key issues in this category include
developing a marketing strategy, establishing production schedules and inventory levels, and dealing with other critical concerns in the daily operations of a business. Operating problems prohibit an organization from maximizing efficiency and productivity. Problems in the third category are strategic in nature and deal primarily with the analysis of a firm’s external environment in order to determine what kinds of opportunities exist and how a business will enter the market. Strategic problems are concerned with the overall objectives and goals of an organization. Common issues in this category include business plan development, feasibility studies, pro-forma financial analysis, and strategic planning (Chrisman & Leslie, p. 42).

In addition to the application of a classification system, Chrisman and Leslie (1989) also examined the effectiveness of small business assistance programs in offering different types of counseling. Their findings indicate that small business benefit more from administrative and operating assistance than strategic assistance. The implication is that counseling from small business programs is more effective in helping firms reduce their costs rather than increase their sales (Chrisman & Leslie, p. 47). However, Chrisman and Leslie (1989) found that clients receiving administrative, operating, and strategic assistance performed better than clients that only received limited assistance on one or two types of problems.

The framework that guided this project was based on the linkage component of Boone’s programming model and the problem classification scheme used by Chrisman and Leslie (1989). In the planning subprocess, Boone (1985) emphasizes the importance of studying the target audience of an educational program to uncover the most critical needs. After conducting a needs analysis and assessment, educational institutions must tailor their
program offerings around the most important needs of the target public. In this study, the problems encountered by clients receiving counseling from Small Business Centers in eastern North Carolina were classified as administrative, operating, or strategic. Prior research has indicated that small business problems may vary according to industry sector, developmental status, and gender of the owner. The more knowledgeable Small Business Center directors are of the needs of their target publics, the better they are able to customize their counseling service to assist clients with various business problems.

Review of Literature

The role of community services in higher education can be traced back to the land grant colleges created by the Morrill Act of 1862 and the “Wisconsin Idea,” where a service component was interwoven into the institution’s original philosophy (Atwell, Vaughan & Sullins, 1982, pp. 3-5). Over the years, the American higher education system has combined the teaching component from the English system and the research component from the German system with a community service function that is uniquely American (Atwell, Vaughan & Sullins, p. 1). Harlacher (1969) points out that community colleges, unlike high schools or universities, have the unique ability to quickly adapt to the needs of their communities (Harlacher, p. 9).

Koos (1924) and Eells (1931) first called for the inclusion of a community service function at two-year schools in the mid 1920s and early 1930s. In the late 1940s, the President’s Commission on Higher Education, most commonly referred to as the Truman Commission, examined the role community colleges play in creating a better democracy. As stated by the Truman Commission, the community college’s purpose is to provide
educational services to the entire community (President’s Commission on Higher Education, vol. I, 1948). In accordance, the Truman Commission suggested that two-year schools undergo a name change. Rather than junior college, these institutions should adopt the name community college, which better incorporates their expanded functions (President’s Commission on Higher Education, vol. III, p. 5). According to Vaughan (1983), this report provided the community college with its “manifesto,” and serves as the “final link” in the chain of events that made the community college an integral component of higher education in the United States (pp. 6-7).

After the Truman Commission’s report was published, Bogue (1950), Reynolds (1956), Medsker (1960), and Brick (1963) continued to call for the development of a community service function in the community college. By the end of the 1960s, research by Harlacher (1969) and Myran (1969) brought community services into the mainstream operations of a community college. Both Harlacher and Myran argued the importance of legitimizing community services as a function of the community college.

Harlacher (1969) describes the community college as an institution dedicated to both formal and informal education. The formal dimension can be characterized as “schooling,” including programs in the areas of transfer, occupational, and general education (Harlacher, p. 3). This component is clearly defined in a community college’s mission. However, Harlacher argues that a second, informal component, a community service dimension, has made its way into the overall mission of a community college. Harlacher suggests that community colleges have accepted the responsibility of a “catalytic agent” for stimulating development efforts for its local community (Harlacher, p. 9). Through these connections, the junior college evolves into a community college.
According to Myran (1969), the community service function of a community college is directed toward serving personal and community needs. Myran proposes a system for developing effective community services based on permeation, penetration, and education. A commitment for community services, including economic development, as a legitimate and valuable function must permeate all areas of the college. After gaining internal commitment, the community college must penetrate all areas of its community, searching for unfulfilled needs. Once the needs have been identified, the community college must create an educational program to help deal with the identified issues (Myran, pp. 17-19). Myran believes that the community college should become the “educational center of the community—a center for community study, planning, and action” (Myran, p. 55).

Raines (1971) and Merson (1971) also emphasize the social and economical value of a community service function at community colleges. Raines (1971) believes that the values of personal self-realization, equal opportunity, civic responsibility, and economic efficiency must be embraced if the college is to promote community development. Similarly, Merson (1971) believes the essence of community development is the creation of programs aimed at improving the economic and social components of a community. In fact, Merson argues that the community college can be defined in a word, and that word is “service—to the individual and to the community” (p. 3).

While Harlacher and Myran are credited with legitimizing the community service function, Gleazer (1980) and Parnell (1985, 1990) are responsible for extending this function to a primary position within the mission of the community college. In his 1980 book entitled The Community College: Values, Vision & Vitality, Gleazer suggests that community colleges should become the “nexus [author’s italics]” of a community learning system (p.
To accomplish this goal, community colleges must understand their regions and establish connections with various stakeholders. Gleazer believes community colleges are well positioned to achieve this through its “vertical connections” in the educational hierarchy and its “horizontal relationship” with local agencies (p. 11). These connections include partnerships with social agencies and business and industry. The mission of a community college, as proposed by Gleazer, is to encourage and facilitate lifelong learning, with community as a “process and a product” (p. 16).

Research by Parnell produced similar recommendations to the ones proposed by Gleazer. In his 1985 publication entitled *The Neglected Majority*, Parnell concluded that community colleges are helping trigger economic revitalization in many communities (Parnell, 1985, p. 99). In a 1990 publication entitled *Dateline 2000: The New Higher Education Agenda*, Parnell expanded on the importance of economic development programs at community colleges. In *Dateline 2000: The New Higher Education Agenda*, Parnell argues that colleges and universities, especially community colleges, will break free from the traditional higher education model and embrace their roles as regional learning centers and economic development organizations. This will create a new economic development paradigm in colleges and universities. This new paradigm is based on the cooperation of three diverse groups: employers and labor, community colleges, and research universities. The efforts of all three groups are necessary to create successful economic development programs (Parnell, 1990).

Community colleges that adopt this new paradigm must be willing to reexamine their mission statements for the economic development component to match the needs of their service region (Parnell, 1990). Parnell (1990) suggests that five interrelated components
exist between higher education and the business world. Community colleges and universities must establish links with the business community in the areas of human resource development, research, technology transfer, economic development, and curriculum reform (Parnell, 1990). Leaders in higher education should dedicate much of their attention to building community, improving institutional flexibility, and developing value-added outcomes (Parnell, 1990; Bogart, 1994).

Vaughan (1997) describes the mission of a community college as “dual-focused and dynamic [author’s italics]” (p. 37). The educational core of the mission includes the degree, diploma, and certificate programs. The core is what defines the community college as a legitimate institution of higher learning. However, as Vaughan points out, the educational core is just one dimension of the community college mission. The other focus, referred to by Vaughan as the edge, is where “the community college intersects with its community” and works with other organizations and agencies to identify and resolve issues that affect the welfare of the entire community (p. 38). This requires a high level of coordination between various community agencies. As pointed out by Gollattscheck, Harlacher, Roberts, and Wygal (1976), the community college is “best prepared” to assume this responsibility (p. 135).

Forde (2002) examined the link between economic and workforce development and the overall mission of a community college. According to Forde, workforce development programs are aimed at the micro needs of local stakeholders, while economic development programs fulfill a community’s macro needs. As previously stated, Forde believes that community colleges are at the “center of the universe” for economic and workforce development activities (p. 35). This status indicates the value of these programs for local
communities, and their significance to the mission of community colleges. A commitment from all levels of leadership is required if community colleges are to continue to offer effective economic and workforce development programs. In order to gain this commitment, all employees within the community college must be informed of the issues, expectations, and expected outcomes of these programs (Forde, 2002).

Dynamic social and economic changes have occurred in the United States since the community service function gained its legitimacy in the late 1960s. These changes include a shift in the demographics of the population, post-Vietnam economic and political policies, and a human resource development crisis (Katsinas & Lacey, 1989). Students are now demanding more technical training and employers need more qualified personnel. The global economy has changed the business environment dramatically. These changes are not just occurring in major urban centers. Rural communities have been hit especially hard by layoffs and plant closings. To combat these challenges, leaders have called on national, state, and local agencies, especially community colleges, to help rejuvenate the economy (Katsinas & Lacey, 1989; Dougherty & Bakia, 1999; Warford & Flynn, 2000).

Gregerman (1984) examined various factors that improve the overall attractiveness of a local business environment. Among the factors discovered include the availability of a well-trained workforce and the quality of educational programs. Similarly, prior research by Bruno and Tyebjee (1982) found that a technically skilled workforce and a region’s proximity to colleges and universities are two factors that heavily influence new business creation. Clarke (1986) discovered that high-technology businesses are particularly attracted by three factors: state and local educational systems, research and development programs, and technical and business assistance. Successful high-technology firms have found great
success in areas such as Silicon Valley in California, Route 128 in Massachusetts, and the Research Triangle Park in North Carolina. All three of these areas feature a strong connection between the business community and local colleges and universities (Luke, Ventriss, Reed & Reed, 1988).

Community and political leaders have become increasingly active in providing support, both financially and politically, for the development of economic development programs in community colleges. In 1985, President Reagan’s Commission on Industrial Competitiveness concluded that colleges and universities play a substantial role in revitalizing the nation’s economy, especially in the areas of technology and human resources. In a 1988 report produced by the Commission on the Future of Community Colleges, entitled *Building Communities: A Vision for a New Century*, the authors argue that workforce training and economic development have become a vital part of the community college movement. As stated in the report, central to the mission of the community college is its ability to encompass a culture that promotes collaboration, openness, inclusiveness, and self-renewal (Commission on the Future of Community Colleges, 1988). To create the necessary conditions for community development, community colleges must establish connections with schools, industry, business, social agencies, and policy groups. As concluded in *Building Communities*, a community is not only a region to be served, but also a “climate to be created” (p. 7).

Two years after the release of *Building Communities*, the Carnegie Foundation for the Advancement of Teaching published *Campus Life: In Search of Community*. This report also challenged community colleges to embrace the concept of community building and revitalization (Carnegie Foundation for the Advancement of Teaching, 1990). The
Commission on the Skills of the American Workforce also published a report in 1990, entitled *America’s Choice: High Skills or Low Wages*, that pointed specifically to the critical need for community development in the area of workforce training. Community colleges must work with other human service agencies to provide training and development programs to deal with this issue.

Many community colleges rely on their programs and activities to define their role in the economic development arena. Community colleges have improved their flexibility and market responsiveness over the past two decades to create a broader array of economic development programs (Hittman, 1994). At times, the programs are specialized in nature and are intended for a certain targeted audience. Other times the activities are general in nature and benefit many community stakeholders.

Katsinas and Lacey (1989) suggest that much of the rapid growth experienced by community colleges in the late 1950s and throughout the 1960s occurred as a result of the desire of local and state officials to enhance local economic development efforts (p. 2). According to Katsinas and Lacey, economic development programs offered by community colleges vary in content and target audience. The economic development programs offered by community colleges include centers for business development and small business incubators, local and regional planning and research centers, customized training and retraining programs, performance-based contracting, manufacturing assistance, and technology transfer (Katsinas & Lacey, p. 13).

Katsinas and Lacey (1989) further differentiate economic development programs at community colleges into traditional and nontraditional activities. In the traditional programs, the college maintains control by determining the learning objectives and outcomes. The
classes are often held on campus and are taught by full-time faculty members. Conversely, community colleges collaborate more with outside agencies to customize programs for nontraditional economic development activities (Katsinas & Lacey, p. 11). These programs tend to be short-term and often lead to the mastery of specific skills and work methods. A special advantage offered by community colleges is that they already have a delivery system in place to provide effective service programs (Katsinas & Lacey, p. 25).

Research by Long (1989), Zeiss (1994), Bender and Carter (1994), Grubb, Badway, Bell, Bragg, and Russman (1997), Dougherty and Bakia (1999), Warford and Flynn (2000), and Forde (2002) also focused on categorizing economic development programs offered by community colleges. Long (1989) believes that a community college’s economic development efforts should fall into three general categories and include programs in the areas of workforce training, both general and customized, technology transfer, small business assistance, and business partnerships (Long, p. 161). The three categories proposed by Long are community development, institutional development, and business development (p. 169).

Institutional development is aimed at the identification of organizational assets and the creation of strategies to maximize the use of the assets (Long, p. 170). The development of strategic partnerships is a core component of institutional development. Community development programs are designed to improve both social and economical aspects of the community (Long, p. 170). Many of the general workforce training programs are included in this category. In addition to specific job skills, these training programs often help citizens improve other aspects of their life, such as literacy skills. The third category, business development, features programs that combine activities from both the community and institutional development components to directly impact local businesses. The primary goal
of business development programs is to assist in the creation of new enterprises and help existing businesses become more successful (Long, p. 171).

Zeiss (1994) found that many colleges offer economic development programs that serve community needs in the areas of small business assistance, customized training and assessment, employee retention training, and workforce literacy training (pp. 512-513). The community colleges with effective economic development programs are client-centered and willing to customize programs and delivery systems for a diverse array of services. By offering customized programs, community colleges are able to get involved in the areas of business creation, expansion, recruitment, and retention (Zeiss, p. 511). Zeiss (1994) calls on community colleges to integrate their programs and services with other educational institutions and community agencies. Community colleges must develop client-focused partnerships with these organizations, thereby creating “synergistic relationships” (Zeiss, pp. 508, 514). This integration will cause community colleges to reexamine their mission and adopt a broader vision. The competitive demands of the global economy, coupled with the applied mission of the community college, will lead to an even stronger relationship between two-year colleges and the business community (Zeiss, 1994).

Similar to Zeiss, Bender and Carter (1994) encourage community colleges and local businesses to work together to establish a long-term mutually beneficial relationship. Community colleges offer the local community comprehensive training and development packages, including needs analysis, customized training programs and delivery systems, curriculum development, and access to facilities and equipment (Bender & Carter, p. 57). These training and development packages are especially beneficial in stimulating job growth.
An increase in the number of jobs rejuvenates the community, which in turn benefits the community college.

According to Grubb, Badway, Bell, Bragg, and Russman (1997), economic development programs allow community colleges an opportunity to work with the local community in the areas of technology transfer, small business assistance, leadership development, market and product research, and business recruiting efforts. They believe that three factors have heavily influenced the ability of community colleges to develop entrepreneurial activities. These factors include an increased acceptance of the career education function, the presence of faculty members with ties to the business community, and the aggressive nature of college administrators searching for new ways to counteract the declining appropriations from traditional funding sources (Grubb, Badway, Bell, Bragg & Russman, p. v). A community college must adopt the entrepreneurial spirit at all levels of the institution’s operations if it is to develop effective economic development programs that truly impact the local community. The development of an “entrepreneurial college,” as defined Grubb, Badway, Bell, Bragg, and Russman (1997), requires the integration of economic development activities with all other functions of the institution (p. v).

The functions of a traditional community college and the new entrepreneurial college blend together to create a harmonious balance. An important role of an entrepreneurial college is to identify new community needs. These needs are then shared with the traditional side of the community college and proper educational programs can be created to satisfy these needs (Grubb, Badway, Bell, Bragg & Russman, p. vi). The entrepreneurial college creates deeper connections with the community and private sector while the traditional college continues to provide the educational foundation. Grubb, Badway, Bell, Bragg, and
Russman believe that this type of integration offers the strongest future for the “comprehensive community college” (p. 55).

Dougherty and Bakia (1999) also examined the types of economic development programs offered by community colleges. During the last two decades, in particular, community colleges have expanded their economic development efforts to include contract training, small business assistance, and economic development planning. Dougherty and Bakia go so far as to say that a community college should act like an “economic watchman,” scanning the local environment for business trends, and becoming active economic policymakers (p. 89).

Wardford and Flynn (2000) propose the creation of a comprehensive response to the economic and workforce development needs of local communities. This approach requires the creation of programs aimed at four major segments in the workforce. These segments include emerging workers, transitional workers, incumbent workers, and entrepreneurs. Wardford and Flynn (2000) suggest that community colleges tailor their economic and workforce development offering to meet the specific needs of these target publics. For emerging workers, community colleges can offer vocational programs that combined the classroom experience with on-the-job training. The Tech Prep program is an example of a program aimed at emerging workers. Transitional workers, as defined by Warford and Flynn, are in transition from one job to another. This present an opportunity for community colleges to develop activities that prepares these workers for new occupational goals. Career planning, job placement assistance, and general training programs are often created to meet the needs of transitional workers. Customized training programs are aimed more at serving
the needs of incumbent workers. These offerings are generally tailored to meet specific industry or company demands.

The final category of programs suggested by Warford and Flynn (2000) include services for local entrepreneurs. Examples of these services include confidential counseling, loan packaging assistance, and resource materials. Both prospective entrepreneurs and existing business owners often turn to community college programs for answers to their business questions. These individuals generally have limited resources and depend on community colleges to provide quick service at little or no cost.

Warford and Flynn (2000) argue that community colleges should strategically position their economic and workforce development activities in a manner that allows them to provide programs for each of these four segments. This approach, according to Warford and Flynn, is more comprehensive in nature. In order to achieve this goal, community colleges must analyze the needs of their communities, identify target segments, and then develop programs to meet customer expectations (Warford and Flynn, p. 31).

