Journal of Leadership and Organizational Studies, 2006, Vol. 12, No. 3

Professional Service Ventures, Performance, and the Gender Effect*

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It has been found in other occupations that there is a gender effect on the earning power of women: women earn less than men. Various studies have examined if there is a gender effect among professional service providers, but they have been empirically focused and generally lacking in theoretical foundation. As a result, very little progress has been made towards understanding why gender effects persist. Most of these examinations have not been based on a theoretical foundation. This study builds on feminist theory from the sociology literature. Consistent with feminist theory, we examined the effect of gender using three mediating factors: professional experience, motivation for becoming an entrepreneur, and amount of effort put into the enterprise. We find that women have less experience as business providers than their male counterparts. A lack of managerial experience is found to relate also to their lower income. Income, as a reason for becoming a professional service provider, is found to be more important to male owners. On the other hand, number of hours worked is unrelated to gender. Collectively these three mediating factors account for thirty-two percent of the gender-related income differences between male and female owners in this study, but approximately two-thirds of the income differences associated with gender still needs to be explained. The implications of these findings and future research directions are discussed.

The largest single identifiable group starting new professional service ventures in the United States (U.S.) is women; they initiated new businesses at twice the rate of men (National Women's Foundation, 2004). It is estimated that 10.6 million businesses in the U.S. are at least 50 percent female owned, representing 48 percent of all privately held businesses. The contribution to the U.S. economy of women owned businesses is estimated at $3.6 trillion (Small Business Administration, 2004).

A wide variety of research has compared various dimensions of female and male small business professional service providers. Initially research explored demographic differences, including age, education, and business background (Brush, 1992). Subsequent owner-gender effects research has been empirical in nature and not guided by a theoretical foundation. As a result, it is difficult to determine progress in explaining differences in performance between male and female owners. An appropriate theoretical foundation for explaining differences between male and female service providers originates in the sociology literature and is referred to as feminist theory. This theory proffers two perspectives regarding gender-related differences in performance. One argues that there are a wide variety of issues that are impacted by society's attitudes towards women (Hooks, 2000). These attitudes are based in the history and institutional structure of society. As a result, women are treated differently than men, so that the performance of businesses owned by women suffers. Another stream of literature argues that there are innate differences between male and female approaches to issues. These differences lead women to take different actions than males in similar situations (Buttner, 2001; Fletcher, 1998). Both streams of feminist theory based research have been used to support the finding that women receive on average only 76 cents in earnings for every dollar a man earns.

There is an alternative theoretical perspective that would not accept the arguments advanced by feminist theory. The foundation for most of this research is the rational economic model (Ferber & Nelson, 1993). This theory argues that individuals make rational economic choices and seek to maximize economic benefit to themselves or the firm. Most of these models assume that customers are economically rational and will make their choices based on the benefits gained from the transaction, and not the gender of the service provider.

Prior research on whether gender has an impact on the financial performance of professional service providers has not provided clear insights on whether feminist theory or the rational economic model is more valid. Some researchers find that women achieve lower financial performance than men (Hisrich & Brush, 1984; Loscocco, Robinson, Hall, & Allen, 1991; Lustgarten, 1995; Chaganti & Prasuraman, 1997; Fasci & Valdez, 1998), while others argue that there is no performance difference between male & female owned enterprises (Fischer, Reuber & Dyke, 1993; Kalleberg & Leicht, 1991). Prior research on the business performance differences between male and female owned small professional service businesses is summarized in Table 1.

A second observation regarding this research stream is that most studies draw their results from a variety of industries. This sampling frame introduces heterogeneity that can significantly influence study results because the competitive environment within each industry shapes the competition within that industry (Lei & Slocum, 2005). The competitive state of the industry exerts a strong influence on how firms develop their strategies to earn profits over time (Porter, 1980). The nature of this competition differs significantly between industries. Therefore, to combine service providers operating in different industries masks important determinants of their success.

