

# Factors Contributing to the Success of Women in Finance

*Susan Coleman*  
*University of Hartford*  
*West Hartford, CT*  
[scoleman@hartford.edu](mailto:scoleman@hartford.edu)

## Abstract

Prior research indicates that women are less likely to enroll in quantitative courses and majors including finance. If this is the case, women students may be less motivated to pursue careers in finance which could provide both personal and economic rewards. This article describes the use of focus groups composed of women who were high achievers in their finance classes in an attempt to identify factors contributing to their success. The focus group results reveal that the women benefit from faculty who are available and accessible. Further, they like to have finance taught in a context that is applied rather than theoretical. Other factors noted by the focus group participants included the importance of networking, role models, and mentors. Finally, many of the focus group participants were motivated to excel when they saw the link between finance and attractive career opportunities.

## Introduction

The field of finance offers a “wealth” of opportunities for young women. The globalization of finance and the development of new financial products and services are creating a demand for finance professionals in a broad array of corporations, organizations, and government entities. Simultaneously, the imminent retirement of many members of the “baby boom” generation will provide openings for younger professionals to embark on careers in finance and move up the ladder quickly. As an added attraction, careers in finance tend to command attractive salaries. According to the Bureau of Labor Statistics’ Annual Compensation Survey for June of 2006 (<http://www.bls.gov>), the mean annual salary for a sample of finance-related positions was as follows:

Job Title	Mean Annual Earnings
Financial Manager	\$85,926
Financial Analyst	\$75,863
Budget Analyst	\$63,752
Credit Analyst	\$54,467
Personal Financial Advisor	\$56,577
Securities, Commodities, and Financial Services Sales Agents	\$90,380

Many of these positions also provide additional benefits such as health care coverage and retirement programs as well as opportunities for further training and advancement.

In spite of these potential advantages, however, many women continue to shy away from the study of finance or employment in the field of finance. Prior research clearly indicates that women tend to avoid quantitative disciplines in college (Ballard & Johnson, 2005; Correll, 2001; Staniec, 2004). Once they are out of college, many women continue to doubt their abilities and regard finance as an area of weakness (Brush, 1992; Hisrich & Brush, 1984). There are a number of theories as to why this is the case. Some contend that women do not have enough role models in quantitative disciplines and fields (Eldrich et al., 2007). Others assert that women have negative experiences in lower level quantitative classes which lead them to avoid higher level classes (Bauer & Dahlquist, 1999). Still others claim that women and men are “different” and that women are not drawn to quantitative disciplines the way men are. Whatever the reason, however, the evidence indicates that women avoid finance and doubt their abilities to excel in that discipline.

Rather than focusing on why women don’t like finance, this article has chosen to focus on why they do. It will describe research involving young women who have excelled in the study of finance or in employment in the field of finance in an attempt to identify those factors that have contributed to their interest and success. It is our hope that, by identifying success factors, we can do a better job of incorporating them into the experiences and pedagogy that we provide to young women.

## **Prior Research**

Although relatively few articles from prior research specifically address women undergraduates’ attitudes toward finance, there are a number of articles that do address their attitudes toward quantitative disciplines in general. These reveal that women’s anxiety about quantitative subjects and lack of confidence in their abilities to deal with quantitative topics begins at a relatively early age. This, in turn, influences their performance in quantitative courses, their selection of college major, and their ultimate career choices.

Several studies have noted the link between women’s level of anxiety and their attitudes toward and performance in undergraduate courses in economics. Jensen and Owen (2001) surveyed almost 2,000 college students attending 34 liberal arts colleges in the spring of 1999. They found that women entered economics with lower levels of math ability and lower overall self-confidence. Correspondingly, they found that women received lower grades in their economics class. They also found that men were less likely to become discouraged and more likely to continue in the field of economics. The authors noted, however, that women were more likely to be encouraged if they had a female instructor.

In a similar study, Benedict and Hoag (2002) surveyed undergraduate students, both male and female, in introductory economics classes at a large U.S. university to find that females were almost twice as likely as males to respond that they were apprehensive

about the course. This was true even controlling for the students' level of math ability and college major. Benedict and Hoag also found that women earned lower grades than men in the course on average, possibly a self-fulfilling prophecy. They postulated that women may be more anxious because they lack confidence in their technical abilities, fear that they will not do well in the course, or experience a less welcoming environment in the classroom.