The research findings of Katsinas and Lacey (1989), Long (1989), Zeiss (1994), Bender and Carter (1994), Grubb, Badway, Bell, Bragg, and Russman (1997), Dougherty and Bakia (1999) and Warford and Flynn (2000) share many similarities. One such similarity is the acknowledgement that small business assistance programs are a valuable component of a community college’s economic development activities. Additional research by Cross (1985), Hankin & Fey (1985), and Carmichael (1991) also indicates that community colleges are heavily involved in devising specialized programs to meet the needs of local small business owners.
Small business assistance programs are important because of the vital role small businesses play in the national economy. Since the 1970s, research has recognized the importance of small businesses in economic development, especially in the area of job growth. Other benefits associated with small businesses include technological innovation, economic diversity, increased local spending, and greater regional loyalty (Luke, Ventriss, Reed & Reed, 1988, pp. 73-75).

In a study of 5.6 million businesses between 1969 and 1976, Birch (1979) found that 80% of new jobs were created by businesses with 100 or fewer employees, with two-thirds of these jobs created by businesses with 20 or fewer employees. Similarly, Edmunds (1980) found that 94% of job creation between 1970 and 1977 came from small businesses. A 1985 study by Touche Ross and Company found that community leaders in cities with a population of 30,000 residents or greater considered small businesses to be more important than large companies in the overall economic health of the region.

Recent research on small businesses by the Small Business Administration (SBA) Office of Advocacy shows that more than 99% of all current employers are classified as small businesses, and they employ 51% of private-sector workers (SBA Office of Advocacy, May 2002). The Small Business Administration defines a small business as one with fewer than 500 employees (SBA Office of Advocacy, May 2002). However, approximately 90% of these businesses employ less than 20 people, and around half have less than 5 employees (Perry, 2001). The Office of Advocacy estimates that approximately 22.4 million small businesses existed in 2001.

In addition to the number of workers currently employed in small firms, approximately two-thirds to three-quarters of new jobs are expected to come from small
businesses (SBA Office of Advocacy, May 2002). From 1998 to 1999, small businesses accounted for 67.4% of new job creation, or a total of 1.74 million new jobs. Prior to that period, the largest employment increase between 1990 and 1995 was experienced by businesses with one to four employees (Acs, Tarpley & Phillips, 1998).

The typical America small business is described in a 2001 report produced by the Small Business and Technology Development Center. According to the report, entitled *State of Small Business*, the average small business in the United States has three employees and generates between $150,000 and $200,000 in annual revenue. These businesses account for 51% of private sector output, represent 96% of all exporters of goods, and employ 38% of high-tech workers. White males own the majority of small businesses (53.4%), but the number of minority-owned businesses, especially Hispanic-owned, continues to grow. The typical small business is privately owned and the owner(s) works an average of 50.4 hours per week (Small Business and Technology Center, p. 6).

While statistics show the great value of small business in the American economy, they do not tell the complete story as to why these enterprises are so important in our society. Acs, Tarpley, and Phillips (1998) suggest that small businesses make two particularly vital contributions in the United States. First of all, small firms are an integral part of the renewal process in our national economy (Acs, Tarpley & Phillips, p. 17). Small firms play a crucial role in innovation and experimentation, thereby leading to better overall productivity. These businesses succeed in a complex environment because they are more efficient and dynamic than their larger counterparts. Acs, Tarpley, and Phillips believe that the activity of small businesses was one of the primary reasons why the American economy improved over the second half of the 1990s. The entrepreneurial activities of startup and small firms allowed
the economy to eliminate stagnation and “reinvent itself” (Acs, Tarpley & Phillips, p. 5). The common opinion among economists now is that “macroeconomic prosperity” is dependent upon strong entrepreneurial activities, especially by small businesses (Acs, Tarpley & Phillips, p. 9).

A second contribution, according to Acs, Tarpley & Phillips (1998), is that small businesses allow millions of people, especially women and minorities, to enter the economical and social mainstream of American society (p. 17). These opportunities serve as a vehicle that enables people to access the “American Dream” of economic prosperity and upward mobility. The American economy is a “democratic system [authors’ italics]” that invites hard working people, regardless of background, to participate (Acs, Tarpley & Phillips, p. 4). An important barometer for the economic and social strength of a nation is the level of new business creation in all sectors of the economy by all segments of the population.

An example of a specialized economic development program targeted at small businesses is the Small Business Development Center. Public Law 86-302, amended as PL 98-395 in 1984, provided financial assistance for the creation of Small Business Development Center satellite offices on the campuses of community colleges and universities (Luke, Ventriß, Reed & Reed, 1988; Carmichael, 1991). These centers are funded through contributions from the Small Business Administration, state legislatures, and private sector foundations. Currently, there are 58 Small Business Development Centers throughout the United States, supported by a network of more than 11,000 service locations and satellite offices (Small Business and Technology Development Center, March 10, 2003, www.sbtde.org). These centers are design to offer services to those who have already started
a small business or individuals who are interested in starting a business. The services offered by Small Business Development Centers include confidential business counseling, education and training programs, and professional referrals (Carmichael, p. 26). The centers also provide a resource library on a variety of business topics. Research by Carmichael (1991) indicates that approximately 40% of community colleges in small communities and rural areas operate a Small Business Development Center satellite office.

In addition to Small Business Development Centers, community colleges have developed small business incubators. According to the Corporation for Enterprise Development (2003), there are 950 business incubators currently in North America, and they served over 35,000 startup businesses in 2001. As defined by Weinberg and Burnier (1991), a business incubator is a facility where “shared services and business and management assistance” are provided for tenant companies (p. 31). The businesses occupying these facilities typically pay rent (at a subsidized rate), or offer community colleges a percentage of royalties or equity in the business. These incubators are intended to stimulate new businesses in the community, thereby producing additional employment opportunities. According to Rice and Matthews (1995), business incubators provide an ideal support system for nascent entrepreneurs and owners of startup businesses. In particular, a business incubator can provide entrepreneurs in the local community with a “portfolio” of resources, including access to facilities, equipment, human resources, and in-house technical and managerial services (Rice & Matthews, p. 113). Although the creation of an incubator is a risky venture for community colleges, it can contribute greatly to the service mission of the institution (Weinberg & Burnier, p. 36).
Small businesses often experience problems that require individualized consultation (Luke, Ventriss, Reed & Reed, 1988). While all businesses, both large and small, are faced with critical issues that determine survival, small businesses are especially susceptible to closure because they often lack sufficient resources. According to the Small Business Administration’s Office of Advocacy, the six year survival rate for small business is only 39.5% (SBA Office of Advocacy, May 2002). Broad workforce development programs often do not provide the necessary attention needed by these business owners (Luke, Ventriss, Reed & Reed, 1988; Warford & Flynn, 2000). In addition, most small business owners cannot afford to pay professional business counselors for specialized assistance.

Prior research on problems encountered by small business owners has offered various classification schemes. Early research by Dearborn and Simon (1958) classified small business problems into the general categories of sales or marketing, organization clarification, and human relations. Later research by Vozikis and Glueck (1980), Kazanjian (1988), Walsh (1988), and Chrisman and Leslie (1989) also developed a classification system for small business problems. According to Vozikis and Glueck (1980), organizational problems typically fall into the functional areas of finance, management, marketing, or operations. Kazanjian (1988) found that small business problems often fall in the areas of sales or marketing, production, people, financial controls, organizational roles and responsibilities, and administrative issues. Walsh (1988) concluded that small businesses most commonly encounter problems in the areas of accounting, human relations, marketing, internal management, and external management.

Chrisman and Leslie (1989) adopted a more integrative system to classify the problems experienced by small business owners. The system used by Chrisman and Leslie is
based on prior research by Ansoff (1965). Ansoff (1965) developed a framework to classify the types of decisions needed to start and maintain a successful business. The classification system features the following categories: (1) administrative decisions, (2) operating decisions, and (3) strategic decisions (Ansoff, p. 8). The key administrative decisions are based on the ability of a business to arrange its resources to create an environment that encourages optimal performance. Operating decisions deal more with the allocation of resources in a manner that promotes efficiency and productivity. These types of decisions center on the functional areas of the business and include marketing, operations, and production. According to Ansoff (1965), operating decisions typically account for a large portion of a firm’s energy and attention. Strategic decisions are concerned with creating the proper fit between the capabilities of the business and its external environment. These decisions are based on the overall objectives of the business and indicate how it will meet the needs of its customers (Ansoff, p. 6).

Chrisman and Leslie (1989) adapted Ansoff’s classification scheme and used it to analyze common problems faced by small business owners. Their system classifies small business problems into administrative, operating, or strategic categories. Administrative problems center on the organizational structure of a business and its ability to acquire and develop its resources (Chrisman & Leslie, p. 42). These problems generally include accounting, finance, personnel, and general management issues. Operating problems are more common in the functional areas of a business. Examples of operating problems include marketing, production, operations, and inventory control issues (Chrisman & Leslie, p. 42). Strategic problems involve the ability of small business owners to match their product or service offering with the demands of the external environment. This requires that business
owners understand the nature of their business and the needs of their target market. Business owners with strategic issues often need assistance with a feasibility study, business plan, pro-forma financial analysis, or market research (Chrisman & Leslie, p. 42). The findings of Chrisman and Leslie (1989) suggest that counseling from small business assistance programs is more effective in providing assistance with administrative and operating problems than with strategic problems. In particular, counseling from an outside source helps owners identify methods to reduce the cost of operating a business (p. 47).

In addition to a classification system for problems faced by small businesses, other researchers have analyzed the relationship between a business’ development cycle and the problems most prevalent during each stage (Olson, 1987; Kazanjian, 1988; Nahavandi & Cheestein, 1988; Kuratko & Hodgetts, 1989; Dodge & Robbins, 1992; Terpstra & Olson, 1993). Olson (1987) suggests that start-up businesses often experience problems related to product creation and development, whereas organizations in the growth stage commonly encounter problems in the areas of managerial and organizational design. Kazanjian (1988) found that problems related to the external environment, such as resource acquisition, are more common in the start-up stage. As a business grows and matures, marketing and organizational development problems become more prevalent.

Research by Nahavandi and Cheestein (1988), Kuratko and Hodgetts (1989), Dodge and Robbins (1992), and Terpstra and Olson (1993) found that marketing problems were most common at every level of business development. Terpstra and Olson (1993) also discovered that capital acquisition, financial management, and general management problems occur more frequently during the formation of a small business (p. 13). As a business enters its growth and mature stages, Kuratko and Hodgetts (1989) found that administrative and
managerial problems became more serious. The findings of Terpstra and Olson (1993) indicated that the most prevalent problems in a business’ mature stage were sales and marketing, financial management, human resource management, and general management.

The research of Dodge and Robbins (1992) was based on the following four stages of an organization’s life cycle: (1) business formation, (2) early growth, (3) later growth, and (4) stability. The formation stage is the period in which entrepreneurs develop a plan and acquire financial support in order to translate their idea into an actual venture. The early growth stage is characterized by rapid growth, while the later growth stage features a decline in sales and an increase in competition. The stability stage features leveling sales and is typically marked by the creation of a bureaucratic management structure (p. 34).

Dodge and Robbins (1992) found that external problems are more critical in a business’ early stages of the development. Some of these problems include market assessment and location selection, marketing activities, and dealing with competition. The later stages feature more internal problems, such as accounting systems, pricing, inventory control, and production. Dodge and Robbins (1992) suggest that owners are often hesitant to make changes in the internal areas of their business early on in their existence. Rather, they wait until sales level off in the later stages to make the necessary adjustments to the internal operations. Small business owners often concentrate on making internal changes as they mature, instead of focusing on the changes occurring in the external environment (p. 34).

The success of small business owners is crucial to the local, state, and national economy. The use of outside sources to provide specialized knowledge for small business owners has become more necessary due to the increased complexity of the business environment (Holtz, 1985; Fry, Stoner & Weinzimmer, 1999). An organization’s first six
years of operations are especially crucial if that business is to achieve long-term survival.
Past research has shown that assistance from outside sources has been beneficial to small business owners. In particular, small business assistance programs offered by colleges and universities have provided valuable counseling for local small businesses (Robinson, 1982; Chrisman, Nelson, Hoy & Robinson, 1985; Chrisman & Leslie, 1989; Terpstra & Olson, 1993; Chrisman, 1999; Fry, Stoner & Weinzimmer, 1999; Chrisman & McMullan, 2000).


Research by Chrisman (1999) and Chrisman and McMullan (2000) examined the time frame when outside assistance has the greatest impact on small business problems. The results of a 1999 study by Chrisman indicated that counseling offered by small business assistance programs has a positive influence on the likelihood that individuals with entrepreneurial intentions actually start a new business venture (Chrisman, p. 9). The findings of this study indicate that 60% to 78% of nascent entrepreneurs that receive counseling from Small Business Development Centers actually started a new business. In comparison, a 1996 study by Carter, Gartner, and Reynolds found that only 48% of all
entrepreneurs with intentions to start a business actually follow through on their plans (Carter, Gartner & Reynolds, 1996).

Chrisman (1999) suggests that small business owners receive two “start-up advantages” from assistance by outside sources (Chrisman, p. 9). For one, the assistance from these programs provides entrepreneurs with knowledge that better prepares them for the many challenges associated with business ownership. Secondly, it demonstrates that a business owner is committed to the new venture. Successful entrepreneurs understand the commitment, especially in the areas of time and resources, needed to establish a sustainable business (Chrisman, p. 9). These advantages are due to an increase in the owner’s level of tacit knowledge resulting from interaction with experienced business professionals. In a business environment, tacit knowledge is often referred to as the general know-how needed to effectively operate a business (Chrisman, 1999). Experience is a key factor that leads to a greater level of tacit knowledge. Chrisman (1999) points out that outside sources can provide business owners with an extensive network of contacts that offer complimentary skills (Chrisman, p. 5).

Research by Chrisman and McMullan (2000) focused on the long-term advantages gained by entrepreneurs that use small business assistance programs during their initial startup period. They found that the survival rate for clients receiving counseling from small business assistance programs is higher than the national survival rate. In addition to its impact on a business’ formation, Chrisman and McMullan (2000) also found that clients of small business assistance programs often experience positive growth rates after initial startup. These two findings provide critical evidence that counseling from small business assistance programs can lead to a competitive advantage for new businesses. As pointed out by
Chrisman and McMullan (2000), outside assistance can improve a business’ long-term ability to survive in a competitive business environment.

In addition to the findings of Chrisman (1999) and Chrisman and McMullan (2000), other research has indicated that counseling from outside sources can improve the level of intellectual capital within a small business (Vesper, 1990; Ulrich, 1998; Erikson, 2002). Erikson (2002) believes that entrepreneurial capital is the specific type of intellectual capital used by entrepreneurs, and is a nascent entrepreneur’s most important asset. Research by Barney (1991), Ulrich (1998), and Erikson (2002) supports the notion that intellectual capital is the one resource that best allows an entrepreneur to develop a sustained competitive advantage. Ulrich (1998) suggests that intellectual capital is the only “appreciable asset” within a small business (p. 15).

According to Ulrich (1998) and Erikson (2002), intellectual capital is based on an entrepreneur’s level of competence and commitment. Entrepreneurial competence, as defined by Erikson (2002), is the ability of an entrepreneur to identify opportunities and obtain the necessary resources to pursue the opportunities. Ulrich (1998) acknowledges that outside sources provide an important tool for increasing the level of competency within an organization. Commitment reflects the willingness of entrepreneurs to use their emotional, intellectual, and physical energy to see the venture through to fruition (Erikson, p. 282). As suggested by Chrisman (1999), participation in a small business assistance program is a signal of an entrepreneur’s commitment to a new venture.

Economic development programs offered by community colleges, whether aimed at general workforce training issues or specifically at meeting the needs of small business owners, provide a strategic tool for state policymakers. Research shows that community
colleges now play an important role in local and state economic development efforts (Liner, 1987; Luke, Ventriss, Reed & Reed, 1988; Melville & Chmura, 1991; Dougherty & Bakia, 1999). Melville and Chmura (1991) believe that a part of the community college’s mission is to play a direct role in state economic development. Many states have created a strategic alignment between the mission of their community college systems and economic development plans (Melville & Chmura, p. 14). Liner (1987) reviewed state economic development plans and found that many emphasize training and education as key strategic issues. Policymakers in California, Florida, Illinois, Michigan, New York, North Carolina, Pennsylvania, and Virginia, in particular, consider community colleges an important tool in their overall state economic development strategy, and provide additional resources to these institutions for that very purpose (Katsinas & Lacey, 1989; Dougherty & Bakia, 1999).

According to Luke, Ventriss, Reed, and Reed (1988), colleges and universities have become the “cornerstone” of state and local economic development plans (p. 144). They argue that state economic development programs must embrace four guidelines to revitalize the state business environment: interdependence, innovation, integration, and investment. These guidelines dictate that state agencies integrate their program offerings to create an interconnected system. A vital member of that system is the community college.

The ability of the community college to meet the needs of its region through community and economic development programs has enhanced its relationship with the business community. The community service function of the community college has expanded over the past three decades to include diverse economic and community development activities (Forde, 2002). This function has allowed many community colleges to develop effective partnerships with other agencies. As Armes (1989) points out, this has
put community colleges where many universities “wish to be—in long-term, mutually
beneficial collaborations with the private sector” (Armes, p. 274).

North Carolina has traditionally been a national leader in coordinating various state
and local agencies to providing resources and services for business and industry, especially
small businesses. The Department of Commerce provides five valuable services aimed at
serving existing businesses and promoting new businesses. These services include assistance
in the areas of site selection, market research and analysis, human resources, environmental
issues, and incentive plans (Department of Commerce, March 10, 2003,
www.investnc.com/helping/services.asp). The state, however, does not rely solely on the
Department of Commerce to serve the business community. The Department of Commerce
works collaboratively with countless other federal, state, and local agencies to develop
services for businesses. Some of these agencies include the following: (1) Small Business
Administration, (2) United States Department of Agriculture’s Office of Rural Development,
(3) Appalachian Regional Commission, (4) MDC, Inc., (5) Self-Help Credit Union, (6) North
Carolina Citizens for Business and Industry, (7) North Carolina Rural Economic
Development Center, (8) Cooperative and Industrial Extension Service, (9) North Carolina
Biotechnology Center, and (10) North Carolina Economic Development Board. In addition,
most communities have a Chamber of Commerce and an Economic Development
Commission to serve their local constituents. Collectively, these organizations work together
to meet the needs of the business community in North Carolina.