A third observation is that a variety of measures have been used to represent business performance. All of the studies utilized more than one performance measure, with the exception of the Lustgarten (1995) and Fasci and Valdez (1998). While this approach has the advantage of increasing the likelihood of finding significant relationships, an alternative approach would be to focus on identifying a performance measure that is most appropriate for a particular theoretical model and a defined sample of businesses. The performance of an early stage firm with venture capital backing, for instance, would typically be measured by sales, employment, or market share growth, while for an established firm, it would be more appropriately judged by some measure of profitability, such as profits as a percent of sales or return on assets (ROA). The main point is that the most appropriate performance measure will depend on the nature of the sampling, which makes heterogeneous industry sampling problematic.

This study seeks to address these issues using feminist theory to guide our investigation. Instead of examining a wide array of causal factors including owner gender, feminist theory suggests that a mediated relationship between owner gender and business performance would be more appropriate. Women do not earn less than men because they are women; instead, lower financial performance would be expected because society treats women differently and because women entrepreneurs approach entrepreneurship and management differently (Lerner & Brush, 1997). This study's research hypotheses are developed in the next section based on feminist theory. This is followed by a description of our research methods, the study results, and a discussion of the implications of these results.

Theory and Hypotheses

Feminist theory has proved useful to analyze issues as diverse as economics (Shackelford, 1992) and ethics (Freeman & Gilbert, 1992). The theory argues that society treats women differently than men and that women are innately different than men. These two factors lead in turn to women acting differently than men, and leads to women earning less than men for the same job in organizations. We argue that feminist theory can also make a significant contribution to the professional service literature and to understanding differences in business performance. This is because the socialization,

Table 1
Empirical Studies of Gender Effects and Entrepreneurial Business Performance

Authors	Date	Sample	Performance Measure	Outcome
Loscocco, Robinson, Hall, & Allen	1991	Small business owners in a variety of industries[1].	Personal income and sales volume	Gender is a significant factor for income, but not sales volume.
Kalleberg & Leicht	1991	Small businesses owners in a variety of industries[2].	Survival and growth in firm gross earnings	Gender is not a significant factor affecting gross earnings.
Fischer, Reuber, & Dyke	1993	Small business owners in a variety of industries[3].	Profits as a percent of sales and owner income	Gender is not a significant factor for either performance measure.
Lustgarten, 1995	1995	Small business owners in a variety of industries[4].	Income	Women have a lower income than men.
Chaganti & Parasuraman	1997	Small business owners in a variety of industries[5].	Firm annual sales, employment growth, ROA	Female owned businesses have lower sales volume than male owned business. No differences were found in ROA or employment growth.
Fasci & Valdez	1998	Owners of small accounting practices[6].	Net profits as percentage of revenues	Female owned practices have lower profit margins.

[1]Businesses were classified as wholesale, business services, financial and real estate, retail, and other services.

[2]Sample was drawn from small retail businesses in computer sales and software, restaurant, and health industry (e.g., nutrition counseling, health food, and exercise).

[3]Sample was drawn from food and furniture manufacturers and retailers, computer services firms, management service firms, and public relations firms.

[4]Sample drawn from the 1990 Population Census which covers a large number of business classifications.

[5]Women sample were more likely to own a service business, while men were more likely to be in retail. The industry composition of the overall sample was not provided.

[6]Sample consisted of CPAs who owned a practice with fewer than five professional employees.

motivations, and resulting organization designs would be different in female settings than in male settings (Mirchandi, 1999). Accordingly, feminist theory is useful in identifying factors associated with gender-related performance differences.

Feminist Theory: Deprivation

The deprivation argument from feminist theory proffers that it is the actions of society in how they treat women that leads to women having less access to education and critical job opportunities. This stream argues that if women have commensurate resources and opportunities, they would be just as successful as men and performance differences would disappear.

It could be expected from the deprivation perspective that women who lead service ventures may be deprived of essential opportunities to succeed, such as proper education, industry experience, networking relationships and access to capital. Research has found some support for this aspect of the feminist perspective (Eagly & Johnson, 1990). Women owners' report that they receive unequal treatment when dealing with lenders and other resource providers (e.g., Belcourt, Burke, & Lee-Gosselin, 1991, Stevenson, 1986); are less likely to have relevant educational experience (Belcourt et al., 1991; Hisrich and Brush, 1987); and lack relevant management and industry experience (Belcourt et al., 1991; Watkins & Watkins, 1983). Empirical research on education and experience levels of women and male owners indicate support that such differences in opportunities exist; if there were equal opportunities there should be equal education and experience opportunities.