Ballard and Johnson (2005) surveyed undergraduates enrolled in an introductory microeconomics course at another large U.S. university. They found that women in the course were less optimistic about their ability to succeed, even controlling for family background, academic experience, and mathematics experience. Men anticipated significantly higher grades in the course than women. When performance was compared to expectations, however, women actually scored higher than men controlling for the factors noted above. The authors observed that women's negative expectations may influence their willingness to take additional courses in economics and their ultimate career selection.

Other studies have focused on the ways in which women's discomfort with quantitative material influences their career choices, in some instances closing them out of potentially rewarding career opportunities. Turner and Bowen (1999) noted that within the science and engineering fields, differences between men and women in terms of choice of major have not lessened in the past two decades. Rather, the gap between men and women majoring in math, engineering, or the physical sciences has actually widened. In response to this, Turner and Bowen conducted a study of students from twelve, highly selective, undergraduate institutions. They found that women were over-represented in fields such as nursing and education, while men were over-represented in math, engineering, and the physical sciences. They further noted that, the higher the math SAT score, the greater the probability that the student would major in some field other than the humanities. For women, however, those with high math SAT scores were still much more likely than men to choose a major in either life sciences or the humanities. Turner and Bowen concluded that differences in SAT scores account for only part of the gap between women and men in choice of major.

Correll (2001) used data from the National Educational Longitudinal Study initiated in 1988. This study used a sample of 25,000 eighth grade students who were reassessed every two years through high school and into college. When Correll surveyed these students in college, she found that males were more likely than females to believe that they were competent in math in spite of the fact that math grades and test scores for the two groups were similar. Correll also found that there was a large gap between the number of men and women selecting a quantitative major. She hypothesized that women and men take different career paths, not due to differences in ability, but rather due to cultural beliefs about gender and mathematics, with mathematical tasks and competence often being stereotyped as masculine.

Staniec (2004) also used the National Educational Longitudinal Study to explore choice of college major. Like Correll, he found that female students were significantly less likely

than males to enroll in science, engineering, or math majors, even controlling for other factors such as math ability and other individual, family, and school characteristics. He noted, however, that students who excelled in math and science were significantly more likely to choose majors in those fields. Staniec noted that women are less likely to receive degrees in engineering, the physical sciences, math, and computer sciences. The percentage of women receiving advanced degrees in those fields is even lower. This, in turn, affects the earning power of women graduates.

Worthington and Higgs (2003) did one of the few studies that actually focused specifically on student attitudes toward finance. They surveyed first year business students at a large Australian university to find that women were significantly less likely to select finance as a major than men. They found, however, that interest in a career in finance was one of the most important predictors of selecting finance as a major. Conversely, students who regarded finance as being highly mathematical and structured were less likely to select finance as a major. Worthington and Higgs concluded that students' choice of finance as a major was a function of perceptions of the finance profession, personality, and gender.

A small number of studies have addressed the attitudes of women entrepreneurs toward quantitative tasks, and, in particular, financial skills and financial management. Pellegrino and Reece (1982) did extensive interviews with twenty women small business owners in Norfolk, Virginia, to find that financial management was one of the greatest areas of concern. Sixty percent of the women perceived that controlling expenses, cash flow planning, and forecasting were major problems. In general, these business owners expressed the belief that financial management was an area of weakness and indicated that they wished they had more skill in that area. Hisrich and Brush (1984) conducted a study of over one thousand women entrepreneurs in eighteen states to find that they also considered financial skills to be their greatest area of weakness. Lack of financial training was one of the biggest problems cited during the start-up phase, and, even after the business was established, women entrepreneurs continued to cite lack of experience with financial planning as a major problem.

Based on an extensive review of prior research, Brush (1992) noted that women entrepreneurs typically had different educational backgrounds than men entrepreneurs. They were much more likely to have undergraduate degrees in liberal arts as opposed to business, engineering, or more technical subjects. Brush also observed that the financial aspects of starting a venture were the biggest obstacles for women. These include obtaining financing and credit, cash flow management, and financial planning. Finally, Brush noted that women's self-assessed competence in their own financial skills was lower than that of men.