North Carolina also relies heavily on its institutions of higher education to play a role
in economic development. The state is fortunate to have both a strong university system and
community college system. The University of North Carolina System consists of 16 member
institutions, strategically located throughout the state. The North Carolina Community College System is made up of 58 institutions that serve all 100 counties in the state. Both systems offer a small business assistance program for local and regional clients.

The Small Business and Technology Development Centers in North Carolina are based on a cooperative effort between the Small Business Administration and the University of North Carolina System (Small Business and Technology Development Center, March 10, 2003, www.sbtdc.org). Since 1984, Small Business and Technology Centers have offered services aimed directly at small business owners within their geographical region. These services include confidential business counseling, government procurement and technology transfer programs, research services, and educational workshops and seminars on critical business topics (Small Business and Technology Development Center, March 10, 2003, www.sbtdc.org).

According to the 2001 Annual Report of the North Carolina Small Business and Technology Development Center, the 17 centers throughout the state served more than 6,000 total clients in 2001, with 75% of these being existing businesses. Furthermore, approximately 25% of these clients were classified as high growth businesses. High growth businesses typically experience 20% more growth in annual revenues or employment. Survival is often the main focus of new or young businesses, especially in the first six years of existence. The businesses that have worked with Small Business and Technology Development Centers in North Carolina have maintained an 85% survival rate over that time frame, compared to the national average of 39% (Small Business and Technology Development Center Annual Report, 2001). The Small Business and Technology
Development Centers in North Carolina are closely aligned with the strategic objectives of the state’s Department of Commerce.

In addition to its university system, North Carolina has used its community college system as a strong economic development tool (Campbell & Faircloth, 1982; Scott, 1987; Katsinas & Lacey, 1989; Lancaster, 1998; Dougherty & Bakia, 1999). The North Carolina Community College System has adopted a service-oriented culture that encourages the creation of entrepreneurial programs for the local business community (Grubb, Badway, Bell, Bragg & Russman, 1997). The mission of the Economic and Workforce Development Division of the North Carolina Community College System is to provide high quality services that “enable North Carolinians to acquire knowledge and skills to obtain and maintain prosperous career opportunities and enhance their quality of life, and provide North Carolina businesses and industries with a world-class workforce and a competitive advantage as a result of their presence in North Carolina” (North Carolina Community College System, March 10, 2003, www.ncccs.cc.nc.us). The Economic and Workforce Development Division offers programs in seven categories to meet the needs of business and industry. These categories include the following: (1) New and Expanding Industry Training, (2) Occupational Continuing Education, (3) Small Business Center Network, (4) Human Resource Development, (5) Focused Industrial Training, (6) Workforce Initiatives, and (7) Training Initiatives (North Carolina Community College System, March 10, 2003, www.ncccs.cc.nc.us).

The primary community college program in North Carolina aimed specifically at serving the needs of small business owners is the Small Business Center. Small Business Centers were first established on eight community college campuses in 1984 (Economic &
By 1994, all 58 community colleges had established a Small Business Center. This network of centers represents one of the largest state sponsored small business assistance systems of its type in country. The mission of the Small Business Center Network is to increase the “success rate and the number of viable small businesses in North Carolina by providing quality, readily accessible assistance to prospective and existing small business owners and their employees” (North Carolina Community College System, February 1, 2003, www.ncccs.cc.nc.us). To accomplish this mission, each Small Business Center serves as a community-based provider of education, training, and counseling for small businesses.

Summary

Community colleges play an important role in the economic development arena. These institutions offer a diverse array of programs aimed at meeting the needs of local business and industry. Many states now view community colleges as one of their best economic development tools to serve existing businesses and promote entrepreneurship. Because of their importance, economic development programs offered by community colleges must be designed in a manner that produces the best results for their target publics.

Small businesses serve as the foundation of the American economy. Approximately 99% of businesses in the United States are classified as small businesses. These enterprises provide an opportunity for millions of people to realize the “American Dream.” Although many small businesses currently exist, they are faced with a constant struggle for survival in a fast-paced global economy. These businesses are faced with a multitude of administrative, operating, and strategic problems. Research has shown that some problems are more
prevalent during the formation of a business, while others become more relevant as the firm
grows and matures. Small business assistance programs, such as Small Business Centers, are
needed to provide the necessary guidance to help these businesses survive, especially in the
initial start-up and early growth stages. These programs serve a vital role by offering
professional counseling to new and young businesses that would probably fail without such a
service.

Economic and community development programs offered by community colleges are
valuable resources for local and regional businesses. Community colleges must continue to
offer effective economic development activities as a part of their community service
function. Many states rely on community colleges to provide their local region with
programs aimed at educating the workforce and stimulating the economy. While each
college should focus on meeting the specific needs of its community, economic development
programs must be organized in a manner that is consistent with the mission of the institution.
As pointed out by Garza and Eller (1998), the economic environment for the new century
demands a greater use of technology, lifelong learning and flexibility, long-term planning,
and community-based strategies for growth, and community colleges are fully capable of
providing the necessary leadership for this transformation.
Chapter Three

Introduction

This chapter contains the research design and methodology used in completing this study. The specific topics discussed in the chapter include research design, instrumentation, validity and reliability, population, data collection, and statistical analysis.

Research Design

A survey research design was used for this study. This design accounts for a large proportion of the research done in the field of education (Borg & Gall, 1989). The objective of survey research is to describe and explain characteristics of a definable group of persons, institutions, or objects (Jaeger, 1984). Survey research can also be used to explore relationships between multiple variables and make planned comparisons (Borg & Gall, 1989; Sapsford, 1999). This methodology often plays an integral role in diagnosing the educational needs of a target audience (Boone, 1985; Rothman & Gant, 1987; Voss, Tordella & Brown, 1987).

This study was based on a secondary data source. Data were collected from records of clients that received counseling from 8 Small Business Centers in the eastern region of North Carolina. The data gathered from these records were used to answer the research questions and test the hypotheses included in this study.
Instrumentation

Each client that receives counseling from a Small Business Center must complete a “Request for Counseling” form. All Small Business Centers use the same request form. The request form is comprised of a series of questions intended to gather both informational and demographical data (see Appendix A). In addition, these forms are used to record a client’s problem(s) and to note the type of counseling provided by staff members of the Small Business Center. While these records contain valuable data on client characteristics, business problems, and types of counseling, little research has been conducted on the relationship between these variables.

The problem areas and types of counseling provided by Small Business Centers are divided into the following 19 categories: (1) accounting and records, (2) business feasibility, (3) business liquidation/sale, (4) business plan development, (5) computer systems, (6) credit and collections, (7) engineering and R&D, (8) estimating and bidding, (9) financial analysis and financial controls, (10) government procurement, (11) inventory control, (12) international trade, (13) legal needs, (14) management and supervision, (15) market research, (16) marketing and sales, (17) personnel, (18) patents and trademarks, and (19) sources of capital. For the purposes of this study, these 19 problems areas were placed into the following categories: (1) administrative, (2) operating, and (3) strategic.

Validity and Reliability

According to Sapsford (1999), validity of measurement in survey research is the extent to which the data constitutes an accurate measurement of what is suppose to be measured. Small Business Center directors are oriented and trained to ensure they
understand the methodology used to classify their client’s business problems. In addition, each Small Business Center uses the same “Request for Counseling” form and problem classification scheme.

Another issue is population validity. Sapsford (1999) defines population validity as the extent to which the sample is an accurate representation of the population it is intended to represent. A random number generator was used to ensure the randomness of the sample. Because this study featured the retail and service industry sectors, the operating and startup stages of business development, and gender, the sample was based on clients that matched these categories.

Reliability of a measuring instrument requires that it produce consistent measurements of the same thing (Sapsford, p. 107). Inter-rater reliability involves the use of two or more judges and is a common technique used to ensure reliability. In order to ensure a consistent fit between the 19 types of problems identified on the Small Business Center’s “Request for Counseling” form and the 3 categories developed by Chrisman and Leslie (1989), a panel of professionals with experience in working with small businesses was consulted. The panel consisted of the Small Business Center director at Coastal Carolina Community College, two business counselors from the Small Business and Technology Center at East Carolina University, and the director of the Center for Economic Education at East Carolina University (see Appendix C). Based on the panel’s suggestions, the classification scheme shown on the following page in Table 3 was developed:
Table 3. Problem Classification Categories

<table>
<thead>
<tr>
<th>Administrative problems:</th>
<th>Accounting &amp; Records, Collections &amp; Credit, Financial Analysis &amp; Cost Control, Government Procurement, Legal Needs, Management &amp; Supervision, Personnel, Sources of Capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating problems:</td>
<td>Computer Systems, Engineering &amp; R&amp;D, Estimating &amp; Bidding, Inventory Control, Marketing &amp; Sales</td>
</tr>
</tbody>
</table>

Population

The businesses used in this study were located in the eastern region of North Carolina and have been served by a Small Business Center in the region. As defined by the North Carolina Department of Commerce, the eastern region consists of the following counties: Carteret, Craven, Duplin, Edgecombe, Greene, Jones, Lenoir, Nash, Onslow, Pamlico, Pitt, Wayne, and Wilson. Eleven Small Business Centers serve this 13 county region. The population used in this study included clients that received counseling from Small Business Centers at the following community colleges: (1) Carteret Community College in Morehead City, North Carolina; (2) Coastal Carolina Community College in Jacksonville, North Carolina; (3) Craven Community College in New Bern, North Carolina; (4) Edgecombe Community College in Tarboro, North Carolina; (5) Lenoir Community College in Kinston, North Carolina; (6) Pitt Community College in Greenville, North Carolina; (7) Wayne Community College in Goldsboro, North Carolina; and (8) Wilson Community College in Wilson, North Carolina.
The Small Business Centers at James Sprunt Community College, Nash Community College, and Pamlico Community College were excluded from this study. Although the centers at James Sprunt Community College and Nash Community College offer a counseling service, they emphasize workshops as their primary function. The low number of counseling clients at these two centers made it difficult to gather a random sample based on the three independent variables used in the study. The director at Pamlico Community College respectfully declined to participate in the study due to confidentiality reasons.

Data Collection

Secondary data were used in this study. A major advantage of secondary data is that it allows a researcher to concentrate more on the theoretical aims of the study rather than the methodological problems of collecting new data (Hakim, 1982). New research based on previously collected data can still be very relevant to current issues (Mason, Taeuber & Winsborough, 1977; Hakim, 1982). Secondary data are most often classified into two categories: microdata and aggregate data. The data used in this study falls into the category of microdata, which is the term used to represent datasets that contain information on individual responses, whether the respondents are individuals or organizations (Hakim, 1982).

A valid technique for collecting survey information is to examine administrative records (Rothman & Gant, 1987; Voss, Tordella & Brown, 1987). An important advantage of collecting data from records is the detail of the information. Records can offer a large amount of rich data in a variety of areas, such as client characteristics, services provided, and services needed (Rothman & Gant, 1987). According to Voss, Tordella, and Brown (1987),
data from administrative records is often effective in assessing community needs. The counseling request records on file at each Small Business Center offers a great deal of categorical information about the characteristics of their small business clients and the types of problems most commonly encountered by these businesses. Chrisman and Leslie (1989) recommend the use of clients’ files as an importance source of information for studying small business assistance programs.

The data used in this study were taken from the counseling request forms from the 2001-2002 and 2002-2003 academic years. The directors of the participating Small Business Centers received a letter outlining the objectives and methodology of the research project (see Appendix B). Approximately two weeks after the letter was sent, the directors were contacted by phone and permission was granted to visit each center and review their “Request for Counseling” forms from the 2001-2002 and 2002-2003 academic years.

A simple random sampling technique was used to select participants from the experimentally accessible population. A random sample is necessary if inferential statistics are used to determine relationships (Borg & Gall, p. 220). A computer was used to generate an appropriate list of random numbers to ensure a suitable sample was selected. A random sample was taken based on each of the three independent variables.

Sample size is always an important factor to consider with survey research. The total data set used in this research process consisted of 300 clients. The general rule is the larger the sample size the better. However, because of resource limitations, researchers must often rely on smaller sample sizes. Nevertheless, if the sample size is too small it is difficult to establish a statistical relationship between variables. According to Borg and Gall (1989), in survey research it is desirable to have at least 100 subjects in each major subgroup and 20 to
50 subjects in each minor subgroup. Sapsford (1999) suggests that in survey research you need at least 40 cases for each independent variable used in the study to ensure meaningful findings.

Prior survey research conducted by Chrisman and Leslie (1989), Terpstra and Olson (1993), and Chrisman and McMullan (2000) used sample sizes of 74 firms, 115 firms, and 169 firms respectively. Other relevant research projects on small business problems by Kazanjian (1988) and Nahavandi and Chesteen (1988) include sample sizes of 105 businesses and 106 businesses. Based on the sample size recommendations offered by Borg and Gall (1989) and Sapsford (1999), and prior studies by Kazanjian (1988), Nahavandi and Chesteen (1988), Chrisman and Leslie (1989), Terpstra and Olson (1993), and Chrisman and McMullan (2000), the overall sample size of 300 businesses and the numbers in each grouping were sufficient.

Statistical Analysis

Phillips (1997) encourages the use of statistical tools in determining relationships and making comparisons between various groups. As recommended by Borg and Gall (1989), the first step in statistical analysis is to compute descriptive statistics for each comparison group in a study. Tables were used in this study to present the frequency counts for each comparison group. Frequency counts were used to answer the first seven research questions in the study.

Research questions eight through fourteen required the use of statistical tests to demonstrate significance. Because the dependent variable used in this study featured categorical data, nonparametric statistical tests were used to test the null hypothesis.
Pearson’s chi-square was performed to determine whether groups differed significantly for each independent variable at a .05 significance level. Pearson’s chi-square is the most frequently used statistical tool by educational researchers in studies involving frequency counts (Borg & Gall, 1989; Anastas, 1999). A chi-square probability of .05 or less is commonly interpreted by social scientists as justification for rejecting the null hypothesis that the row variable is unrelated to the column variable (Anastas, 1999).

Pearson’s chi-square calculates a p-value that is used to test the hypothesis of no association of columns and rows in tabular data. It is based on the cells, rows, and columns of a cross-tabulation table. The null hypothesis is tested by comparing the number observed to fall into each category or cell in the table with the number expected to fall in each category or cell (Anastas, 1999). The chi-square statistic is calculated in the following manner: (1) find the expected frequency for each cell in the table, (2) subtracting it from the actual count or observed frequency, (3) squaring the difference, (4) dividing that number by the number expected in the cell, and (5) adding up the resulting numbers for all cells in the table (Anastas, p. 494). If the difference between the expected count and the observed account is sufficiently large, the null hypothesis will be rejected and one can assert that the sample difference probably reflects a true difference in the population (Sapsford, 1999).

In addition to Pearson’s chi-square, lambda was used to measure the approximate association between the independent and dependent variables. Lambda is used to measure the association between nominal variables and operates on the proportionate reduction of error logic. This means that two variables are related to each other to the extent that knowing one attribute on a variable will help the researcher guess another attribute (Babbie, Halley & Zaino, 2000).
The value of lambda, which can range between 0.00 and 1.00, indicates the strength of the relationship between two nominal variables (Babbie, Halley & Zaino, 2000). The closer the value of lambda is to 1.00, the stronger the relationship between variables. Table 4 offers the general guidelines for interpreting the value of lambda.

**Table 4. General Guidelines for Interpreting Lambda**

<table>
<thead>
<tr>
<th>Strength of Association</th>
<th>Lambda Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>0.00</td>
</tr>
<tr>
<td>Weak/Uninteresting association</td>
<td>.01 to .09</td>
</tr>
<tr>
<td>Moderate/Worth noting</td>
<td>.10 to .29</td>
</tr>
<tr>
<td>Strong association/Extremely interesting</td>
<td>.30 to .99</td>
</tr>
<tr>
<td>Perfect association/Strongest possible</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Source: (Babbie, Halley & Zaino, 2000)

Because of the sample size used in this study, the 11.5 version of Statistical Package for Social Science (SPSS) was used to calculate Pearson’s chi-square and lambda. The frequencies, crosstabulations, p-values, and lambda values produced by a SPSS program were used to answer the research questions and hypotheses featured in this study.
Chapter Four

The purpose of this chapter was to offer a profile of respondents and answer the 14 research questions and test the 12 hypotheses included in the study by summarizing the results produced by the frequency counts, crosstabulations, and the Pearson’s chi square and lambda statistical tests. This study featured industry sector, business development status, and gender as the three independent variables and type of business problems as the dependent variable.

Profile of Respondents

A random sample of 300 businesses was used in this study. The sample was taken from clients that received confidential counseling from Small Business Centers in eastern North Carolina. The clients featured in this study received counseling from the Small Business Centers at Carteret Community College, Coastal Carolina Community College, Craven Community College, Edgecombe Community College, Lenoir Community College, Pitt Community College, Wayne Community College, and Wilson Community College.

As seen below in Table 5, 40.3% of the businesses used in this study came from the retail sector and 59.7% from the service sector.

<table>
<thead>
<tr>
<th>Industry Sector</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail</td>
<td>121</td>
<td>40.3%</td>
</tr>
<tr>
<td>Service</td>
<td>179</td>
<td>59.7%</td>
</tr>
</tbody>
</table>

Tables 6 and 7 on the following page provided a breakdown of the sample based on business development status and the owner’s gender. Of the 300 businesses used in this study, 42%
were startup and 58% were operating, while 52.3% were female-owned business and 47.7% were male-owned businesses.