The increase in the number of women entering into ownership of new ventures in recent years has been substantial. Of all the new businesses formed in the U.S., women now found businesses at twice the rate of men (DeMartino & Barbato, 2003). Despite the rate of growth in women owning businesses, they are likely to have less experience in their chosen industry than their male counterparts because these structural economic changes have been recent. We thus made the following hypothesis:

Hypothesis 1: Women professional service providers have lower levels of industry experience than males in similar businesses.

Feminist Theory: Orientation

The orientation stream of literature holds that there are differences between male and female experiences from the earliest moments of life. These experiential differences result in women & men holding fundamentally different views of the world. Neither the male nor the female perspective or orientation is considered superior or more functional, but these differences are considered to be pervasive and often subtle in nature (Powell & Graves, 2003).

Therefore, feminist theory would argue that it is not that someone is female or male per se that leads to their performance. Instead, it is factors associated with one's gender that lead to attitudes and behaviors that in turn impact performance.

This perspective argues that there are innate differences in how men and women act. A key part of these differences is that women are more compassionate and less driven by financial success than men. These differences may influence even the motivation of women to become professional service providers and self-employment (Scherer, Brodzinski, & Wiebe, 1990; Moore & Buttner, 1997; DeMartino & Barbato, 2003) or a profession (Valian, 1998a). In the case of self-employment, most men and women share the desire for independence (Sexton & Bowman, 1986, 1990; Shane, Kolvereid, & Westhead, 1991). Their priorities for starting a business, however, still differ significantly. Women generally are more focused on balancing work and family, while men are more motivated to gain wealth through business ownership (Moore & Buttner, 1997; DeMartino & Barbato, 2003). On the basis of this evidence, we made the following hypothesis:

Hypothesis 2: Women professional service providers place a lower priority on financial success than do males.

Another aspect of socialization that may result in gender differences relates to sex roles associated with women and men. Men are expected by society to be career-motivated and to focus their energy on producing income for the family during their work years (Powell & Graves, 2003; Moore & Buttner, 1997). Women are expected to assume the primary responsibility for family and care-giving as well as contribute to work. Men generally are socialized to be instrumental and proactive and possess career goals that are financial and success oriented. On the other hand, women are generally socialized to be passive and supportive of others, especially family members, and have career goals that are oriented toward fulfillment and satisfaction of others.

Differences between men and women in terms of motivation have been identified as well. Women are motivated more than men by the opportunity to have flexibility in lifestyle and to have more of a balance between work and family (Brush, 1992). Buttner (1993) found that women are influenced and motivated more by family needs than are men. Similarly, DeMartino and Barbato (2003) found that men were not particularly motivated by a desire to gain greater balance between work and family whereas women were. Women, on the other hand, tended to possess a lower preference for advancement and equity compared to men (DeMartino & Barbato, 2003). As a result of this evidence, we made the following hypothesis:

Hypothesis 3: Women professional service providers work fewer hours in their businesses than do males in similar businesses.

Finally, we state explicitly what is shown in our model in Figure 1. The three factors on which male and female owners differ – experience, income motivation, and hours worked – mediate the relationship between gender and business performance.

Industry experience is particularly critical for professional service providers because building a social network is important to establishing the legitimacy of the service (Loscocco, Robinson, Hall, & Allen, 1991; Zimmerman & Zeitz, 2002) and the success of the venture (Silversides, 2001). Industry experience provides the opportunity for a professional to establish a well endowed network of support. The most widely identified reason for the failure of an entrepreneurial venture is an absence of resources both tangible and intangible (Eisenhardt & Schoonhoven, 1990). The small business venture can overcome these missing resources through networks with other parties. A new venture may have a shortage of cash but a supportive network built over years in an industry that can act to help arrange financing from a variety of sources may mediate the gender impact. Industry experience also allows the service provider to develop networks of relationships that help to validate the new business to others. The Fasci and Valdez (1998) study found empirical support for a relationship between industry experience and business performance. In their study of accounting professionals, the amount of experience was positively associated with owner income. Based on these arguments and this empirical evidence, we developed the following hypothesis:

Hypothesis 4: The gender effect on income will be mediated by:

(a): Industry experience, which will be positively related to financial performance.