Jones and Tullous (2002) studied the behaviors of men and women aspiring to entrepreneurship. They surveyed 133 clients of a regional small business development center who participated in a training program in 1995. Their findings revealed that both Anglo and Hispanic males perceived that they needed less help in the financial area than Anglo and Hispanic females. When the consultants who worked with these pre-venture

entrepreneurs were surveyed, however, it was their perception that women actually needed less assistance in the financial area than men. Thus, the women had a lower estimation of their financial abilities than the consultants who worked with them to help them establish their businesses.

Taken together, these prior studies attest to women's anxiety regarding quantitative topics in general and financial skills in particular. They reveal that female college students tend to avoid quantitative disciplines, and women entrepreneurs feel that finance is an area of weakness. In contrast, this research will elicit input from women who have succeeded in either the study of finance or employment in the field of finance in order to probe their attitudes towards this field and identify the factors that have contributed to their success.

## **Methodology**

In order to pursue these research questions, the focus group method was used to elicit information from high achieving women in the field of finance. The focus group method is one in which a facilitator works with a small group (8-10) of individuals having similar characteristics to "focus" on an issue or topic. The benefit of this method is that it can provide a wealth of qualitative information in a relatively efficient fashion. Further, focus groups have the potential to provide more detailed information than objective measures such as surveys and questionnaires. This method is particularly appropriate for research on attitudes and motivations, the focal point of this article (Byers & Wilcox, 1991; Morgan, 1988; *Ibid.*, 1996). Interaction between group members creates an environment for sharing and information exchange that is not typically present in pen and pencil surveys. Further, focus group interactions can provide insights into attitudes and motivations that might not emerge through individual observations or interviews (Frey & Fontana, 1993; Morgan & Krueger, 1993).

It should be noted, however, that some of the advantages of the focus group method, specifically the spontaneity, flexibility, and group interaction, can also represent disadvantages as well. It can be more challenging for the researcher to control the direction of the group and hence the data generated. The researcher sought to overcome this disadvantage by identifying specific topics for discussion, using a discussion guide, and re-focusing the discussion as required (Krueger, 1993; Morgan, 1996). Other possible disadvantages include the relatively small number of participants included in a focus group, typically eight to ten, and the potential for undue influence or interference on the part of the moderator (Morgan, 1996). Some researchers have noted the risk that focus group participants will feel compelled to conform to the group norm for "acceptable" ideas and opinions (Morgan & Krueger, 1993), while other researchers have noted that strong personalities within the group can sway group members to more extreme positions than they might have expressed individually (Morgan, 1996).

In this instance, two focus groups were conducted. The first included 10 women undergraduates attending a mid-sized, private university in the Northeast (8,000 students). Nine of the participants were women in their senior year and were recommended by faculty as students who had excelled in their finance classes. The tenth

participant was a female student who had just completed her senior year. The second focus group included 8 women working in the field of finance. All of these women had either completed or were in the process of completing their MBA degrees at the same university. As in the case of the undergraduate students, the women were also recommended by faculty as students who had excelled in their finance classes.

For this study, each focus group met with the researcher/facilitator for one and one-half hours. As noted above, the facilitator followed a discussion guide with each group. The guide for senior women consisted of seven questions while the guide for working women included eight questions. In general, the discussion guide questions explored the women's attitudes toward finance, factors that had contributed to their success in the field of finance, and instructional or workplace strategies that were either beneficial or detrimental to that success.

It should be noted that this study targeted women who succeeded in the field of finance. It does not address the experience of women who were not successful, or those who had bad experiences. A possible direction for further research would be to study not only successful women, but those who are less successful as well in order to compare factors contributing to the performance and attitudes of each. That effort is beyond the scope of this study, but it is hoped that the issues raised by this research will help to lay the groundwork for additional work in this area.

## **Focus Group Results**

### **Focus Group #1**

Several themes emerged in the first focus group. These could be categorized under the general headings of relevance, career linkages, approachability, networks, and the importance of parents, role models and mentors.