Table 6. Business Development Status Breakdown

<table>
<thead>
<tr>
<th>Business Development Status</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating</td>
<td>126</td>
<td>42.0%</td>
</tr>
<tr>
<td>Startup</td>
<td>174</td>
<td>58.0%</td>
</tr>
</tbody>
</table>

Table 7. Gender Breakdown

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>157</td>
<td>52.3%</td>
</tr>
<tr>
<td>Male</td>
<td>143</td>
<td>47.7%</td>
</tr>
</tbody>
</table>

The data presented in Tables 8, 9, and 10 provided a more detailed breakdown of the sample included in the study. Table 8 provided a breakdown according to industry sector and business development status. As seen below in Table 8, 17% of the businesses in the sample are classified as retail and operating, 23.3% are retail and startup, 25% are service and operating, and 34.7% are service and startup.

Table 8. Industry Sector and Business Development Status Breakdown

<table>
<thead>
<tr>
<th>Bus Status</th>
<th>Industry</th>
<th>Percent</th>
<th>Industry</th>
<th>Percent</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating</td>
<td>Retail</td>
<td>51</td>
<td>Service</td>
<td>75</td>
<td>126</td>
</tr>
<tr>
<td>Startup</td>
<td></td>
<td>70</td>
<td></td>
<td>104</td>
<td>174</td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td>121</td>
<td></td>
<td>179</td>
<td>300</td>
</tr>
</tbody>
</table>

Table 9 on the following page provided a breakdown of the sample according to industry sector and gender. As seen in Table 9, 22.7% of the sample is categorized as retail businesses and female-owned, 17.6% as retail and male-owned, 29.7% as service and female-owned, and 30% as service and male-owned.
Table 9. Industry Sector and Gender Breakdown

<table>
<thead>
<tr>
<th>Gender</th>
<th>Industry</th>
<th>Percent</th>
<th>Industry</th>
<th>Percent</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>Retail</td>
<td>68</td>
<td>Service</td>
<td>89</td>
<td>157</td>
</tr>
<tr>
<td></td>
<td></td>
<td>22.7%</td>
<td></td>
<td>29.7%</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td></td>
<td>53</td>
<td></td>
<td>90</td>
<td>143</td>
</tr>
<tr>
<td></td>
<td></td>
<td>17.6%</td>
<td></td>
<td>30.0%</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td>121</td>
<td></td>
<td>179</td>
<td>300</td>
</tr>
</tbody>
</table>

Table 10 provided a breakdown according to business development status and gender. Of the 300 businesses included in the sample, 19.3% of the female-owned firms and 22.7% of the male-owned firms were operating, while 33% of the female-owned firms and 25% of the male-owned firms were classified as startup.

Table 10. Business Development Status and Gender Breakdown

<table>
<thead>
<tr>
<th>Gender</th>
<th>Bus Status</th>
<th>Percent</th>
<th>Bus Status</th>
<th>Percent</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>Operating</td>
<td>58</td>
<td>Startup</td>
<td>99</td>
<td>157</td>
</tr>
<tr>
<td></td>
<td>19.3%</td>
<td></td>
<td>33.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>68</td>
<td></td>
<td>44</td>
<td>58</td>
<td>143</td>
</tr>
<tr>
<td></td>
<td>22.7%</td>
<td></td>
<td>25.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>126</td>
<td></td>
<td>174</td>
<td></td>
<td>300</td>
</tr>
</tbody>
</table>

Table 11 provided a breakdown according to industry sector, business development status, and gender.

Table 11. Industry Sector, Business Development Status, and Gender Breakdown

<table>
<thead>
<tr>
<th>Gender</th>
<th>Bus Devel Status</th>
<th>Industry</th>
<th>Percent</th>
<th>Industry</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>Operating</td>
<td>Retail</td>
<td>27</td>
<td>Service</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>9.0%</td>
<td></td>
<td>10.3%</td>
</tr>
<tr>
<td>Female</td>
<td>Startup</td>
<td></td>
<td>41</td>
<td></td>
<td>58</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>13.7%</td>
<td></td>
<td>19.3%</td>
</tr>
<tr>
<td>Male</td>
<td>Operating</td>
<td></td>
<td>24</td>
<td></td>
<td>44</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>8.0%</td>
<td></td>
<td>14.7%</td>
</tr>
<tr>
<td>Male</td>
<td>Startup</td>
<td></td>
<td>29</td>
<td></td>
<td>46</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>9.7%</td>
<td></td>
<td>15.3%</td>
</tr>
</tbody>
</table>

Of the 300 businesses included in the sample, 9% of the firms were retail, operating, and female-owned, 10.3% were service, operating, and female-owned, 13.7% were retail, startup, and female-owned, and 19.3% were service, startup, and female-owned. Additionally, 8% of the firms were retail, operating, and male-owned, 14.7% were service, operating, and male-owned.
owned, 9.7% were retail, startup, and male-owned, and 15.3% were service, startup, and male-owned.

The dependent variable used in the study was the types of problems encountered by the 300 businesses in the sample. Based on a prior classification system used by Ansoff (1965) and Chrisman and Leslie (1989), these problems were classified as administrative, operating, or strategic. As shown below in Table 12, 33.3% of the problems faced by businesses in this sample were administrative, while 12.7% were operating, and 54% were strategic.

Table 12. Business Problems Breakdown

<table>
<thead>
<tr>
<th>Business Problems</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative</td>
<td>100</td>
<td>33.3%</td>
</tr>
<tr>
<td>Operating</td>
<td>38</td>
<td>12.7%</td>
</tr>
<tr>
<td>Strategic</td>
<td>162</td>
<td>54.0%</td>
</tr>
</tbody>
</table>

Responses to Research Questions and Testing of Hypotheses

Responses to Research Questions 1 Through 7

The objective of this study was stated in 14 research questions and 12 hypotheses. The frequency counts produced by crosstabulations were used to answer the first seven research questions in the study. These counts indicated the types of problems encountered by the 300 small businesses in the sample. The first three research questions featured an examination of the types of problems based on each of the three independent variables. The following four research questions included the types of problems encountered by small businesses based on all possible combinations of independent variables.
Research Question 1

What types of problems are encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina based on their industry sector (retail or service)?

The crosstabulation between type of problems and industry sector can be seen in detail below in Table 13.

Table 13. Problems & Industry Sector Crosstabulation

<table>
<thead>
<tr>
<th>Problems</th>
<th>Industry</th>
<th>Percent</th>
<th>Industry</th>
<th>Percent</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative</td>
<td>Retail</td>
<td>37</td>
<td>Service</td>
<td>63</td>
<td>100</td>
</tr>
<tr>
<td>Operating</td>
<td>14</td>
<td>11.6%</td>
<td>24</td>
<td>13.4%</td>
<td>38</td>
</tr>
<tr>
<td>Strategic</td>
<td>70</td>
<td>57.9%</td>
<td>92</td>
<td>51.4%</td>
<td>162</td>
</tr>
<tr>
<td>Totals</td>
<td>121</td>
<td>57.9%</td>
<td>179</td>
<td>51.4%</td>
<td>300</td>
</tr>
</tbody>
</table>

Thirty-seven (30.5%) of the retail businesses in this study experienced administrative problems, compared to 63 (35.2%) service businesses with administrative problems. Fourteen (11.6%) retail businesses and 24 (13.4%) service businesses encountered operating problems. Seventy (57.9%) retail firms and 92 (51.4%) service firms sought counseling for strategic problems.

There is a consistent distribution of problems encountered by both retail and service firms when based on percentages. The most common problems faced by both retail and service businesses in this sample were strategic in nature. The second most common type of problem for retail and service businesses was administrative, while the least common type of problem for firms in both industry sectors was in the area of operations.
Research Question 2

What types of problems are encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina based on their business development status (operating or startup)?

The crosstabulation between type of problems and business development status can be seen in detail below in Table 14.

Table 14. Problems & Business Development Status Crosstabulation

<table>
<thead>
<tr>
<th>Problems</th>
<th>Bus Status</th>
<th>Percent</th>
<th>Bus Status</th>
<th>Percent</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative</td>
<td>Operating</td>
<td>60</td>
<td>47.6%</td>
<td>40</td>
<td>23.0%</td>
</tr>
<tr>
<td>Operating</td>
<td>26</td>
<td>20.6%</td>
<td>12</td>
<td>6.9%</td>
<td>38</td>
</tr>
<tr>
<td>Strategic</td>
<td>40</td>
<td>31.8%</td>
<td>122</td>
<td>70.1%</td>
<td>162</td>
</tr>
<tr>
<td>Totals</td>
<td>126</td>
<td></td>
<td>174</td>
<td></td>
<td>300</td>
</tr>
</tbody>
</table>

Sixty (47.6%) of the operating businesses in this study experienced administrative problems, compared to 40 (23%) startup businesses with administrative problems. Twenty-six (20.6%) operating businesses and 12 (6.9%) startup businesses encountered operating problems. Forty (31.8%) operating firms and 122 (70.1%) startup firms faced strategic problems.

The percentage distribution of problems encountered by operating and startup firms was not as consistent as the distribution based on industry sector. Whereas the most common type of problems encountered by operating businesses were administrative, the majority of problems facing the startup businesses in this sample were strategic. Approximately 7 out of every 10 startup businesses in this sample encountered strategic problems. Also of note was that 20.6% of operating businesses experienced operating problems, while only 6.9% of startup businesses experienced these types of problems.
Research Question 3

What types of problems are encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina based on their gender (female or male)?

The crosstabulation between type of problems and business development status can be seen in detail below in Table 15.

Table 15. Problems & Gender Crosstabulation

<table>
<thead>
<tr>
<th>Problems</th>
<th>Gender</th>
<th>Percent</th>
<th>Gender</th>
<th>Percent</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative</td>
<td>Female</td>
<td>53</td>
<td>Male</td>
<td>47</td>
<td>100</td>
</tr>
<tr>
<td>Operating</td>
<td>16</td>
<td>10.2%</td>
<td>22</td>
<td>15.4%</td>
<td>38</td>
</tr>
<tr>
<td>Strategic</td>
<td>88</td>
<td>56.0%</td>
<td>74</td>
<td>51.7%</td>
<td>162</td>
</tr>
<tr>
<td>Totals</td>
<td>157</td>
<td></td>
<td>143</td>
<td></td>
<td>300</td>
</tr>
</tbody>
</table>

Fifty-three (33.8%) of the female-owned businesses in this study experienced administrative problems, compared to 47 (32.9%) male-owned businesses with administrative problems. Sixteen (10.2%) female-owned businesses and 22 (15.4%) male-owned businesses encountered operating problems. Eighty-eight (56%) female-owned firms and 74 (51.7%) male-owned firms faced strategic problems.

The percentage distribution of problems encountered by female-owned and male-owned firms was consistent, much like the distribution based on industry sector. The most common problems for both female-owned and male-owned businesses were strategic in nature. The second most common type of problem for female-owned and male-owned businesses was administrative, while the least common type of problem was in the area of operations.
Research Question 4

What types of problems are encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina based on both their industry sector and business development status?

The crosstabulation between type of problems and industry sector and business development status can be seen in detail below in Table 16.

Table 16. Problems & Industry Sector and Business Development Status Crosstabulation

<table>
<thead>
<tr>
<th>Bus Status</th>
<th>Problems</th>
<th>Industry</th>
<th>Percent</th>
<th>Industry</th>
<th>Percent</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Administrative</td>
<td>Retail</td>
<td>24</td>
<td>47.1%</td>
<td>Service</td>
<td>36</td>
</tr>
<tr>
<td>Operating</td>
<td>Operating</td>
<td></td>
<td>9</td>
<td>17.6%</td>
<td></td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Strategic</td>
<td></td>
<td>18</td>
<td>35.3%</td>
<td></td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>Totals</td>
<td></td>
<td>51</td>
<td>18.6%</td>
<td></td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>Administrative</td>
<td></td>
<td>13</td>
<td>18.6%</td>
<td></td>
<td>27</td>
</tr>
<tr>
<td>Startup</td>
<td>Operating</td>
<td></td>
<td>5</td>
<td>7.1%</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Strategic</td>
<td></td>
<td>52</td>
<td>74.3%</td>
<td></td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>Totals</td>
<td></td>
<td>70</td>
<td></td>
<td></td>
<td>104</td>
</tr>
</tbody>
</table>

A total of 51 retail businesses and 75 service businesses in this study were classified as operating. Of the 51 retail businesses that were classified as operating, 24 (47.1%) firms experienced administrative problems, 9 (17.6%) firms experienced operating problems, and 18 (35.3%) firms experienced strategic problems. The problems encountered by the 75 operating service firms included 36 (48%) firms with administrative problems, 17 (22.7%) firms with operating problems, and 22 (29.3%) firms with strategic problems.

A total of 70 retail businesses and 104 service businesses in this study were classified as startup. Of the 70 retail businesses that were classified as startup, 13 (18.6%) firms experienced administrative problems, 5 (7.1%) firms experienced operating problems, and 52 (74.3%) firms experienced strategic problems. The problems encountered by the 104 startup
service firms included 27 (26%) firms with administrative problems, 7 (6.7%) firms with operating problems, and 70 (67.3%) firms with strategic problems.

The most common type of problem facing retail firms classified as operating (47.1%) was administrative, while startup retail firms (74.3%) most often encountered strategic problems. As was the case with retail firms, the most common type of problems facing service firms classified as operating (48%) were administrative, while startup service firms (67.3%) most often encountered strategic problems. Regardless of industry sector, the most common type of problem facing operating firms in this study was administrative problems, while the most common type of problem facing startup firms was strategic problems. A total of 60 (47.6%) retail and service firms in the sample that were operating experienced administrative problems, while 122 (70.1%) startup retail and service firms experienced strategic problems. The least common type of problem for firms (12.7%), regardless of industry sector or business development status, was operating problems.

Research Question 5

What types of problems are encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina based on both their industry sector and gender?

The crosstabulation between type of problems and industry sector and gender can be seen in detail in Table 17 on the following page. A total of 68 retail businesses and 89 service businesses in this study featured female owners. Of the 68 retail businesses that were female-owned, 23 (33.8%) firms experienced administrative problems, 9 (13.3%) firms experienced operating problems, and 36 (52.9%) firms experienced strategic problems. The problems encountered by the 89 female-owned service firms included 30 (33.7%) firms with
administrative problems, 7 (7.9%) firms with operating problems, and 52 (58.4%) firms with strategic problems.

Table 17. Problems & Industry Sector and Gender Crosstabulation

<table>
<thead>
<tr>
<th>Gender</th>
<th>Problems</th>
<th>Industry</th>
<th>Percent</th>
<th>Industry</th>
<th>Percent</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Administrative</td>
<td>Retail</td>
<td>23</td>
<td>33.8%</td>
<td>Service</td>
<td>30</td>
</tr>
<tr>
<td>Female</td>
<td>Operating</td>
<td>9</td>
<td>13.3%</td>
<td></td>
<td>7</td>
<td>7.9%</td>
</tr>
<tr>
<td></td>
<td>Strategic</td>
<td>36</td>
<td>52.9%</td>
<td></td>
<td>52</td>
<td>58.4%</td>
</tr>
<tr>
<td></td>
<td>Totals</td>
<td>68</td>
<td></td>
<td></td>
<td>89</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>Administrative</td>
<td>14</td>
<td>26.4%</td>
<td></td>
<td>33</td>
<td>33.7%</td>
</tr>
<tr>
<td></td>
<td>Operating</td>
<td>5</td>
<td>9.4%</td>
<td></td>
<td>17</td>
<td>18.9%</td>
</tr>
<tr>
<td></td>
<td>Strategic</td>
<td>34</td>
<td>64.2%</td>
<td></td>
<td>40</td>
<td>44.4%</td>
</tr>
<tr>
<td></td>
<td>Totals</td>
<td>53</td>
<td></td>
<td></td>
<td>90</td>
<td></td>
</tr>
</tbody>
</table>

A total of 53 retail businesses and 90 service businesses in this study had male owners. Of the 53 retail businesses that were male-owned, 14 (26.4%) firms experienced administrative problems, 5 (9.4%) firms experienced operating problems, and 34 (64.2%) firms experienced strategic problems. The problems encountered by the 90 male-owned service firms included 33 (33.7%) firms with administrative problems, 17 (18.9%) firms with operating problems, and 40 (44.4%) firms with strategic problems.

The most common type of problem facing both female-owned (52.9%) and male-owned (64.2%) retail firms was strategic problems. Similarly, the most common type of problems facing female-owned (58.4%) and male-owned (44.4%) service firms was strategic problems. Regardless of industry sector, the most common type of problem facing female-owned and male-owned firms in this study was strategic problems. A total of 88 (56.1%) female-owned retail and service firms in the sample experience strategic problems, while 74 (51.7%) male-owned retail and service firms experienced strategic problems. The least
common type of problem for firms (12.7%), regardless of industry sector or gender, was operating problems.

Research Question 6

What types of problems are encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina based on both their business development status and the gender?

The crosstabulation between type of problems and business development status and gender can be seen in detail below in Table 18.

Table 18. Problems & Business Development Status and Gender Crosstabulation

<table>
<thead>
<tr>
<th>Gender</th>
<th>Problems</th>
<th>Bus Status</th>
<th>Percent</th>
<th>Bus Status</th>
<th>Percent</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Operating</td>
<td></td>
<td>Startup</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>Administrative</td>
<td>30</td>
<td>51.7%</td>
<td>23</td>
<td>23.3%</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td>Operating</td>
<td>8</td>
<td>13.8%</td>
<td>8</td>
<td>8.0%</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Strategic</td>
<td>20</td>
<td>34.5%</td>
<td>68</td>
<td>68.7%</td>
<td>88</td>
</tr>
<tr>
<td></td>
<td>Totals</td>
<td>58</td>
<td></td>
<td>99</td>
<td></td>
<td>157</td>
</tr>
<tr>
<td>Male</td>
<td>Administrative</td>
<td>30</td>
<td>44.1%</td>
<td>17</td>
<td>22.7%</td>
<td>47</td>
</tr>
<tr>
<td></td>
<td>Operating</td>
<td>18</td>
<td>26.5%</td>
<td>4</td>
<td>5.3%</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>Strategic</td>
<td>20</td>
<td>29.4%</td>
<td>54</td>
<td>72.0%</td>
<td>74</td>
</tr>
<tr>
<td></td>
<td>Totals</td>
<td>68</td>
<td></td>
<td>75</td>
<td></td>
<td>143</td>
</tr>
</tbody>
</table>

A total of 58 operating businesses and 99 startup businesses in the sample were owned by females. Of the 58 operating businesses that were female-owned, 30 (51.7%) firms experienced administrative problems, 8 (13.8%) firms experienced operating problems, and 20 (34.5%) firms experienced strategic problems. The problems encountered by the 99 female-owned startup firms included 23 (23.3%) firms with administrative problems, 8 (8%) firms with operating problems, and 68 (68.7%) firms with strategic problems.
A total of 68 operating businesses and 75 startup businesses in this study featured male owners. Of the 68 operating businesses that were owned by males, 30 (44.1%) firms experienced administrative problems, 18 (26.5%) firms experienced operating problems, and 20 (29.4%) firms experienced strategic problems. The problems encountered by the 75 male-owned startup firms included 17 (22.7%) firms with administrative problems, 4 (5.3%) firms with operating problems, and 54 (72%) firms with strategic problems.