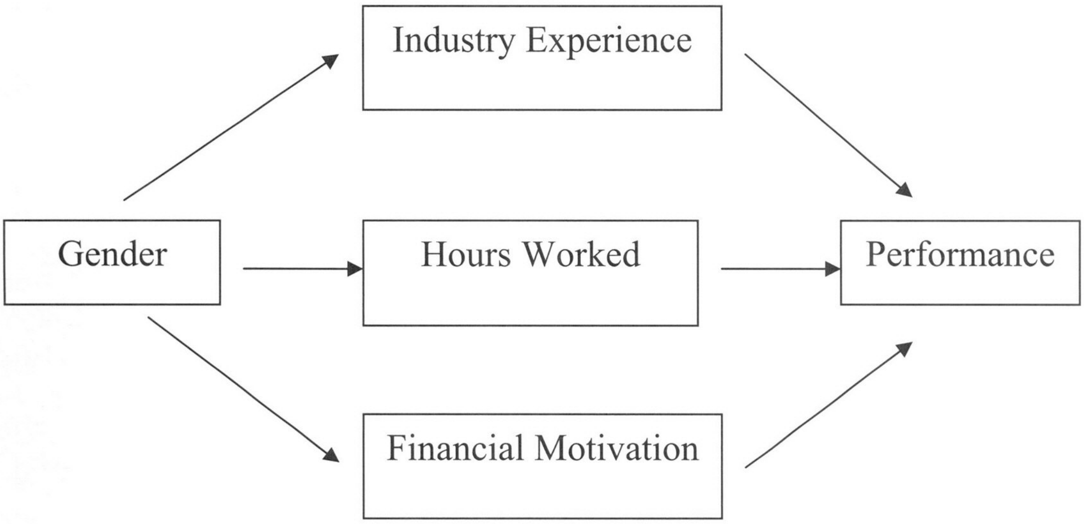
We also expect that one's motivation for going into a profession will guide one's subsequent behaviors within the profession. Specifically, if income is an important determinant for entering a particular profession, then we expect owners with this motivation to manage their behaviors so as to achieve their objective of high income.

(b): Financial motivation for starting a business, which will be positively related to financial performance.

We have argued earlier that women are likely to work fewer hours than men, it also seems appropriate to expect that hours worked will be related to financial performance, especially in professional practices where income is related to the number of customers serviced and how much time a particular procedure requires. Thus we developed the following hypothesis:

(c): Hours worked will be positively related to financial performance.

Figure 1 - Model



Research Methods

Individual professionals starting and operating their own businesses are recognized as professional service providers (Cohen, Musson, & Duberley, 2004). The professions examined in the prior research have covered a wide variety, such as engineers (Pitt, 2004), doctors (Gibb, 2002), and bankers (Bamford, Dean, & Douglas, 2004). Professional and entrepreneurial competencies are unique from each other. Both sets of competencies are needed in professional service ventures for them to be successful (Iyigun & Owen, 1998). Thus, professional service providers offer an appropriate sample for gender investigations (Fasci & Valdez, 1998).

Sample

The increase in the number of women entering into professional practices in recent years has been substantial. The percentage of female law students, for instance has grown from less than 10% in the 1970s to roughly 49% in 2001, according to the American Bar Association. Women are rapidly becoming a majority in the veterinary profession where they now make up nearly 76% of veterinary students and 36% of practicing veterinarians, which is nearly twice the percentage of female veterinarians practicing in 1990 (Volk, 2005). One benefit of studying such professionals is that they are a clearly definable group. Additionally, excessive variability in the sample can be controlled since the participants' educational backgrounds and assets necessary to establish the business would be similar, regardless of gender. The use of a single category of professional service providers also has the benefit of having clearly relevant measures of performance. One of the major shortcomings in the prior research we noted was the reliance on highly diverse samples with no clearly applicable measures of performance in each setting.