If we begin with the theme of relevance, the focus group participants unanimously indicated that it was important to them to have finance taught in a context that is relevant and meaningful. They want to understand why the material is important before they invest the time to learn it. The participants indicated that straight lectures or an endless stream of PowerPoint slides do not demonstrate relevance. They want real world examples, problems that can be done in class with the professor, and the opportunity to ask questions.

Continuing with the theme of relevance, career linkages were also very important to this group of participants. Approximately half of the group indicated that they were always good at math and liked it, but the other half indicated that they "hated" math in high school. In college, however, they became interested in finance because they saw it as a pathway to attractive careers. Once they started studying it, they became interested and motivated. This finding suggests the importance of discussing career possibilities with young women in high school or during their freshman year of college so they will be

aware of some of their options as well as the educational programs that they will need to pursue to achieve their goals.

In terms of instructional strategies, the group indicated that it is important to them to have professors who are approachable and accessible. This group was not at all intimidated about asking questions when they don't understand something, and they want to be able to do so both in class and outside of class. Interestingly enough, this group of women did not care if their faculty members were male or female. It was much more important to them that the individual be willing to work with them. Several of the participants did indicate, however, that they liked seeing women faculty in quantitative disciplines such as economics and finance, because it shows that women can "make it" in those fields.

One of the most interesting findings of this focus group was their use of networking as a learning strategy in finance. They do not view learning or study as a solitary pursuit. Everyone in the group used study partners or study groups to help them learn in a variety of contexts, i.e. to prepare assignments, to study for exams, or to explain material that they did not understand in class. In fact, most of the participants indicated that they would ask their study partner/group for help if they didn't understand something before going to a professor. Study group members assist each other, and they are a source of support and confidence. This very effective use of networking is a skill that will serve these women well in their careers. A number of articles have noted that women are at a disadvantage in business settings because they do not have access to the types of informal networks that men do, i.e. golf, tennis, etc. The findings of this research suggest that a younger generation of high-achieving women in finance are finding ways to develop their own networks and using them to achieve their goals.

The final topic addressed in this group was the impact of role models (including parents) and mentors. In a couple of instances, a parent or parents had encouraged the participant to go into a specific field, i.e. business or engineering. In most instances, however, the participants indicated that their parents did not steer them toward one type of college major versus another. Nevertheless, in most instances, parents did communicate expectations that their daughter should "work hard and do well." There was a clear understanding among this group of women that they were expected to excel academically and that this type of achievement was valued. In a couple of instances, the women were student athletes and had a "surrogate parent" in the form of a coach. In another instance, there was a sister who had "done everything right since the day she was born." In these instances also, the expectation for academic achievement was clearly communicated.

In addition to the parents, women in this group mentioned a number of different role models and mentors including siblings, friends, faculty, or individuals they met in the course of their internship experience. This university requires an internship for every undergraduate student in business. All of the women in this group had done their internships, so they had the opportunity to meet and interact with a number of business professionals in that context. As with faculty, the women indicated that they did not care if their role models were male or female. They were more interested in role models who would spend time with them and help them with their careers. Tying back to the original

theme of relevance, they also wanted internships that allowed them to do meaningful work in the field of finance. They did not want to be used for routine tasks or activities beneath their level of ability.

## **Focus Group #2**

The second focus group, comprised of professional women working in the field of finance reinforced many of the findings from the first focus group. These women were also attracted to the field of finance because of the earnings potential and opportunities for career advancement. They noted, however, that they wanted to do work that was interesting and meaningful rather than just “crunching numbers in a cubicle.” All of these women were either working on or had recently completed their MBA. They noted that it was important to them to have professors who were accessible and approachable as well as the opportunity to ask questions. One woman observed that all professors say that they are available, but some of them mean it while others can’t be bothered. It doesn’t take students long to figure out which category a given professor falls into.

This group of women also noted that it was important to them to have class assignments that are relevant and applicable to the workplace. They want to learn skills that they can actually apply on the job. They felt that they benefited most from classes that provided real world examples and case studies rather than straight lectures. The women noted that reinforcement and repetition of concepts were important instructional strategies. They liked to see concepts repeated across different classes and across disciplines. This helped them understand a particular finance concept in a variety of contexts and demonstrated how it fit in with other disciplines such as marketing, management, operations, etc. They felt that the capstone course which is a part of the MBA program did a good job of integrating the various disciplines, but they also liked to see reinforcement and repetition in other classes as well.