The most common type of problem facing female-owned operating firms (51.7%) was administrative, while the female-owned startup firms (68.7%) most often encountered strategic problems. Similarly, the most common type of problem facing male-owned operating businesses (44.1%) was administrative, while male-owned startup firms (72%) most often encountered strategic problems. Regardless of gender, the most common type of problem facing operating firms in this study was administrative problems, while the most common type of problem facing startup firms was strategic problems. A total of 60 (47.6%) operating firms in the study experienced administrative problems, while 122 (70.1%) startup firms experienced strategic problems. The least common type of problem for firms, regardless of business development status or gender, was operating problems. Male-owned operating firms, however, experienced the greatest number of operating problems compared to any other combination of independent variables. Eighteen (26.5%) of the male-owned operating firms encountered operating problems.

Research Question 7

What types of problems are encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina based on their industry sector, business development status, and the gender?
The crosstabulation between type of problems and industry sector, business development status, and gender can be seen in detail below in Table 19.

Table 19. Problems & Industry Sector, Business Development Status and Gender Crosstabulation

<table>
<thead>
<tr>
<th>Gender</th>
<th>Bus Status</th>
<th>Problems</th>
<th>Industry Percent</th>
<th>Industry Percent</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Retail</td>
<td>Service</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>Operating</td>
<td>Administrative</td>
<td>14 (51.9%)</td>
<td>16 (51.6%)</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Operating</td>
<td></td>
<td>4 (14.8%)</td>
<td>4 (12.9%)</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Strategic</td>
<td></td>
<td>9 (33.3%)</td>
<td>11 (35.5%)</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Totals</td>
<td></td>
<td>27</td>
<td>31</td>
<td>58</td>
</tr>
<tr>
<td></td>
<td>Startup</td>
<td>Administrative</td>
<td>9 (22.0%)</td>
<td>14 (24.1%)</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>Operating</td>
<td></td>
<td>5 (12.2%)</td>
<td>3 (5.2%)</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Strategic</td>
<td></td>
<td>27 (65.8%)</td>
<td>41 (70.7%)</td>
<td>68</td>
</tr>
<tr>
<td></td>
<td>Totals</td>
<td></td>
<td>41</td>
<td>58</td>
<td>99</td>
</tr>
<tr>
<td>Male</td>
<td>Operating</td>
<td>Administrative</td>
<td>10 (41.7%)</td>
<td>20 (45.5%)</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Operating</td>
<td></td>
<td>5 (20.8%)</td>
<td>13 (29.5%)</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Strategic</td>
<td></td>
<td>9 (37.5%)</td>
<td>11 (25.0%)</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Totals</td>
<td></td>
<td>24</td>
<td>44</td>
<td>68</td>
</tr>
<tr>
<td></td>
<td>Startup</td>
<td>Administrative</td>
<td>4 (13.8%)</td>
<td>13 (28.3%)</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Operating</td>
<td></td>
<td>0 (0.0%)</td>
<td>4 (8.7%)</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Strategic</td>
<td></td>
<td>25 (86.2%)</td>
<td>29 (63.0%)</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>Totals</td>
<td></td>
<td>29</td>
<td>46</td>
<td>75</td>
</tr>
</tbody>
</table>

A total of 27 retail businesses and 31 service businesses in this study were classified as operating and owned by females. Of the 27 retail businesses that were operating and female-owned, 14 (51.9%) firms experienced administrative problems, 4 (14.8%) firms experienced operating problems, and 9 (33.3%) firms experienced strategic problems. The problems encountered by the 31 service firms that were operating and female-owned included 16 (51.6%) firms with administrative problems, 4 (12.9%) firms with operating problems, and 11 (35.5%) firms with strategic problems.
A total of 41 retail businesses and 58 service businesses in this study were classified as startups and featured female owners. Of the 41 retail firms that were startups and owned by females, 9 (22%) firms experienced administrative problems, 5 (12.2%) firms experienced operating problems, and 27 (65.8%) firms experienced strategic problems. The problems encountered by the 58 female-owned startup firms in the service sector included 14 (24.1%) firms with administrative problems, 3 (5.2%) firms with operating problems, and 41 (70.7%) firms with strategic problems.

A total of 24 retail businesses and 44 service businesses in this study were classified as operating and owned by males. Of the 24 retail businesses that were operating and male-owned, 10 (41.7%) firms experienced administrative problems, 5 (20.8%) firms experienced operating problems, and 9 (37.5%) firms experienced strategic problems. The problems encountered by the 44 service firms that were operating and male-owned included 20 (45.5%) firms with administrative problems, 13 (29.5%) firms with operating problems, and 11 (25%) firms with strategic problems.

A total of 29 retail businesses and 46 service businesses in this study were classified as startup and owned by males. Of the 29 retail startup businesses that were male-owned, 4 (13.8%) firms experienced administrative problems and 25 (86.2%) firms experienced strategic problems. None of the retail startup firms with male owners experienced operating problems. The problems encountered by the 46 service firms that were startup and male-owned included 13 (28.3%) firms with administrative problems, 4 (8.7%) firms with operating problems, and 29 (63%) firms with strategic problems.

The most common type of problem facing both retail (51.9%) and service (51.6%) operating firms owned by females were administrative, while the female-owned startup firms
in the retail (65.8%) and service (70.7%) sectors most often encountered strategic problems. Similarly, the most common type of problem facing retail (41.7%) and service (45.5%) operating firms owned by males was administrative, while male-owned startup firms in the retail (86.2%) and service (63%) sectors most often encountered strategic problems.

The least common (12.7%) type of problems for firms, regardless of industry sector, business development status or gender, was operating problems. The lone exception was for male-owned operating businesses in the service sector. The least common type of problems for these firms (29.5%) was strategic in nature. Interestingly, no male-owned startup businesses from the retail sector in the sample sought assistance for operating problems.

Responses to Research Questions 8 Through 14

Research questions 8 through 14 featured 12 hypotheses and required the use of more rigorous statistical tests to demonstrate the possible existence, and strength, of relationships between the independent and dependent variables included in the study. The p-value produced by Pearson’s chi-square was used to determine whether or not a relationship existed in the population between the different study variables. A significance level of .05 was used for this study. If the p-value produced by Chi-square was greater than .05, the null hypothesis was rejected. If a significant relationship was found, lambda was used to determine the strength of the relationship. The value of lambda can range between 0.00 and 1.00. It indicates the strength of the relationship between various study variables. Table 4 on page 76 offers the general guidelines for interpreting lambda. A lambda score of .01 to .09 indicates a weak or uninteresting association, a score of .10 to .29 indicates moderate
strength that is worth noting, and a score of .30 to .99 indicates a strong association that is extremely interesting (Babbie, Halley & Zaino, 2000).

Research Question 8

Is there a relationship between the types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and their industry sector?

Research Hypothesis 1: There is no relationship between the types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and their industry sector.

Null Hypothesis 1: There is a relationship between the types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and their industry sector.

The Pearson’s chi-square and lambda statistical tests were used to answer the eighth research question and test the first research hypothesis. The Pearson’s chi-square test was based on a .05 level of significance.

Table 20. Pearson’s Chi-square and Lambda Results for Research Question 8

<table>
<thead>
<tr>
<th>Independent Variable(s)</th>
<th>Dependent Variable</th>
<th>P-value</th>
<th>Lambda</th>
<th>Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry Sector</td>
<td>Problems</td>
<td>.546</td>
<td>.000</td>
<td>No</td>
</tr>
</tbody>
</table>

As seen above in Table 20, the p-value produced by Pearson’s chi-square was .546. Since the p-value was greater than .005, the first null hypothesis was rejected. This indicated that no significant relationship exists between the type of business problems and the industry sector of clients that receive counseling from Small Business Centers in eastern North Carolina.
The value produced by lambda (.000) indicated that no association existed between industry type and the type of problems encountered by small businesses included in the sample. This indicated that we have improved our guess of the type of problems facing small businesses that received counseling from Small Business Centers in eastern North Carolina by 0% as a result of knowing its industry sector.

Research Question 9

Is there a relationship between the types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and their business development status?

Research Hypothesis 2: There is no relationship between the types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and their business development status.

Null Hypothesis 2: There is a relationship between the types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and their business development status.

The Pearson’s chi-square and lambda statistical tests were used to answer the ninth research question and test the second research hypothesis. The Pearson’s chi-square test was based on a .05 level of significance.

Table 21. Pearson’s Chi-square and Lambda Results for Research Question 9

<table>
<thead>
<tr>
<th>Independent Variable(s)</th>
<th>Dependent Variable</th>
<th>P-value</th>
<th>Lambda</th>
<th>Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bus Develop Status</td>
<td>Problems</td>
<td>.000</td>
<td>.145</td>
<td>Yes</td>
</tr>
</tbody>
</table>

As seen above in Table 21, the p-value produced by Pearson’s chi-square was .000. Since the p-value was less than .005, we fail to reject the second null hypothesis. This
indicated that a significant relationship does exist between the type of business problems and the business development status of clients that receive counseling from Small Business Centers in eastern North Carolina.

The value produced by lambda (.145) indicated that a moderate association existed between industry type and the type of problems encountered by small businesses included in the sample. This indicated that we have improved our guess of the type of problems facing small businesses that received counseling from Small Business Centers in eastern North Carolina by 14.5% as a result of knowing its business development status.

Research Question 10

Is there a relationship between types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and their gender?

Research Hypothesis 3: There is no relationship between the types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and their gender.

Null Hypothesis 3: There is a relationship between the types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and their gender.

The Pearson’s chi-square and lambda statistical tests were used to answer the tenth research question seven and test the third research hypothesis. The Pearson’s chi-square test was based on a .05 level of significance.
Table 22. Pearson’s Chi-square and Lambda Results for Research Question 10

<table>
<thead>
<tr>
<th>Independent Variable(s)</th>
<th>Dependent Variable</th>
<th>P-value</th>
<th>Lambda</th>
<th>Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Problems</td>
<td>.393</td>
<td>.000</td>
<td>No</td>
</tr>
</tbody>
</table>

As seen above in Table 22, the p-value produced by Pearson’s chi-square was .393. Since the p-value was greater than .005, the third null hypothesis was rejected. This indicated that no significant relationship exists between the type of business problems and the gender of clients that receive counseling from Small Business Centers in eastern North Carolina.

The value produced by lambda (.000) indicated that no association existed between gender and the type of problems encountered by small businesses included in the sample. This indicated that we have improved our guess of the type of problems facing small businesses that received counseling from Small Business Centers in eastern North Carolina by 0% as a result of knowing the owner’s gender.

Research Question 11

Is there a relationship between the types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and both their industry sector and business development status?

Research Hypothesis 4: There is no relationship between the types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and their industry sector, when controlling for business development status.

Null Hypothesis 4: There is a relationship between the types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and their industry sector, when controlling for business development status.
Research Hypothesis 5: There is no relationship between the types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and their business development status, when controlling for industry sector.

Null Hypothesis 5: There is a relationship between the types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and their business development status, when controlling for industry sector.

The Pearson’s chi-square and lambda statistical tests were used to answer the eleventh research question and test the fourth and fifth research hypotheses. The Pearson’s chi-square test was based on a .05 level of significance. It was necessary to perform two Pearson chi-square and lambda tests because the eleventh research question involved multiple variables that required individual analysis. The results of these tests were reported in two parts.

In the first Chi-square and lambda tests, the analysis was made based on the relationship between industry sector and business development status, holding the business development status constant.

Table 23. Pearson’s Chi-square and Lambda Results for Research Question 11-Part I

<table>
<thead>
<tr>
<th>Independent Variable(s)</th>
<th>Dependent Variable</th>
<th>P-value</th>
<th>Lambda</th>
<th>Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry Sector, Bus Devel Status-operating</td>
<td>Problems</td>
<td>.699</td>
<td>.000</td>
<td>No</td>
</tr>
<tr>
<td>Industry Sector, Bus Devel Status-startup</td>
<td>Problems</td>
<td>.525</td>
<td>.000</td>
<td>No</td>
</tr>
</tbody>
</table>

As seen above in Table 23, the p-value produced by Pearson’s chi-square was .699 for industry sector when controlling for operating businesses. The p-value produced by
Pearson’s chi-square was .525 for industry sector when controlling for startup businesses. Since both p-values were greater than .005, the fourth null hypothesis was rejected. This indicated that no significant relationship exists between the type of business problems and the industry sector and business development status of clients that receive counseling from Small Business Centers in eastern North Carolina, when controlling for business development status.

The values produced by lambda for industry sector when controlling for operating businesses was .000 and for industry sector when controlling for startup businesses was .000, indicating that no association existed between industry sector and business development status, when held constant, and the type of problems encountered by small businesses included in the sample. This indicated that we have improved our guess of the type of problems facing small businesses that received counseling from Small Business Centers in eastern North Carolina by 0% as a result of knowing its industry sector when controlling for both the operating and startup business development statuses.

In a second test, the analysis was made based on the relationship between industry sector and business development status, holding the industry sector constant.

Table 24. Pearson’s Chi-square and Lambda Results for Research Question 11-Part II

<table>
<thead>
<tr>
<th>Independent Variable(s)</th>
<th>Dependent Variable</th>
<th>P-value</th>
<th>Lambda</th>
<th>Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bus Devel Status</td>
<td>Problems</td>
<td>.000</td>
<td>.118</td>
<td>Yes</td>
</tr>
<tr>
<td>Industry Sector-retail</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bus Devel Status</td>
<td>Problems</td>
<td>.000</td>
<td>.161</td>
<td>Yes</td>
</tr>
<tr>
<td>Industry Sector-service</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As seen above in Table 24, the p-value produced by Pearson’s chi-square was .000 for business developments status when controlling for retail businesses. The p-value produced
by Pearson’s chi-square was .000 for business development status when controlling for service businesses. Since both p-values were less than .005, we can fail to reject the fifth null hypothesis. This indicated that a significant relationship does exist between the type of business problems and the business developments status and industry sector of clients that receive counseling from Small Business Centers in eastern North Carolina, when controlling for industry sector. The p-values produced by Pearson’s chi square (.000) in both cases indicated that a relationship would still exist even if the significance level was at .001.

The values produced by lambda for business development status when controlling for retail firms was .118 and for business development status when controlling for service firms was .161, indicating that a moderate association existed between business development status and industry sector, when held constant, and the type of problems encountered by small businesses included in the sample. This indicated that we have improved our guess of the type of problems facing small businesses that received counseling from Small Business Centers in eastern North Carolina by 11.8% as a result of knowing its business development status when controlling for retail firms, and by 16.1% as a result of knowing its business development status when controlling for service firms

Research Question 12

Is there a relationship between the types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and both their industry sector and gender?

Research Hypothesis 6: There is no relationship between the types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and their industry sector, when controlling for gender.
Null Hypothesis 6: There is a relationship between the types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and their industry sector, when controlling for gender.

Research Hypothesis 7: There is no relationship between the types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and their gender, when controlling for industry sector.

Null Hypothesis 7: There is a relationship between the types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and their gender, when controlling for industry sector.

The Pearson’s chi-square and lambda statistical tests were used to answer the twelfth research question and test the sixth and seventh research hypotheses. The Pearson’s chi-square test was based on a .05 level of significance. It was necessary to perform two Pearson chi-square and lambda tests because the twelfth research question involved multiple variables that required individual analysis. The results of these tests were reported in two parts.

In the first test, the analysis was made based on the relationship between industry sector and gender, holding gender constant.

Table 25. Pearson’s Chi-square and Lambda Results for Research Question 12-Part I

<table>
<thead>
<tr>
<th>Independent Variable(s)</th>
<th>Dependent Variable</th>
<th>P-value</th>
<th>Lambda</th>
<th>Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry Sector, Gender-female</td>
<td>Problems</td>
<td>.523</td>
<td>.000</td>
<td>No</td>
</tr>
<tr>
<td>Industry Sector, Gender-male</td>
<td>Problems</td>
<td>.064</td>
<td>.000</td>
<td>No (yes at .10)</td>
</tr>
</tbody>
</table>

As seen above in Table 25, the p-value produced by Pearson’s chi-square was .523 for industry sector when controlling for female-owned businesses. The p-value produced by Pearson’s chi-square was .064 for industry sector when controlling for male-owned businesses. Since both p-values were greater than .005, the sixth null hypothesis was
rejected. This indicated that no significant relationship exists between the type of business problems and the industry sector and gender of clients that receive counseling from Small Business Centers in eastern North Carolina, when controlling for gender. However, it is important to note that the p-value (.064) produced by Pearson’s chi square for industry sector when controlling for male-owned businesses was almost significant at .05 and would be significant if the level was changed to .10.

The values produced by lambda for industry sector when controlling for female-owned businesses was .000 and for industry sector when controlling for male-owned businesses was .000, indicating that no association existed between industry sector and gender, when held constant, and the type of problems encountered by small businesses included in the sample. This indicated that we have improved our guess of the type of problems facing small businesses that received counseling from Small Business Centers in eastern North Carolina by 0% as a result of knowing its industry sector when controlling for both female- and male-owned firms. Although the p-value indicated a significant relationship between industry sector when controlling for male-owned businesses at the .10 significance level, lambda (.000) indicated no association between these variables.