The sample for this study was drawn from a larger study by the American Veterinary Medical Association (AVMA). The AVMA mailed 15,000 survey questionnaires to a random sample of member veterinarians. Responses were received from 4,392 veterinarians for a 29.3 percent response rate. Respondents included in this study met the following criteria:

> *A sole proprietor of the business, thus excluding partnerships and publicly held companies. As sole proprietors they will be personally responsible for*

the decisions affecting the performance of the business and their income from the business.

The businesses sampled focused exclusively on small/companion animals, as opposed to food animals (e.g., cows, pigs, etc.) and equestrian, veterinarians. This helped to further insure that the comparison of male and female service providers were similar since there can be significant differences in the nature of veterinary practices. This requirement further controlled for potential confounding of extraneous variables.

These qualifications resulted in a sample of 572 owners, including 178 women (31%) and 394 men (69%). To check on the representativeness of this sample, the gender mix and income levels of this sample were compared to known statistics for all veterinarians. The mix of women and male veterinarians in this sample appears to be in line with the 36% of all veterinarians who are female (Brown & Silverman, 1999). The slightly lower percent of women in this study may be due to the focus on practice owners. Women constitute a larger percent of associates as opposed to owners in the veterinary industry (Cron, et al., 2000). The average income of the owners participating in this study is $65,211, which is higher than the government figure of $57,130 for all veterinarians at the time (U.S. Labor Statistics, 1998). Prior research has found owner income is higher than that of associates in this field (Cron, et al., 2000). A more complete description of the practices and income of this sample of service providers and for each gender are provided in Table 2.

Measures

The descriptive statistics and intercorrelations of the measures in the study are presented in Table 3.

Performance: One of the advantages of focusing on professionals in one industry is the opportunity to develop a valid business performance measure. Professional service ventures, such as veterinarian practices, are typically organized as limited liability corporations. A limited liability corporation (LLC) is attractive since the professional receives liability protection. If there is a legal suit or overwhelming debts, those debts belong to the firm not the individual. Another benefit of an LLC is that the business can expense costs, such as insurance and other fringe benefits, because these are tax deductible. The owner of an LLC typically does not build up extensive retained earnings in the firm. Instead, they will pay themselves a salary and then pay themselves a bonus at year end so that the LLC itself does not owe any taxes. Individuals will pay taxes on their personal income. If the person seeks to sell the business, they are selling the customer base and a revenue stream. The most appropriate performance measure therefore would be the

Table 2: Descriptive Statistics of Sample Practices

	Total Sample	Female Owners	Male Owners
Average Income in Practice's Zip Code	$46,167	$48,063	$46,122
Size of Community (population):			
Less than 25,000	38%	44%	35%
25,000 – 49,000	18%	19%	18%
50,000 – 250,000	34%	29%	37%
More than 250,000	10%	8%	10%
Number of Associates in Practice	1.8	2.2	1.6
Number of Locations Operated	1.1	1.0	1.2
Income	$65,210	$47,474	$73,169

Table 3: Means, Standard Deviations, Correlations, and Cronbach Alpha

Variable	Mean	Std. Dev.	FO	ZCI	SC	NA	NL	EXP	HW	IP
Female Owner (FO)	31%[1]	--								
Zip Code Income (ZCI)	$46,167	15,720	.06	--						
Size of Community (SC)	3.11	1.11	-.11	-.01	--					
Number of Associates (NA)	1.8	4.25	.06	.08	.07	--				
Number of Locations (NL)	1.1	0.22	-.08	-.01	-.09	.10	--			
Experience (EXP)	18.4	8.39	-.39	-.05	.06	.01	-.01	--		
Hours Worked (HW)	48.2	8.8	-.05	.01	.05	-.21	-.11	-.26	--	
Established Practice for Income Potential (IP)	5.5	1.3	-.26	.04	.10	.06	-.01	-.11	-.01	--
Income (I)	$65,210	21,511	-.55	.04	.15	.23	.16	.33	-.14	.47

[1]31 percent of respondents are women.
Note: For rs > .13, p < .001; for rs > .09, p < .01; and for rs .06, p < .05.

income the professional is able to take out of the firm. As a result, studying the performance of LLC professional service organizations is synonymous with examining owner income. It is worth noting that owner income is also the measure used by the AVMA (American Veterinary Medical Association), the veterinarian's professional society, when annually evaluating performance in the industry (Volk, Felsted, Cummings, Slocum, Cron, Ryan & Moosbrugger, 2005). The average income level for veterinarians in this study is $65,210.