This group was particularly vocal regarding the impact and importance of role models and mentors. Each of the women in the group had at least one important role model or mentor, a parent, professor, supervisor, or someone else in their company. In most instances, these role models were women, although some participants indicated that they also had men who served as mentors. Individuals in this group indicated that it was very important to them to have someone that they could go to who could provide advice and guidance on a variety of workplace issues. This could include advice on how to do some technical task, but it could also include advice on how to handle some aspect of office politics, career advice, or advice on achieving a satisfactory work/life balance. Several women in the group attributed recent promotions to help from a workplace mentor. They also noted the career progress of some of their role models. Three women in the group had women role models/mentors who “went right to the top.”

Interestingly, these women were not interested in role models who were the stereotypical workaholic with no family and no personal life. They wanted role models who had achieved a reasonable balance between professional and personal goals and aspirations. As one participant put it, “you have to have a role model that you can actually identify

with as opposed to someone that you don't want to identify with." As noted above, many conversations with mentors involved issues of work/life balance rather than technical issues specific to the job. Further, when asked about longer term career aspirations, half of the women in the group indicated that they might start their own business at some point in the future, at least partially to obtain some flexibility as well as the ability to pursue personal interests and goals such as having a family. In general, these women were looking for and valued employer flexibility. They wanted flexibility in the workplace, flexibility in terms of the ability to work at home when appropriate, and a flexible boss willing to accommodate personal needs.

This group of women was also very aware of the importance of developing a network to achieve their professional and personal goals. Each of them had consciously taken steps to develop a network of professors, classmates, bosses and old bosses, and other people in their company. Several women attended networking events for young professionals in their area, and others attended meetings of their professional associations. Each woman in the group clearly understood that developing a network was a critical part of advancing her career. As one woman put it "the old boy's network is on its way out, and we're on our way in..."

This group concluded by asking the participants what advice they would give to "younger" women preparing to graduate and pursue a career in the field of finance. The first piece of advice was to "get a mentor." The women recommended that new graduates find a mentor that they could admire both personally and professionally. They noted that a good mentor can provide guidance on work-related matters, but also on life-related matters as well.

The second piece of advice was "don't settle." In other words, do not underestimate your own abilities and settle for a job beneath the level of your capabilities. Be willing to stretch yourself, take risks, and grow. This is perhaps particularly important advice for young women, since a great deal of prior research suggests that women are more risk averse than men. Thus, they may have a tendency to "settle" rather than "reach."

Along the same line, the third piece of advice was "don't be afraid to make changes." These women felt that if you are not happy with a job, if the employer will not work with you to help you achieve your professional goals, or if you are just bored with what you are doing and not growing, it's time to move on. Don't be afraid to take the risks associated with trying something new and challenging yourself.

The final piece of advice pertained to the importance of both technical skills and the ability to work with others. The women noted that, in order to advance your career, you have to be the kind of person that "other people want to work with." As one woman put it "don't burn any bridges; you never know when you will have to work with those people again." These women also observed that you need to develop the skills, both technical and interpersonal, that will allow you to excel in the workplace. One woman observed "your work will speak for itself," while another noted "you are your reputation."

## Summary and Conclusions

This study has focused on women who are high achievers in their finance classes as well as on women who are currently employed in the field of finance. The objective has been to identify those factors contributing to their motivation to pursue the field of finance and to their success in it. The focus group method was used, because prior research indicates that it is a particularly effective means for delving into attitudes and motivations. For this study, a total of eighteen women participated in two focus group lasting one and one-half hours each.

In terms of instructional strategies, the women indicated that they benefit most from professors who are available and accessible both in and outside of the classroom. They want to feel that they can ask questions if they don't understand the material. Further, they like to see women faculty in the field of finance, because it demonstrates that women can be successful in that field. This group of women felt that it was particularly important for finance to be taught in a context that is applied and meaningful. They want to know why it is important to learn the various concepts and techniques and how they can be applied. They prefer applied types of learning such as case studies, projects, and real world examples as opposed to straight lectures or PowerPoint slides.