In the second tests, the analysis was made based on the relationship between industry sector and gender, holding the industry sector constant.

As seen on the following page in Table 26, the p-value produced by Pearson’s chi-square was .460 for gender when controlling for retail businesses. The p-value produced by Pearson’s chi-square was .053 for gender when controlling for service businesses.
Table 26. Pearson’s Chi-square and Lambda Results for Research Question 12-Part II

<table>
<thead>
<tr>
<th>Independent Variable(s)</th>
<th>Dependent Variable</th>
<th>P-value</th>
<th>Lambda</th>
<th>Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender, Industry Sector-retail</td>
<td>Problems</td>
<td>.460</td>
<td>.000</td>
<td>No</td>
</tr>
<tr>
<td>Gender, Industry Sector-service</td>
<td>Problems</td>
<td>.053</td>
<td>.000</td>
<td>No (yes at .10)</td>
</tr>
</tbody>
</table>

Since both p-values were greater than .005, the fifth null hypothesis was rejected. This indicated that no significant relationship existed between the type of business problems and the gender and industry type of clients that receive counseling from Small Business Centers in eastern North Carolina, when controlling for industry sector. However, it is important to note that the p-value (.053) produced by Pearson’s chi square for gender when controlling for service businesses was almost significant at .05 and would be significant if the level was changed to .10.

The values produced by lambda for gender when controlling for retail businesses was .000 and for gender when controlling for service businesses was .000, indicating that no association existed between industry sector and business development status, when held constant, and the type of problems encountered by small businesses included in the sample. This indicated that we have improved our guess of the type of problems facing small businesses that received counseling from Small Business Centers in eastern North Carolina by 0% as a result of knowing the owner’s gender when controlling for both retail and service firms. Although the p-value indicated a significant relationship in the population between gender and service businesses at the .10 significance level, lambda (.000) indicated no association between these variables.
Research Question 13

Is there a relationship between the types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and both their business development status and gender?

Research Hypothesis 8: There is no relationship between the types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and their business development status, when controlling for gender.

Null Hypothesis 8: There is a relationship between the types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and their business development status, when controlling for gender.

Research Hypothesis 9: There is no relationship between the types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and their gender, when controlling for business development status.

Null Hypothesis 9: There is a relationship between the types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and their gender, when controlling for business development status.

The Pearson’s chi-square and lambda statistical tests were used to answer the thirteenth research question and test the eighth and ninth research hypotheses. The Pearson’s chi-square test was based on a .05 level of significance. It was necessary to perform two Pearson chi-square and lambda tests because the thirteenth research question involved multiple variables that required individual analysis. The results of these tests were reported in two parts.

In the first test, the analysis was made based on the relationship between business development status and gender, holding gender constant.
As seen above in Table 27, the p-value produced by Pearson’s chi-square was .000 for business development status when controlling for female-owned businesses. The p-value produced by Pearson’s chi-square was .000 for business development status when controlling for male-owned businesses. Based on these p-values, we can fail to reject the eighth null hypothesis. This indicated that a significant relationship does exist between the type of business problems and the business development status and gender of clients that receive counseling from Small Business Centers in eastern North Carolina, when controlling for gender. Based on the p-values produced by Pearson’s chi-square the relationship would still exist even if the significance level was changed to .001.

The values produced by lambda for business development status when controlling for female-owned or male-owned firms was .145, indicating that a moderate association exists between business development status and gender, when held constant, and the type of problems encountered by small businesses included in the sample. This indicated that we have improved our guess of the type of problems facing small businesses that received counseling from Small Business Centers in eastern North Carolina by 14.5% as a result of knowing its business development status when controlling for female- and male-owned firms.
In the second test, the analysis was made based on the relationship between business development status and gender, holding the business development status constant.

Table 28. Pearson’s Chi-square and Lambda Results for Research Question 13-Part II

<table>
<thead>
<tr>
<th>Independent Variable(s)</th>
<th>Dependent Variable</th>
<th>P-value</th>
<th>Lambda</th>
<th>Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender, Bus Devel Status-operating</td>
<td>Problems</td>
<td>.215</td>
<td>.000</td>
<td>No</td>
</tr>
<tr>
<td>Gender, Bus Devel Status-startup</td>
<td>Problems</td>
<td>.763</td>
<td>.000</td>
<td>No</td>
</tr>
</tbody>
</table>

As seen above in Table 28, the p-value produced by Pearson’s chi-square was .215 for gender when controlling for operating businesses. The p-value produced by Pearson’s chi-square was .763 for gender when controlling for startup businesses. Based on these p-values, the ninth null hypothesis was rejected. This indicated that no significant relationship existed between the type of business problems and the gender and business development status of clients that receive counseling from Small Business Centers in eastern North Carolina, when controlling for business development status.

The values produced by lambda for gender when controlling for operating firms was .000 and for gender when controlling for startup firms was .000, indicating that no association existed between gender and business development status, when held constant, and the type of problems encountered by small businesses included in the sample. This indicated that we have improved our guess of the type of problems facing small businesses that received counseling from Small Business Centers in eastern North Carolina by 0% as a result of knowing its gender when controlling for both operating and startup firms.
Research Question 14

Is there a relationship between the types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and their industry sector, business development status, and gender?

Research Hypothesis 10: There is no relationship between the types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and their industry sector, when controlling for business development status and gender.

Null Hypothesis 10: There is a relationship between the types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and their industry sector, when controlling for business development status and gender.

Research Hypothesis 11: There is no relationship between the types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and their business development status, when controlling for industry sector and gender.

Null Hypothesis 11: There is a relationship between the types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and their business development status, when controlling for industry sector and gender.

Research Hypothesis 12: There is no relationship between the types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and their gender, when controlling for industry sector and business development status.

Null Hypothesis 12: There is a relationship between the types of problems encountered by small business owners that receive counseling from Small Business Centers in the eastern region of North Carolina and their gender, when controlling for industry sector and business development status.
The Pearson’s chi-square statistical test was used to answer the fourteenth research question and test the tenth, eleventh, and twelfth research hypotheses. The Pearson’s chi-square test was based on a .05 level of significance. It was necessary to perform three Pearson chi-square and lambda tests because the fourteenth research question involved multiple variables that required individual analysis. The results of these tests were reported in three parts.

In the first test, the analysis was made based on the relationship between industry sector, business development status, and gender and the type of problems encountered by small businesses included in the sample, holding business development status and gender constant.

Table 29. Pearson’s Chi-square and Lambda Results for Research Question 14-Part I

<table>
<thead>
<tr>
<th>Independent Variable(s)</th>
<th>Dependent Variable</th>
<th>P-value</th>
<th>Lambda</th>
<th>Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry Sector, Bus Devel Status-operating, Gender-female</td>
<td>Problems</td>
<td>.972</td>
<td>.000</td>
<td>No</td>
</tr>
<tr>
<td>Industry Sector, Bus Devel Status-startup, Gender-female</td>
<td>Problems</td>
<td>.450</td>
<td>.000</td>
<td>No</td>
</tr>
<tr>
<td>Industry Sector, Bus Devel Status-operating, Gender-male</td>
<td>Problems</td>
<td>.517</td>
<td>.000</td>
<td>No</td>
</tr>
<tr>
<td>Industry Sector, Bus Devel Status-startup, Gender-male</td>
<td>Problems</td>
<td>.064</td>
<td>.000</td>
<td>No (yes at .10)</td>
</tr>
</tbody>
</table>

As seen above in Table 29, the p-values produced by Pearson’s chi-square were .972 for industry sector when controlling for female-owned operating businesses, .450 for industry sector when controlling for female-owned startup businesses, .517 for industry sector when controlling for male-owned operating businesses, and .064 for industry sector when...
controlling for male-owned startup businesses. Based on these p-values, the tenth null hypothesis was rejected. This indicated that no significant relationship existed between the type of business problems and the industry sector, business development status, and gender of clients that receive counseling from Small Business Centers in eastern North Carolina, when holding business development status and gender constant. However, it is important to note that the p-value (.064) produced by Pearson’s chi square for industry sector when controlling for male-owned startup businesses was almost significant at .05, and would be significant if the accepted level was changed to .10.

The values produced by lambda were less than .001 for industry sector when controlling for female-owned operating firms, female-owned startup firms, male-owned operating firms, and male-owned startup firms. These values show that no association existed between industry sector, business development status, and gender and the type of problems encountered by small businesses included in the sample, when holding business development status and gender constant. This indicated that we have improved our guess of the type of problems facing small businesses that received counseling from Small Business Centers in eastern North Carolina by 0% as a result of knowing its industry when controlling for female-owned operating and startup firms, and also by 0% as a result of knowing its business development status when controlling for male-owned operating and startup firms.

In the second test, the analysis was made based on the relationship between business development status, industry sector, and gender and the type of problems encountered by small businesses included in the sample, holding industry sector and gender constant.
Table 30. Pearson’s Chi-square and Lambda Results for Research Question 14-Part II

<table>
<thead>
<tr>
<th>Independent Variable(s)</th>
<th>Dependent Variable</th>
<th>P-value</th>
<th>Lambda</th>
<th>Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bus Devel Status,</td>
<td>Problems</td>
<td>.022</td>
<td>.156</td>
<td>Yes</td>
</tr>
<tr>
<td>Industry Sector-retail,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender-female</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bus Devel Status,</td>
<td>Problems</td>
<td>.006</td>
<td>.135</td>
<td>Yes</td>
</tr>
<tr>
<td>Industry Sector-service</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender-female</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bus Devel Status,</td>
<td>Problems</td>
<td>.000</td>
<td>.053</td>
<td>Yes</td>
</tr>
<tr>
<td>Industry Sector-retail,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender-male</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bus Devel Status,</td>
<td>Problems</td>
<td>.000</td>
<td>.180</td>
<td>Yes</td>
</tr>
<tr>
<td>Industry Sector-service</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender-male</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As seen above in Table 30, the p-values produced by Pearson’s chi-square were .022 for business development status when controlling for female-owned retail businesses, .006 for business development status when controlling for female-owned service businesses, .000 for business development status when controlling for male-owned retail businesses, and .000 for businesses development status when controlling for male-owned service businesses. Based on these p-values, we can fail to reject the eleventh null hypothesis. This indicated that a significant relationship existed between the type of business problems and the business development status, industry, and gender of clients that receive counseling from Small Business Centers in eastern North Carolina, when controlling for industry sector and gender.

The values produced by lambda indicated that a moderate association existed between business development status, when controlling for female-owned retail businesses (.156), female-owned service businesses (.135), and male-owned service businesses (.180), and the type of problems encountered by small businesses included in the sample. The value produced by lambda also shows that a weak association existed between business
development status, when controlling for male-owned retail businesses (.053), and the type of problems encountered by small businesses in the sample. This indicated that we have improved our guess of the type of problems facing small businesses that received counseling from Small Business Centers in eastern North Carolina by 15.6% as a result of knowing its business development status when controlling for female-owned retail firms and by 13.5% as a result of knowing its business development status when controlling for female-owned service firms. In addition, we have improved our guess of the type of problems facing small businesses that received counseling from Small Business Centers in eastern North Carolina by 5.3% as a result of knowing its business development status when controlling for male-owned retail firms and by 18% as a result of knowing its business development status when controlling for male-owned service firms.

In the third test, the analysis was made based on the relationship between gender, business development status, and industry sector and the type of problems encountered by small businesses included in the sample, holding business development status and industry sector constant.

As seen in Table 31 on the following page, the p-values produced by Pearson’s chi-square were .740 for gender when controlling for operating retail businesses, .218 for gender when controlling for operating service businesses, .078 for gender when controlling for startup retail businesses, and .649 for gender when controlling for startup service businesses. Based on these p-values, the twelfth null hypothesis was rejected. This indicated that no significant relationship existed between the type of business problems and the gender, business development status, and industry sector of clients that receive counseling from Small Business Centers in eastern North Carolina, when controlling for business
development status and industry sector. However, it is important to note that the p-value was .078 for gender when controlling for startup retail businesses. This was almost significant at .05 and would be significant if the accepted level was moved to .10.

Table 31. Pearson’s Chi-square and Lambda Results for Research Question 14-Part III

<table>
<thead>
<tr>
<th>Independent Variable(s)</th>
<th>Dependent Variable</th>
<th>P-value</th>
<th>Lambda</th>
<th>Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender, Bus Devel Status-operating,</td>
<td>Problems</td>
<td>.740</td>
<td>.000</td>
<td>No</td>
</tr>
<tr>
<td>Industry Sector-retail</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender, Bus Devel Status-operating,</td>
<td>Problems</td>
<td>.218</td>
<td>.000</td>
<td>No</td>
</tr>
<tr>
<td>Industry Sector-service</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender, Bus Devel Status-startup</td>
<td>Problems</td>
<td>.078</td>
<td>.000</td>
<td>No (yes at .10)</td>
</tr>
<tr>
<td>Industry Sector-retail</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender, Bus Devel Status-startup</td>
<td>Problems</td>
<td>.649</td>
<td>.000</td>
<td>No</td>
</tr>
<tr>
<td>Industry Sector-service</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The values produced by lambda were .000 for gender when controlling for operating retail firms, operating service firms, startup retail firms, and startup service firms. These values show that no association existed between industry sector, business development status, and gender and the type of problems encountered by small businesses included in the sample, when holding industry sector and business development status constant. This indicated that we have improved our guess of the type of problems facing small businesses that received counseling from Small Business Centers in eastern North Carolina by 0% as a result of knowing its gender when controlling for operating and startup retail firms, and also by 0% as a result of knowing its gender when controlling for operating and startup service firms.
Summary of Findings

Crosstabulations were used in this study to indicate the type of problems encountered by businesses included in the study, based on all possible combination of independent and dependent variables. Pearson’s chi-square produced a p-value that was used to test the hypotheses included in the study. Lambda was then calculated to determine the strength of the association. The following is a summary of the findings from the statistical tests.

1. Strategic problems were the most common type of problems faced by both retail (57.9%) and service (51.4%) businesses in this sample, while operating problems were the least common for firms in both the retail (11.6%) and service (13.4%) sectors.

2. While administrative problems were the most common type of problems encountered by operating businesses (47.6%), the majority of problems facing the startup businesses (70.1%) in this sample were strategic. Operating problems were the least common for both operating firms (20.6%) and startup firms (6.9%).

3. Strategic problems were the most common type of problems for female-owned (56%) and male-owned (51.7%) businesses. Administrative problems were the second most common for female-owned (33.8%) and male-owned (32.9%) businesses, while operating problems were the least common for female-owned (10.2%) and male-owned (15.4%) firms.

4. Administrative problems were the most common type of problems facing retail firms classified as operating (47.1%) and service firms classified as operating (48%), while startup retail firms (74.3%) and startup service firms (67.3%) most
often encountered strategic problems. Regardless of industry sector, administrative problem were the most common type of problems facing operating firms (47.6%) in this study, while strategic problems were the most common for startup firms (70.1%). Operating problems (12.7%) were the least common type of problem experienced by firms, regardless of industry sector or business development status.

5. Strategic problems were the most common type of problems facing both female-owned (52.9%) and male-owned retail firms (64.2%). Similarly, strategic problems were the most common for female-owned (58.4%) and male-owned (44.4%) service firms. Regardless of industry sector, the most common type of problems facing female-owned (56%) and male-owned (51.7%) firms in this study were strategic problems. Operating problems (12.7%) were the least common type of problems experienced by firms, regardless of industry sector or gender.

6. Administrative problems were the most common type of problems facing female-owned operating firms (51.7%), while the female-owned startup firms (68.7%) most often encountered strategic problems. Similarly, administrative problems were the most common for male-owned operating (44.1%), while strategic problems were most common in male-owned startup firms (72%). Regardless of gender, administrative problems were the most common type of problem facing operating firms (47.6%) in the sample, while strategic problems were the most common in startup firms (70.1%). Operating problems (12.7%) were the least common type of problem experienced by firms, regardless of business development status or gender.

7. Administrative problems were the most common type of problems facing both retail (51.9%) and service (51.6%) operating firms owned by females, while the female-
owned startup firms in the retail (65.8%) and service (70.7%) sectors most often encountered strategic problems. Similarly, administrative problems were the most common in retail (41.7%) and service (45.5%) operating firms owned by males, while male-owned startup firms in the retail (86.2%) and service (63%) sectors most often encountered strategic problems. With the exception of male-owned operating businesses in the service sector, operating problems (12.7%) were the least common type of problems experienced by firms, regardless of industry sector, business development status or gender. Strategic problems were the least common in male-owned operating businesses in the service sector (25%).

8. A significant relationship existed between the type of business problems and the business development status of clients that receive counseling from Small Business Centers in eastern North Carolina (p<.05).

9. A significant relationship existed between the type of business problems and the business development status and industry sector of clients that receive counseling from Small Business Centers in eastern North Carolina, when controlling for retail firms (p<.05).

10. A significant relationship existed between the type of business problems and the business development status and industry sector of clients that receive counseling from Small Business Centers in eastern North Carolina, when controlling for service firms (p<.05).

11. A significant relationship existed between the type of business problems and the business development status and gender of clients that receive counseling from
Small Business Centers in eastern North Carolina, when controlling for female-owned firms (p<.05).

12. A significant relationship existed between the type of business problems and the business development status and gender of clients that receive counseling from Small Business Centers in eastern North Carolina, when controlling for male-owned firms (p<.05).

13. A significant relationship existed between the type of business problems and the business development status, industry sector, and gender of clients that receive counseling from Small Business Centers in eastern North Carolina, when controlling for female-owned retail firms (p<.05).

14. A significant relationship existed between the type of business problems and the business development status, industry sector, and gender of clients that receive counseling from Small Business Centers in eastern North Carolina, when controlling for male-owned retail firms (p<.05).