To further validate income as the most appropriate measure of business success, respondents were asked, "At the end of your fiscal year, what is the most important criterion by which you evaluate your practice's financial performance?" The answers from which they could choose, with the percent choosing each response in parentheses, were owner income (61%), total dollar revenue (15%), cash flow (15%), pre-tax dollar profits (4%), return on assets (3%), and return on owner's equity (2%). As owner income is closely related to revenue and cash flow, these results provide strong support for the use of owner income as the most appropriate measure of business success for these professional service providers.

Industry Experience: Industry experience was measured in this study by asking respondents how many years they had been operating their own practice. The average number of years entrepreneurs in this study have been operating their own practices is a little over 18.5 years, ranging from 2 to 40 years.

Hours Worked: Hours worked was measured by asking respondents to indicate the number of hours they worked in their business during a typical week. The average number of hours was 48 hours a week, ranging from a low of 20 hours to a high of 60 hours a week.

Financial Motivation: To measure financial motivation for starting their own practice, respondents were asked to rate on a 7-point scale ranging from "not at all important" to "very important" the importance of income potential as their reason for starting their practice as a sole proprietorship. The average importance rating in this study was 5.5 out of seven with a standard deviation of 1.3.

Controls

A set of several control variables was also included in the analyses to account for additional determinants of income. One factor expected to be positively related to performance is the population of the community in which the practice is located. All things being equal, performance should be greater when there are more people in the community in which the practice is located (Loscocco, et al., 1991). Respondents were asked to indicate the size of the community in which their practice is located from less than 25,000, 25,000 to 49,999, 50,000 to 250,000, to 250,000 or more people. These categories were developed by the AVMA to mirror population density associated with rural, small, medium, and large communities. This was considered preferable to having respondents estimate the precise size of their community since errors in estimating were likely and the boundaries of communities are not always obvious.

A second factor that may influence owner income is the average income in the area in which the practice is located, as this should allow for greater pricing flexibility. The core trading area for companion-pet veterinary practices is generally within a two to three mile radius of the practice's location. The average income level within the zip code of the veterinary practice is used to measure this factor. This data was obtained from the U.S. Census Bureau (www.census.gov). We expect this measure to be positively related to owner income due to greater discretionary spending levels and the flexibility this offers veterinarians in setting higher prices.

Finally, size of business (e.g., number of employees) has been generally found to have an important influence on business performance. Given the local nature of veterinary practices, however, business performance will be influenced both by volume of business in a particular trading area and by the limits of the owner to both manage the business and provide professional services. According to the AVMA, two measures of size are appropriate for veterinary practices: number of practice facilities and the number of full-time equivalent (FTE) associates in the practice. Both measures were included because it was felt that they measure slightly different aspects of organization size. The trading area for companion animal veterinary practices is geographically limited. Therefore, we expected that multiple locations would result in greater volume of business than a single location. On the other hand, 96 percent of the sample operated only one location, so the number of associates in FTEs would capture differences in size of practices for veterinarians practicing out of only one location. Indeed, the number of associates working in single location practices varies from zero to a high of 15, with an average of 1.8 associates per practice.

Method of Analyses

It was noted in the review of prior research that lack of methodological rigor confounds our understanding of gender. Therefore, as recommended by Baron and Kenney (1986), we used a three-stage process to examine whether industry experience, hours worked, and financial motivation mediated the relationship between owner gender and business performance. With this approach, three conditions must be met in order to establish mediation. First, the independent variable (owner gender) must be related to the mediators (hours worked per week, experience, and financial importance of being an entrepreneur) as stated in Hypotheses 1, 2, and 3. The next two steps are a strong test of hypotheses 4a, 4b, and 4c. First, the independent variable (owner gender) must be related to the dependent variable, owner income. Finally, the effect of the independent variable (female ownership) on the dependent variable must be significantly reduced or disappear when jointly considered with the mediator variables.