An important finding of this research was the importance of linking instruction in finance to possible careers in finance. This is consistent with prior work by Worthington and Higgs (2003) with Australian students. Their study also found that interest in a career in finance was one of the major predictors for students choosing finance as a college major. At least half of the women participating in these focus groups indicated that they "hated" math and quantitative subjects at some point. When they learned about the career options available to them, however, it became more important for them to study finance and excel in it. In the process of doing that, they discovered that there was a lot about finance that was interesting and relevant for them.

Another important finding was the women's use of networking as a learning strategy. All of the undergraduate women had established a network or study partners or study teams. They relied on these networks to prepare assignments, study for exams, and get explanations for things they did not understand in class. Student partners and teams also reinforce each other and give each other confidence. This may be particularly important for women who may doubt their abilities in quantitative areas. Further, this very effective use of networking is a strategy that they can also apply in the workplace.

The women participating in this study were quite vocal on the importance of role models and mentors, particularly the professional women. At the undergraduate level, the women indicated that, although their parents did not push them toward one major versus another for the most part, they did clearly communicate the expectation for hard work and excellence in academic performance. In addition to parents or siblings as role models, the undergraduate women mentioned a number of other individuals including professors, friends, and internship supervisors.

The professional women were even more adamant about the importance of having role models and mentors. Prior research has suggested that women in finance face greater difficulty, precisely because they don't have a lot of role models (Eldrich et al., 2007). In contrast, this group of professional women gave examples of women role models who had risen through the ranks in their company thus demonstrating that it could be done. They also gave examples of women in their companies who had achieved a reasonable work/life balance, something that was very important to this group. Further, they talked about mentors who helped them get promotions or coached them through difficult situations at work. Overall, the professional women in this focus group felt that having a mentor was a major factor in their workplace happiness and success.

It could be argued that many of these findings might also be applicable to women majoring in business fields other than finance. The point is, however, that these findings were generated by women specifically discussing their experience with finance classes and employment in the field of finance. It should also be noted that all of these women either were or had been students at a mid-sized private university in the Northeast. It would be interesting to see if the same types of responses would be generated by women attending large, public universities.

What does all this mean in terms of pedagogy? What kinds of things can we as professors do to help our women students be successful in the study of finance and in careers in finance? First, the participants in these focus groups indicated that they wanted faculty who are approachable and accessible. We need to be aware that women students may ask questions during class, after class, or outside of class, and we need to keep ourselves mentally as well as physically available to them. Several of the women in these groups took advanced finance classes because of the interest and encouragement provided by a professor in an introductory class.

Second, women like to learn finance in a context that is applied and meaningful. To achieve this, we can incorporate real world examples, articles from the Wall Street Journal or business press, case studies, team projects, community projects, and a variety of other activities to ensure that the material is relevant.

Third, we should make women aware of the opportunities provided by careers in finance, and we shouldn't wait until their junior or senior year to do it. Students can be alerted to career possibilities through freshman orientation sessions and classes, student clubs, guest speakers, and advising sessions. In terms of guest speakers, women who have careers in finance should be invited as well as men.

Fourth, these groups of women felt that it is important to have female role models. In light of that, it would be desirable to have some female finance faculty members as well as guest speakers from the field who are women. In addition, to the extent that case studies or articles from the business press are used, those should also feature women in leadership, problem-solving, or decision-making roles.

Fifth, these women discussed the importance of networking both as a learning strategy and as a career strategy in finance. Study groups and study partners helped the undergraduate women learn finance, provided a peer group, and gave them confidence. For the professional women, networks both within and outside of their companies helped them to develop job skills and provided them with information regarding career options and opportunities. As faculty, we can help women students develop these networking skills by providing classroom activities such as cases, presentations, or projects that require students to work in teams or in groups.

Finally, most of the undergraduate women and all of the professional women stressed the importance of mentors, or individuals who took an interest in them and their development in the field of finance. Special sessions could be developed for women students through the business school, the finance club, or the career center on mentoring to cover such topics as “What is a mentor?”, “How do you find a mentor?”, and “How can a mentor help your career?”