15. A significant relationship existed between the type of business problems and the business development status, industry sector, and gender of clients that receive counseling from Small Business Centers in eastern North Carolina, when controlling for female-owned service firms (p<.05).

16. A significant relationship existed between the type of business problems and the business development status, industry sector, and gender of clients that receive counseling from Small Business Centers in eastern North Carolina, when controlling for male-owned service firms (p<.05).
17. A significant relationship existed between the type of business problems and the industry sector and gender of clients that receive counseling from Small Business Centers in eastern North Carolina, when controlling for male-owned firms, if the significance level was changed to .10 (p<.064).

18. A significant relationship existed between the type of business problems and the gender and industry sector of clients that receive counseling from Small Business Centers in eastern North Carolina, when controlling for service firms, if the significance level was changed to .10 (p<.053).

19. A significant relationship existed between the type of business problems and the industry sector, business development status, and gender of clients that receive counseling from Small Business Centers in eastern North Carolina, when controlling for male-owned startup firms, if the significance level was changed to .10 (p<.064).

20. A significant relationship existed between the type of business problems and the gender, business development status, and industry sector of clients that receive counseling from Small Business Centers in eastern North Carolina, when controlling for startup retail firms, if the significance level was changed to .10 (p<.078).

21. A significant relationship did not exist between the type of business problems and the industry sector of clients that receive counseling from Small Business Centers in eastern North Carolina (p>.05).
22. A significant relationship did not exist between the type of business problems and the gender of clients that receive counseling from Small Business Centers in eastern North Carolina (p>.05).

23. A significant relationship did not exist between the type of business problems and the industry sector and business development status of clients that receive counseling from Small Business Centers in eastern North Carolina, when controlling for operating firms (p>.05).

24. A significant relationship did not exist between the type of business problems and the industry sector and business development status of clients that receive counseling from Small Business Centers in eastern North Carolina, when controlling for startup firms (p>.05).

25. A significant relationship did not exist between the type of business problems and the industry sector and gender of clients that receive counseling from Small Business Centers in eastern North Carolina, when controlling for female-owned firms (p>.05).

26. A significant relationship did not exist between the type of business problems and the gender and industry sector of clients that receive counseling from Small Business Centers in eastern North Carolina, when controlling for retail firms (p>.05).

27. A significant relationship did not exist between the type of business problems and the gender and business development status of clients that receive counseling from Small Business Centers in eastern North Carolina, when controlling for operating firms (p>.05).
28. A significant relationship did not exist between the type of business problems and the gender and business development status of clients that receive counseling from Small Business Centers in eastern North Carolina, when controlling for startup firms (p>.05).

29. A significant relationship did not exist between the type of business problems and the industry sector, business development status, and gender of clients that receive counseling from Small Business Centers in eastern North Carolina, when controlling for female-owned operating firms (p>.05).

30. A significant relationship did not exist between the type of business problems and the industry sector, business development status, and gender of clients that receive counseling from Small Business Centers in eastern North Carolina, when controlling for female-owned startup firms (p>.05).

31. A significant relationship did not exist between the type of business problems and the industry sector, business development status, and gender of clients that receive counseling from Small Business Centers in eastern North Carolina, when controlling for male-owned operating firms (p>.05).

32. A significant relationship did not exist between the type of business problems and the gender, business development status, and industry sector of clients that receive counseling from Small Business Centers in eastern North Carolina, when controlling for operating retail firms (p>.05).

33. A significant relationship did not exist between the type of business problems and the gender, business development status, and industry sector of clients that receive
counseling from Small Business Centers in eastern North Carolina, when controlling for operating service firms (p>.05).

34. A significant relationship did not exist between the type of business problems and the gender, business development status, and industry sector of clients that receive counseling from Small Business Centers in eastern North Carolina, when controlling for startup service firms (p>.05).

35. Lambda indicated that a moderate association existed between industry type and the type of problems encountered by small businesses included in the sample. We have improved our guess of the type of problems facing small businesses that received counseling from Small Business Centers in eastern North Carolina by 14.5% as a result of knowing its business development status.

36. Lambda indicated that a moderate association existed between business development status, when controlling for industry sector, and the type of problems encountered by small businesses included in the sample. We have improved our guess of the type of problems facing small businesses that received counseling from Small Business Centers in eastern North Carolina by 11.8% as a result of knowing its business development status when controlling for retail firms, and by 16.1% as a result of knowing its business development status when controlling for service firms.

37. Lambda indicated that a moderate association existed between business development status, when controlling for gender, and the type of problems encountered by small businesses included in the sample. We have improved our guess of the type of problems facing small businesses that received counseling from Small Business Centers in eastern North Carolina by 14.5% as a result of knowing
its business development status when controlling for female- and male-owned firms.

38. Lambda indicated that a moderate association existed between business development status, when controlling for female-owned retail businesses, female-owned service businesses, and male-owned service businesses, and the type of problems encountered by small businesses included in the sample. Lambda also shows that a weak association existed between business development status, when controlling for male-owned retail businesses and the type of problems encountered by small businesses in the sample. We have improved our guess of the type of problems facing small businesses that received counseling from Small Business Centers in eastern North Carolina by 15.6% as a result of knowing its business development status when controlling for female-owned retail firms and by 13.5% as a result of knowing its business development status when controlling for female-owned service firms. In addition, we have improved our guess of the type of problems facing small businesses that received counseling from Small Business Centers in eastern North Carolina by 5.3% as a result of knowing its business development status when controlling for male-owned retail firms and by 18% as a result of knowing its business development status when controlling for male-owned service firms.
Chapter 5

The purpose of this study was to determine the types of problems encountered by small businesses that receive counseling from Small Business Centers in the eastern region of North Carolina and the relationship between these problems and selected business characteristics. The insights gained from the findings can be used by Small Business Center directors to create a better counseling service aimed at meeting the most critical needs of small business owners. In order to be successful, providers of small business assistance programs must develop a proper match between their services and the needs of their clients (Franklin & Goodwin, 1983; Roitman, Emshoff, & Robinson, 1984; Nahavandi & Chesteen, 1988; Chrisman, 1999).

Entrepreneurs often lack sufficient resources and experience to take advantage of business opportunities (Chrisman & Leslie, 1989; Gnyawali & Fogel, 1994). This is especially true in eastern North Carolina, where the business startup rate is below the state average and the failure rate is above the state average (NC Department of Commerce, March 10, 2003, www.nccommerce.com/econscan). In addition, many communities throughout the state do not invest an adequate level of resources in the development of their small business sector (NC Rural Economic Center, 2001). Small Business Centers are a critical resource because they provide personalized counseling to assist emerging and existing small business owners with the development and implementation of feasible solutions for their problems. The mission of these centers is to promote the creation of new small businesses within the state and help existing business owners increase their success rate (North Carolina Community College System, February 1, 2003, www.ncccs.cc.nc.us).
This chapter presents the conclusions, implications, recommendations, and areas for future research based on the conceptual framework, literature review, and findings of the statistical tests used in the study. The study featured 14 questions and 12 hypotheses, and included a sample of 300 small businesses. A total of six conclusions, four implications, and eight recommendations were produced from the study. Seven areas for future research were discussed at the end of the chapter.

Conclusions

Conclusion 1:

Prior research by Olson (1987), Kazanjian (1988), Kuratko and Hodgetts (1989), Dodge and Robbins (1992), and Terpstra and Olson (1993) found that problems varied in the different developmental phases of a small business. Marketing problems and capital acquisition are common issues in the startup stage of business development, while managerial and administrative problems become more prevalent as an organization grows and matures (Kuratko & Hodgetts, 1989; Dodge & Robbins, 1992; Terpstra & Olson, 1993). Dodge and Robbins (1992) suggest that external problems become less important and internal problems increase as a small business moves through its developmental cycle.

The types of problems encountered by small business owners in this study varied according to the developmental stage of their business, regardless of industry sector or gender. Strategic problems were more prevalent in startup businesses (70.1%), while owners of operating businesses (47.6%) were more concerned with administrative problems. Strategic problems were also more common in retail (74.3%) and service (67.3%) startup
businesses and female-owned (68.7%) and male-owned (72%) startup businesses. Conversely, administrative problems were more common in retail (47.1%) and service (48%) operating firms and female-owned (51.7%) and male-owned (44.1%) operating firms.

The results of the Pearson’s chi-square and lambda tests further supported this conclusion. The only independent variable found to have a significant (p<.05) relationship with the type of problems experienced by small businesses included in the sample was business development status. The p-value produced by Pearson’s chi-square indicated that we were at least 99% confident that we can predict the type of problems encountered by small businesses owners based on their business development status (operating or startup). Lambda indicated that the strength of the association between business development status and the type of problems was worth noting (Babbie, Halley & Zaino, 2000). According to the value produced by lambda, we have improved our guess of the type of problems facing small businesses that received counseling from Small Business Centers in eastern North Carolina by 14.5% as a result of knowing their business development status.

In addition, a significant relationship (p<.05) appeared when industry sector and gender were examined in conjunction with business development status, when controlling for industry sector and gender. The values produced by lambda indicated that we have improved our guess of the type of problems facing small businesses that received counseling from Small Business Centers in eastern North Carolina as a result of knowing their business development status when controlling for: (1) retail and service firms; (2) female-owned and male-owned firms; (3) female-owned retail and service firms; and (4) male-owned retail and service firms.
This conclusion is consistent with prior findings that indicate problems vary as a small business goes through the organizational life cycle (Olson, 1987; Kuratko & Hodgetts, 1989; Dodge & Robbins, 1992; Terpstra & Olson; 1993). Strategic problems are common in the startup stage, while administrative problems become more prevalent as a small business moves into the operating and maturity stages of development. A better understanding of the types of problems prevalent in the various developmental stages allows business counselors to offer more effective assistance that can have a direct impact on the success of their clients.

Conclusion 2:

In a prior study on business counseling, Chrisman and Leslie (1989) found that clients primarily rely on small business assistance programs for help with administrative and operating problems. They concluded that these programs provide counseling that helps small businesses owners reduce their costs, rather than advice on how to grow the business or increase sales. As pointed out by Chrisman and Leslie (1989), it is “far easier” for business counselors to show owners how to cut administrative costs and improve efficiency rather than help them with strategic issues such as business planning or market analysis (p. 47). They did, however, acknowledge that strategic issues are often the source of many business failures.

The findings of this study indicated that the majority of small business owners in the retail and service sectors in eastern North Carolina rely on counseling from Small Business Centers to help them resolve strategic issues that are core to the development of a successful enterprise. The most common type of problems facing these businesses was strategic in nature (54%). The second most common type of problems experienced by these businesses
was administrative (33.3%), followed by operating problems (12.7%). The only exception was with firms classified as operating. Administrative problems were more common in operating firms, regardless of industry sector or gender. In all other combinations of independent variables (retail, service, startup, female-owned, and male-owned), strategic problems were more prevalent.

While the majority of small business owners in the sample experienced strategic problems, only 12.7% of these owners sought assistance for operating problems. This provided evidence that business owners have a good understanding of the operations of their businesses. Although small business managers are competent in their chosen field of interest, they lack the necessary business skills to effectively manage their enterprise. Rather than searching for ways to reduce operational expenses, most small business owners in eastern North Carolina need help establishing a foundation for the business and growing sales. The lone exception was owners of operating businesses. The primary need of these individuals was help in resolving administrative problems.

The results of this study provided evidence contrary to the findings of Chrisman and Leslie (1989). Whereas Chrisman and Leslie (1989) found that small business owners primarily rely on small business assistance programs for help with administrative and operating problems, the results of this study indicated that the majority of business owners received counseling from Small Business Centers for strategic problems. The findings support the claim by Warford and Flynn (2000) that entrepreneurs often turn to community colleges for information when making a commitment to start a new business venture.
programs at community college tend to have limited resources and a need for personalized service at little or no cost.

Conclusion 3:

As pointed out by Greenfield (1987) and Rue and Ibrahim (1998), many new small business owners are very competent in their chosen profession, but lack the managerial or technical skills necessary for strategic planning. This creates an environment that often prohibits business owners from bringing their innovative ideas to fruition (Roitman, Emshoff, & Robinson, 1982; Luke, Ventriss, Reed & Reed, 1988). Small business owners that engage in strategic planning typically provide a clearer direction for the business and improve their decision making ability, which can lead to higher growth rates (Schwenk & Shrader, 1993; Rue and Ibrahim, 1998; Fry, Stoner & Weinzimmer, 1999).

The findings of this study indicated that many owners of startup businesses in eastern North Carolina that use the counseling service provided by Small Business Centers do not properly plan before starting their venture. New business owners, in particular, need assistance in understanding the fundamentals of developing and maintaining a viable business. Small Business Centers provide a service that helps small business owners develop a stronger foundation for their enterprises, thereby improving the chance for long-term success. The use of small business assistance programs to provide specialized knowledge for business owners has become more necessary due to the increased complexity and competitiveness of the business environment (Holtz, 1985; Fry, Stoner & Weinzimmer, 1999).
Conclusion 4:

Prior research by Brush and Chaganti (1999) found that fewer obstacles are present for establishing a business in the retail and service sectors, but the failure rate is typically higher in these industries. Fewer barriers to entry encourage many aspiring entrepreneurs to target new retail or service ventures. However, this can also create an environment that does not promote the importance of planning prior to creating a new business.

Although the statistical tests used in the study did not show a significant relationship between the type of problems encountered by small business owners that receive counseling from Small Business Centers in eastern North Carolina and their industry sector (retail or service), the frequency counts indicated that strategic problems were the most common type of problems in both retail (57.9%) and service (51.4%) firms. This finding supports the claim by Brush and Chaganti (1999) that entrepreneurs often do not plan appropriately when starting a business in the retail and service sectors. Rather than taking the necessary time to plan, entrepreneurs start retail and service businesses then turn to Small Business Centers to help them resolve problems that result from a lack of planning.

One of the most important contributions of personalized counseling from business professionals is that they can help inexperienced owners acquire more tacit knowledge (Barney 1991; Ulrich, 1998; Chrisman, 1999; Erikson, 2002). Tacit knowledge is often referred to as the general know-how needed to effectively operate a business (Chrisman, 1999). This knowledge would often take years for the business owner to acquire through direct experience. As the number of new ventures in the retail and service sector continues to increase, small business owners must either take the time to learn the necessary business skills or establish a network of advisors that will allow them to create competitive advantage.
The owners that do not create an advantage increase the likelihood that their businesses will fail.

Conclusion 5:

A number of studies have examined the differences in female- and male-owned businesses. They have offered mixed results. Hisrich and Brush (1984) found that female entrepreneurs tend to have weak financial skills, adequate marketing and operating skills, and strong people skills. Prior research has also shown that women tend to have less business experience than their male counterparts (Welsh & Young, 1984), and female-owned businesses generally perform at a lower financial level than male-owned businesses (Cuba, DeCenzo & Anish, 1983; Hisrich & Brush, 1984; Loscocco, Robinson, Hall & Allen, 1991). However, other studies have shown that female entrepreneurs do not require different assistance than male entrepreneurs (Chrisman, Carsrud, DeCastro & Herron, 1990), and there is no significant difference in the failure rates of male-owned and female-owned businesses (Watson, 2003).

The results of this study indicated that gender did not have a significant relationship with the type of problems encountered by small business owners that receive counseling from Small Business Centers in eastern North Carolina. However, the frequency counts indicated that strategic problems were the most common types of problems in both female-owned (56%) and male-owned (51.7%) firms that use the counseling service of Small Business Centers. The distribution of administrative and operating problems encountered by female-owned and male-owned firms was also consistent. Administrative problems were the
second most common type of problems for both female-owned and male-owned small businesses, while the least common type of problem was in the area of operations.

The consistent frequency counts found in the sample support prior research by Chrisman, Carsrud, DeCastro, and Herron (1990) that indicated female entrepreneurs do not require different assistance than male entrepreneurs. Although significance was not established between gender and type of problems, the frequency of administrative, operating, and strategic problems was similar for both female and male small businesses owners included in the sample. While some prior studies have shown that female business owners possess a different skill set than male business owners, the results of this study indicated that both women and men rely on counseling from Small Business Centers for the same reasons.

Conclusion 6:

Prior research on industry sector, gender, and types of business problems has been previously discussed in the fourth and fifth conclusions. It was also noted that both industry sector (retail or service) and gender did not have a significant relationship with the type of problems encountered by small businesses included in this study at the .05 level of significance. While industry sector and owner’s gender by themselves did not show a significant relationship with the type of problems, there was some evidence of significance when the two variables were combined (and the significance level was move to .10). A significant relationship (p<.10) existed between the type of business problems and the industry sector and gender of clients that receive counseling from Small Business Centers in eastern North Carolina, when controlling for male-owned firms (p<.064) and service firms (p<.053). However, lambda showed no strength in these relationships. This finding, along
with the inconsistencies in past research, should encourage more research on the relationship between industry sector, gender, and the common problems encountered by small business owners.

Implications

Implication 1:

The directors of Small Business Centers, and other small business assistance programs, must take the time to understand the dynamics of the development stages of small businesses and the types of problems most commonly encountered during each stage. The results of this study indicated the existence of a significant relationship between a firm’s business development status and the type of problems encountered by the business. Prior research by Rice and Matthews (1995) emphasizes the importance of understanding the developmental phase of a client’s business in order to effectively identify their most critical needs. In addition, taking the time to learn more about a firm’s history can increase the credibility of a business counselor. Relationships within these organizations tend to be more personal and gaining access as an outsider can be a difficult process (Greenfield, 1987). Counseling is not effective if the owner does not take the time to implement valuable suggestions. A better understanding of the problems faced by small businesses leads to more effective assistance that can have a direct impact on the owner’s management practices (Chrisman & Leslie, 1989; Chrisman, 1999). Without such help, many small business owners are unable to overcome the various problems encountered during different stages of business development (Kuratko & Hodgetts, 1989; Dodge & Robbins, 1992; Terpstra & Olson, 1993).
Implication 2:

A finding of this study was that many small business owners in eastern North Carolina need assistance in resolving strategic problems. Conversely, prior research by Chrisman and Leslie (1989) found that small business assistance programs are more effective in helping business owners with administrative and operational problems. This difference in findings is an indication that directors of small business assistance programs must develop a better understanding of the needs of their local target publics.