Findings

The first condition of the Baron and Kenney test was partially met with female service providers differing significantly from males with respect to the hypothesized mediating factors ($F = 46.37$, $p < .001$). Female professionals, compared to male professionals, are less experienced ($F = 99.7$, $p < .001$) and indicated that income potential was less important as a reason for starting their own business ($F = 39.7$, $p < .001$) than their male peers. In hours worked per week, there were no differences between males and females. The mean responses in Table 4 indicate a profile of female owners as having less practice ownership experience than their male counterparts (14 versus 21 years experience) and income was not as important a reason for starting their practice as it was for male owners (4.8 versus 5.6), but working essentially the same number of hours per week as male owners (48 hours per week).

The second condition is that the independent variable (owner gender) must be related to the dependent variable, owner income. As shown in Table 5, this condition is met. Female ownership is negatively related to income (β = -.54, $p < .001$), even when controlling for environmental and business factors. Specifically, owner income is positively related to size of community (β = .08, $p < .05$), number of associates in the business (β = .25, $p < .001$), and number of facilities (β = .10, $p < .01$). The beta coefficient for zip code average income was positive, but was not significant. Combined these factors produce an adjusted R^2 of .38 (F = 67.12, $p < .01$).

Finally, the third condition is that the effect of independent variable (female ownership) on the dependent variable must be significantly reduced or disappear when jointly considered with the mediator variables (Aiken and West, 1992). To examine this effect, owner income was regressed on owner gender, the hypothesized mediating factor, and the control factors. All three hypothesized mediating factors are significantly related to owner income as shown in Table 6. Nevertheless, owner gender is still significantly related to owner income: female ownership is negatively related to owner income. These results suggest that the three mediating factors only partially mediate the relationship between female ownership and income. The adjusted R^2 increases to .51 (F = 70.18) when all the factors were included. Likewise the beta-coefficient for gender, while still significant (β = -.41, p <.001), declined and the partial eta squared declined from .317 to .215 indicating that 32% of the relationship between gender and income was accounted for by the mediation variables.

The nature of the relationship between the three hypothesized mediating factors and owner income is interesting. The partial eta squared for the three personal factors combined indicated that they accounted for 21% of the variance in owner income. Furthermore, the importance of money accounted for 18% of the explained variance. As expected, years of experience in practice ownership is positively related to income (β = .08, $p < .05$), as is the importance of income potential as a reason for starting the practice ((β = .34, $p < .001$). Hours worked per week is also significantly related to income, however the relationship is negative (β = -.11, $p < .01$), suggesting that income is lower among owners who spend more time working each week. The common expectation that the harder one works, the more money one will earn does not hold among this sample of professional service providers. It may be that they work longer hours when competitive and economic conditions require additional efforts. Even under such exigencies, service providers who worked longer hours earned less than owners who reported working shorter hours. While this is simply conjecture at this point, it is worth noting that number of hours worked is negatively correlated with years of experience, number of associates, and number of locations. Working long hours to establish one's practice and client pool is often undertaken without the aid of associates to handle the workload. Veterinarians who are more willing to spend extra hours to keep (or build) their practice perhaps are engaging in activities unrelated to their practice (e.g., Rotary Club, high school events) in the hope that these will increase the practice's income in the future.

We were able to test whether the hours worked to income relationship holds for both male and female owners. We reran the full-model including all the independent measures with males and then with only female service providers. Owner income was negatively related to the number of hours worked per week (β = -.17, $p < .001$) for male owners, but the relationship was not significant (β = -.06, p = ns) for female owners.

One possible explanation for these findings are the motivations of women service providers. Consistent with feminist theory, it could be argued that women started their practice to have

Table 4
ANOVA Results for Personal Factors

Personal Factors	Female Owners (178)	Male Owners (394)	Univariate F-value
Experience	13.5	20.6	99.7*
Average hours worked per week	48.8	47.9	1.3
Reason for starting business: Income potential	4.8	5.6	39.7*

Multivariate F = 46.37, $p < .001$

* p<.001.