In summary, this research has focused on women who have excelled in their finance classes and women who have pursued careers in the field of finance. Findings have revealed a number of factors contributing to their success, and suggestions have been provided for ways in which we as educators can incorporate those elements into our curriculum and teaching. Finance is a field that can offer both personal and economic rewards for young women, and this article has been an attempt to open that door to opportunity a little wider.

## References

- Ballard, C. & Johnson, M. (2005). Gender, expectation, and grades in introductory microeconomics at a US university. *Feminist Economics*, 11(1), 95-122.
- Bauer, R. J., Jr. & Dahlquist, J. R. (1999). Recognizing and eliminating gender bias in finance education. *Financial Practice and Education* 9 (1), 83-91.
- Benedict, M. E. & Hoag, J. (2002). Who’s afraid of their economics classes? Why are students apprehensive about introductory economics courses? An empirical investigation. *American Economist* 46 (2), 21-44.
- Brush, C. G. (1992). Research on women business owners: Past trends, a new perspective, and future directions. *Entrepreneurship Theory and Practice* 16 (4), 5-31.
- Byers, P. Y. & Wilcox, J.R. (1991). Focus groups: A qualitative opportunity for researchers. *The Journal of Business Communication* 28 (1), 63-78.
- Correll, S. J. (2001). Gender and the career choice process: The role of biased self-assessments. *The American Journal of Sociology* 106 (6), 1691-1730.
- Eldridge, C. B., Park, P., Phillips, A., & Williams, E. (2007). Executive women in finance. *The CPA Journal* 77 (1), 58-60.
- Frey, J. H. & Fontana, A. (1993). The group interview in social research in successful focus groups; Advancing the state of the art. Newbury Park, CA: Sage Publications.
- Hisrich, R. D. & Brush, C. (1984). The woman entrepreneur; Management skills and

- business problems. *Journal of Small Business Management* 22 (1), 30-37.
- Jensen, E. J. & Owen, A. L. (2001). Pedagogy, gender, and interest in economics. *Journal of Economic Education* 32 (4), 323-343.
- Jones, K. & Tullous, R. (2002). Behaviors of pre-venture entrepreneurs and perceptions of their financial needs. *Journal of Small Business Management* 40 (3), 233-249.
- Krueger, R. A. (1993). Quality control in focus group research in successful focus groups: Advancing the state of the art, edited by D. L. Morgan. Newbury Park, CA: Sage Publications.
- Morgan, D. L. (1988). Focus groups as qualitative research. Newbury Park, CA: Sage Publications.
- Ibid. (1996). Focus groups. *Annual Review of Sociology* 22, 129-152.
- Morgan, D. L. & Krueger, R. A. (1993). When to use focus groups and why in successful focus groups; Advancing the state of the art. Newbury Park, CA: Sage Publications.
- National compensation survey: Occupational wages in the United States. (June 2006). Retrieved September 2007 from <http://www.bls.gov>.
- Pellegrino, E. T. & Reece, B. L. (1982). Perceived formative and operational problems encountered by female entrepreneurs in retail and services firms. *Journal of Small Business Management* 20 (2), 15-24.
- Staniec, J. F. O. (2004). The effects of race, sex, and expected returns on the choice of college major. *Eastern Economic Journal* 30 (4), 549-562.
- Turner, S. E. & Bowen, W. G. (1999). Choice of major: The changing (unchanging) gender gap. *Industrial & Labor Relations Review* 52 (2), 289-314.
- Ward, V.M., Bertrand, J.T., & Brown, L. (1991). The comparability of focus group and survey results. *Evaluation Review* 15(2), 266-283.
- Worthington, A. & Higgs, H. (2003). Factors explaining the choice of a finance major: The role of student characteristics, personality and perceptions of the profession. *Accounting Education* 12 (1), 1-21.

## Biography



**Susan Coleman** is a professor of finance at the University of Hartford's Barney School of Business. She did her doctoral work at Pace University, and teaches courses in entrepreneurial and corporate finance at both the undergraduate and graduate levels. Dr. Coleman's research interests include entrepreneurial finance and financial literacy. She has published extensively in journals including the *Journal of Small Business Management*, *Entrepreneurship Theory & Practice*, and the *Journal of Developmental Entrepreneurship*.