Grubb, Badway, Bell, Bragg, and Russman (1997) call for the development of an “entrepreneurial college” that integrates economic development activities with all other functions of the institution (p. v). An important role of an entrepreneurial college is to identify new community needs, which are then shared with the traditional side of the college so that educational programs can be created to satisfy these needs (Grubb, Badway, Bell, Bragg & Russman, p. vi). This type of arrangement allows a community college to create a deeper connection with the business sector, while staying true to its educational core.

The programming model developed by Boone (1985) requires an accurate assessment and analysis of the educational needs of the target public before developing educational programs (p. 68). A common mistake made by many adult educators is to define what they believe to be the needs of their target publics and then create “canned” programs based on their perceptions (Boone, p. 117). Prior research has shown that a thorough needs assessment allows the counseling process to be tailored in a manner that best assists each client (Franklin & Goodwin, 1983; Roitman, Emshoff, & Robinson, 1984; Nahavandi & Chesteen, 1988; Chrisman, 1999).

130
A needs assessment is important because of the diversity associated with small businesses. As noted by Greenfield (1987), small businesses are structurally, economically, and statistically different than their larger counterparts and require programs that can combine specialization and flexibility with personalized attention. As business counselors become more familiar with the common problems encountered by small business owners, they are able to quickly identify the specific problems facing each client and begin working on feasible solutions (Greenfield, 1987).

Implication 3:

Aspiring or existing owners of startup businesses must understand the importance of a business plan and be prepared to engage in strategic planning, or seek help from outside sources. Based on the findings of this study, most small business owners in eastern North Carolina need help with strategic problems rather than administrative or operational issues. Small business owners that do not engage in strategic planning increase their likelihood of failure. The survival rate for small businesses after six years of operation is only 39.5%, and approximately 81% of all small businesses fail after ten years (Dawitt, 1983).

Small business owners that engage in strategic planning often experience high growth rates (Rue & Ibrahim, 1998). Chrisman (1999) found that entrepreneurs that draw upon outside sources of knowledge have a “start-up advantage” and are more likely to actually start a business (Chrisman, p. 9). Business owners that lack the critical skills to develop a business plan should take advantage of the individualized counseling service offered by Small Business Centers.
Implication 4:

Small Business Center directors must understand business planning and be properly trained in how to offer effective counseling for strategic problems. This includes knowledge and experience in strategy formulation, financial planning and cash flow projections, writing business plans, and market research and analysis. In addition, Small Business Center directors should be capable of analyzing different industries to identify market opportunities and the business competencies necessary for success.

Prior research has shown that counseling provided by small business assistance programs can help prepare entrepreneurs for the challenges of opening a new business. Small Business Center directors must be capable of providing the necessary advice to help prospective and existing small business owners understand the fundamental requirements of opening and maintaining a successful enterprise. When clients work with counselors to formulate a strategy around business opportunities, both market and financial performance should improve (Chrisman & Leslie, 1989).

Recommendations

Recommendation 1:

Small Business Centers should provide a variety of workshops aimed primarily at aspiring entrepreneurs or owners of startup businesses. These workshops should focus on strategic topics, such as how to develop a business plan or conduct a market study. They should be marketed as the first step in learning about business ownership, and can be tailored around different industries.
Recommendation 2:

Small Business Center directors should periodically complete a needs assessment of their service regions to ensure their program offerings meet the true needs of local constituents. In order to maximize the effectiveness of the services offered by Small Business Centers, the directors of these centers must be aware of the most critical needs within their region. An accurate needs assessment allows adult educators to create programs aimed at their target publics.

The conceptual model developed by Boone (1985) encourages the development of an active partnership with the learners to the degree that an accurate assessment of the educational needs is attained (p. 68). The expressed needs of small business owners can be used to design and implement an effective educational program. The diversity associated with small businesses requires a high level of interaction between adult educators (Small Business Center directors) and learners (small business owners) in order to tailor the counseling service around the most critical needs within the region.

Recommendation 3:

Small Business Center directors should consider implementing a qualifying process for prospective clients. The centers may require potential clients to bring a copy of their business plan to the first meeting. If the client does not have at least a draft of a business plan, the director can provide the business owner with a list of strategic questions that must be answered prior to the first meeting. In addition, if the individual does not have at least the foundation for a business plan, the director may require a prospective client to first attend a
workshop on how to start a business. The staff at Small Business Centers work with thousands of clients per year and need to concentrate on legitimate business owners (or aspiring owners) in order to maximize the effectiveness of their counseling service.

Recommendation 4:

Small Business Center directors should continue to strengthen their relationship with agencies that provide similar and complimentary services, especially Small Business Technology and Development Centers. Better coordination allows each organization to focus on serving targeted needs of small business owners. Specifically, Small Business Centers should consider concentrating on counseling owners of emerging or startup businesses, while Small Business Technology and Development Centers should focus on serving the needs of business owners already in operations. As indicated in a 2003 report from the W. K. Kellogg Foundation, entitled Mapping Rural Entrepreneurship, many states do not focus on the needs of business owners during the startup stage of business development. Small Business Centers can serve as the vehicle for helping emerging business owners develop a strong foundation for their enterprises, thereby improving their chances for long-term survival.

Recommendation 5:

Small Business Centers should continue to stock their resource centers with appropriate materials on strategic planning and how to start and maintain a successful business. It is important to have materials on fundamental issues such as taxes, payroll, insurance, business structure, financial statements, and legal and regulatory requirements. Examples of business
plans and market research studies would also be helpful. In addition to printed materials, these centers should provide access to websites offered by the Small Business Administration, Internal Revenue Service, North Carolina Department of Commerce, and other relevant agencies. Each center should also consider purchasing software packages that provide a template for writing a successful business plan.

Recommendation 6:

Small Business Center directors should be trained in all facets of the counseling process. The directors must not only be familiar with the type of problems facing local business owners and how to best help them resolve their problems, they must also understand how to effectively interact with the personalities of these individuals. These owners often assume multiple roles and are emotionally attached to their business. An effective business counselor must not only have the ability to diagnose problems, but also understand how to communicate with clients in a manner that encourages them to actually implement suggested recommendations. In addition, it is important that directors understand how to help aspiring entrepreneurs redirected their focus in case they are unable to successfully start a business.

Recommendation 7:

The state legislature should continue to provide resources to community college for Small Business Centers. These centers provide a valuable service to small business owners, particularly in the startup stage of business development. The services offered by small business assistance programs can have a positive influence on a business’ long-term ability to “survive, grow, and innovate” (Chrisman and McMullan, 2000, p. 51). As the state of North
Carolina continues to promote entrepreneurship, it must be willing to provide the necessary support for Small Business Centers. Additionally, legislators should reexamine the current funding levels provided to these centers to ensure they are able to effectively meet the needs of their local communities.

Recommendation 8:

Community colleges should continue to support the efforts of Small Business Center directors. Economic development activities are an important part of the community college’s mission. A component of a comprehensive economic development program is the ability to offer small business assistance programs that provide individualized counseling (Robinson, 1982; Chrisman & Leslie, 1989; Parnell, 1990; Dougherty and Bakia, 1999; Warford and Flynn, 2000; Forde, 2002). Grubb, Badway, Bell, Bragg, and Russman (1997) encourage a community college to adopt the entrepreneurial spirit at all levels of the institution’s operations in order to develop economic development programs that truly impact the local community. Community colleges in North Carolina must continue to offer adequate staffing, facilities, and other necessary resources to ensure each Small Business Center can offer confidential counseling, educational workshops, and a community resource center.

Future Research

This study focused on uncovering the types of problems, and their relationship with business characteristics, faced by small business owners that receive counseling from Small Business Centers in eastern North Carolina. However, additional research is needed to gain more knowledge about the most critical needs of these business owners. Small business
assistance programs provide individualized counseling that can assist current owners or aspiring entrepreneurs with the development and implementation of practical solutions for their business problems. Small business owners often need personalized attention to help them resolve their problems (Chrisman & Leslie, 1989; Dougherty & Bakia, 1999). As emphasized by Boone (1985), it is important to study the target audience of an educational program to uncover its real needs. The areas for future research listed below can provide additional knowledge about the needs of business owners and the services that should be offered by small business assistance programs.

1. Conduct research comparing the types of problems experienced by small businesses that receive counseling from Small Business Centers with other small business assistance programs.

2. Conduct research comparing the types of problems experienced by small businesses that receive counseling from small business assistance programs with small businesses that do not receive any type of assistance from these programs.

3. Conduct research on the problems encountered by small businesses in the mature stage of development. The problems encountered by mature firms can then be compared with the problems encountered by small businesses in the startup and operating stages to identify any differences or similarities.

4. Conduct studies on other geographical regions and compare the findings to the types of problems encountered by the small businesses included in this sample.

5. Conduct research that examines the effectiveness of counseling provided by Small Business Centers in resolving the problems encountered by prospective and existing small business owners.
6. Conduct research comparing the number of owners or size of the management team and the type of problems encountered by small businesses. The concept of team ownership is becoming more prevalent because of the variety of skills needed to operate a small business successfully.

7. Conduct research on the types of problems encountered by small business owners that participate in educational workshops prior to receiving individualized counseling from a small business assistance program. These problems can be compared with the problems encountered by business owners that do not attend educational workshops to uncover any differences or similarities.


Gleazer, E. J. (1968). This is the community college. Boston: Houghton Mifflin.


Appendix A
Small Business Center—Request for Counseling Form

1. SSN ________________________________ 2. Your Name ________________________________
   Last                                                                 First

3. Referral From S.B.T.D.C. 0 Yes 0 No 4. Bus. Phone (   ) __________________ Home (   ) ____________

5. Position/Title __________________________________________________________________________

6. Company Name ____________________________________________________________________________

7. County __________________________________________________________________________________

8. Company Address __________________________________________________________________________

9. BUSINESS OWNERSHIP
   0 Male
   0 Female

10. TYPE OF BUSINESS
    (present or proposed)
    0 Construction
    0 Manufacturing
    0 Other (specify)
       ____________________________
    0 Retail
    0 Service
    0 Wholesale

11. HOW DID YOU LEARN OF THESE COUNSELING SERVICES? (source)
    0 Brochure
    0 Chamber
    0 Financial Institution/Bank
    0 Friend/Word of Mouth
    0 SBA
    0 S.B.T.D.C.

12. STATUS OF BUSINESS
    0 Closing
    0 Expansion
    0 Exploring Options
    0 Operating
    0 Start-up

13. CURRENT OR EXPECTED NUMBER OF EMPLOYEES?
    _______ Full-Time
    _______ Part-Time

14. BUSINESS OWNERSHIP
    0 Male
    0 Female

15. ETHNIC BACKGROUND
    0 White
    0 Black
    0 Indian
    0 Hispanic
    0 Asian
    0 Other (specify) ______________

CHECK THE PROBLEM AREAS FOR WHICH YOU NEED ASSISTANCE:

  0 Accounting and Records
  0 Business Feasibility
  0 Business Liquidation/Sale
  0 Business Plan Development
  0 Computer Systems
  0 Credit & Collections
  0 Engineering, R & D
  0 Estimating & Bidding
  0 Financial Analysis/Cost Control
  0 Government Procurement
  0 Inventory Control
  0 International Trade
  0 Legal Needs
  0 Management & Supervision
  0 Market Research
  0 Marketing/Sales
  0 Other (specify) ______________
  0 Personnel
  0 Patents and Trademarks
  0 Source of Capital

I will furnish relevant information to the Director of the Small Business Center although I expect that information to be held in strict confidence by him/her.

I further understand that the SBC personnel have agreed not to recommend goods or services from sources in which he/she has an interest and accept fees or commissions developing from this counseling relationship. In consideration of the Community College Small Business Center furnishing management or technical assistance, I waive all claims arising from this assistance against the center, The Community College, its employees, and the State of North Carolina.

I have read this entire document and agree to the conditions set forth herein:

________________________________________________________________________
Signature of Requestor

________________________________________________________________________
Title

The Community College is an equal opportunity institution.
Appendix B
Dear Small Business Center Director:

I am writing to request your participation in a dissertation project involving Small Business Centers in the eastern region of North Carolina. I have been in contact with Ms. Gayle Harvey, the state director of the Small Business Center Network, and she has offered her support for the project. In these times of budgetary cutbacks, programs need to continually show their value. My hope is that this research will help do just that for all the Small Business Centers in the eastern region of North Carolina.

This study focuses on the challenge, and importance, of providing small business assistance in the eastern region of North Carolina. The purpose of this study was to determine the type of problems encountered by small businesses that receive confidential counseling from Small Business Centers in the eastern region of North Carolina and the relationship between these problems and selected business characteristics. Included with this letter is a proposal that further explains the purpose and methodology of the study.

Rather than designing a new survey instrument, I am requesting that I be allowed access to the “Request for Counseling” forms used by your center during the past two academic years (2001-2002 and 2002-2003). I will use the data from these administrative records to perform a statistical analysis of the relationship between the multiple variables included in the project. I am only interested in the raw data; I do not need to know the company’s name and contact information. I can assure each director that I am fully aware of the confidential nature of the data and have designed a confidentiality agreement for this project.

I will follow up on this letter with a personal phone call within the next two weeks. With your help, I would like to establish a time for me to visit your center to introduce myself and further explain the details of the project. Your time is valuable and all visits will be made at your convenience.

Please contact me if you have any questions. I sincerely hope that you will participate in this project. All participants will receive a copy of the project findings. Thanks in advance for your cooperation.

Respectfully,

Michael Harris

CC: Gayle Harvey, State Director
Small Business Center Network
The Types of Problems Encountered by Small Business Owners that Receive Counseling from Small Business Centers and the Relationship Between these Problems and Selected Business Characteristics: A Regional Analysis

Primary Researcher: Michael Harris, North Carolina State University
Contact Information: (252) 328-6063 or (252) 321-2106; Harriseu1@cs.com

Purpose of Study
This study focuses on the challenge, and importance, of providing small business assistance in the eastern region of North Carolina. The purpose of this study was to determine the type of problems encountered by small businesses that receive confidential counseling from Small Business Centers in the eastern region of North Carolina and the relationship between these problems and selected business characteristics. The characteristics of the businesses used in this study include (1) industry sector (retail vs. service), (2) business development status (start-up vs. operating), and (3) gender of the owner/manager. The problems encountered by small business owners will be classified as administrative, operating, or strategic. Table 1 indicates the independent and dependent variables used in this project. This study will examine the relationship between these variables.

Table 1. Study Variables

<table>
<thead>
<tr>
<th>INDEPENDENT VARIABLES</th>
<th>DEPENDENT VARIABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry Sector</td>
<td>Types of Problems</td>
</tr>
<tr>
<td>Retail</td>
<td>Administrative</td>
</tr>
<tr>
<td>Service</td>
<td>Operating</td>
</tr>
<tr>
<td>Business Development Status</td>
<td>Strategic</td>
</tr>
<tr>
<td>Start-up</td>
<td></td>
</tr>
<tr>
<td>Operating</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td></td>
</tr>
</tbody>
</table>

Population
The businesses used in this study are located in the eastern region of the state and have been served by Small Business Centers in the region. As defined by the North Carolina Department of Commerce, the eastern region, referred to as the Global TransPark Development Region, consists of the following 13 counties: Carteret, Craven, Duplin, Edgecombe, Greene, Jones, Lenoir, Nash, Onslow, Pamlico, Pitt, Wayne, and Wilson. Eleven Small Business Centers serve this region. Eight centers have been chosen to participate in this study. The population includes clients that have received confidential counseling from Small Business Centers at the following community colleges: (1) Carteret
Community College in Morehead City, North Carolina; (2) Coastal Carolina Community College in Jacksonville, North Carolina; (3) Craven Community College in New Bern, North Carolina; (4) Edgecombe Community College in Tarboro, North Carolina; (5) Lenoir Community College in Kinston, North Carolina; (6) Pitt Community College in Greenville, North Carolina; (7) Wayne Community College in Goldsboro, North Carolina; and (8) Wilson Community College in Wilson, North Carolina.

**Data Collection**

The data used in this study is taken from “Request for Counseling” forms from the 2001-2002 and 2002-2003 academic years. These forms are used to record a client’s problem(s) and to note what type of counseling was provided by the director of the Small Business Center. According to Voss, Tordella, and Brown (1987), data from administrative records is often effective in assessing community needs. A simple random sampling technique is used to select the participants from the experimentally accessible population. A random sample is necessary if inferential statistics are used to determine cause-and-affect relationships (Borg & Gall, p. 220). A computer will be used to generate an appropriate list of random numbers to ensure a suitable sample is selected. The total data set used in this research process will consist of 300 clients. Pearson’s chi-square and lambda statistical tests will be used to analyze the data.

**Confidentiality Agreement**

In discharge of my research responsibilities during the course of this project with the Small Business Centers in the eastern region of North Carolina, I realize that I will see and hear a number of things that the concerned business very properly considers “confidential”.

I hereby promise that all data, materials, conversations and the like will be kept in the strictest confidence. I shall not:

1. divulge to others information received and/or developed in this project
2. use any materials, data, conversations or the like as the subject of other reports
3. solicit or accept compensation for any services to clients while operating under this agreement
4. engage in direct competition against clients involved in this project.

I further agree that the results of this project may not be offered for sale to a third party agency.

RESEARCHER’S SIGNATURE: _______________________________

SBC DIRECTOR’S SIGNATURE: _______________________________

INSTITUTION: ___________________

DATE: _______________________________
Appendix C
PANEL OF EXPERTS

Beth Eckstein, Director, Center for Economic Education
College of Business, East Carolina University

Jim Ensor, Business Counselor, Small Business Technology & Development Center
Eastern Region, East Carolina University

Anne Shaw, Director, Center for Business & Industry Development
Coastal Carolina Community College

Carolyn Wilburn, Business Counselor, Small Business Technology & Development Center
Eastern Region, East Carolina University