Table 5
Regression of Personal Income on Environmental Factors, Business Factors, and Gender

Factors		
Environment Factors:		
Zip Code Average Income		.05
Size of Community		.08*
Business Factors:		
Number of Associates in practice		.25**
Number of locations		.10**
Female Owner:		-.54**
*p<.05.	R^2_{adj}	.38**
**p<.01.	F-value	67.1

flexibility in their schedule and to manage family related concerns.

According to one female service provider, "Making more money isn't a great motivating factor for me. My bigger motivation is to have a great team, provide good-quality medicine, and be happy with what I do." Male service providers started their practice to make a financial success. While female owners are found to work the same number of hours on average as male owners, they have less experience (14 years versus 21 years), operate fewer locations (1.02 versus 1.50 locations), and work with more associates (2.2 versus 1.6). The picture that emerges is that female owners are willing to trade-off income for flexibility and may not feel that they are in a position to work an extraordinarily high number of hours.

Discussion

The evidence presented here is that there is a gender effect among professional veterinarian service providers; females earn significantly less than their male counterparts. We controlled for the type of industry in which these professionals practiced, firm size, and practice location effects. The high level of variance explained, an adjusted R^2 of 48 percent, is consistent with our test of the gender effect.

Table 6
Analysis of Mediation for Personal Factors and Income

Factors		
Environment Factors:		
Zip Code Average Income		.04
Size of Community		.07*
Business Factors:		
Number of Associates in practice		.22**
Number of locations		.11**
Female Owner:		-.41**
Personal Factors:		
Average hours worked per week		-.11**
Reason for starting business: Income Potential		.34**
Years of Experience		.08*
* $p<.05$.	$R^2_{adj.}$	.51**
** $p<.01$.	F-value	70.18

There are several research implications from the findings presented here. First, the findings demonstrate the usefulness of feminist theory for guiding research on the effect of gender on performance. It has been argued that there is a need for greater use of the theory in the study of organizations (Jermier & Clegg, 1994). This research would support that call. Second, the results reported here suggest that future research on gender effects should include relevant industry experience and hours worked. Both factors were found to be significantly related to income and to partially mediate the effects of gender on income. Third, our results concerning the importance of money in motivating the service provider to enter a profession suggest that greater attention should be focused on the motivations of the professional. It is impressive that after 18 years of practicing, on average, one's original motivations for entering a profession, still impact current income.

The findings here also have implications on the direction of future research. Feminist theory has guided this research, but we were unable to incorporate all the variables suggested by this theory. We believe there are other variables that merit investigation since the mediating model presented was only partially supported. Specifically, it is striking that 18 percent of the explained variance, even after accounting for the mediating factors, is attributable to gender. This is an indication that there are still strong mediating factors (e.g., economic dependency, family needs, life-style choices) impacting women which have not been examined to date.

For example, the impact of society's actions when they deprive women of specific resources is an area ripe for future investigation. One such topic that would be useful for future investigation would be obtaining greater insight on the impact of the deprivation of financial resources on women founded businesses. Financial resources are critical to the success of a professional venture (Steiner & Greenwood, 2000). However, if society treats women differently, understanding the impact of this on women's performance is important.

Another interesting area for future research would be to understand those choices that women make in managing their business, which over the long term, have a financial impact on their ventures. Differences in the area of human resource practices would appear to be an area that would provide rich insights in the future.

A management practice that may be productive for future research would be pricing practices by women professional service providers. Pricing has been found to have a greater impact on profits than other financial decisions, including fixed costs, variable costs, and revenue growth (Marn & Rosiello, 1992). Most professional practices have considerable flexibility when setting prices since variable costs are low relative to price and it is not easy for consumers to make price comparisons. Given these cost dynamics, transactional pricing can be construed as a naturally occurring negotiation setting from the professional's perspective. Most studies of gender effects on negotiations have found that men take a different approach than women when negotiating (Halpern & Parks, 1996). A recent meta-analysis on the causes of negotiated outcomes concluded that men negotiated significantly better outcomes than women (Stuhlmacher & Waters, 1999).

Future research should also explore if the gender effect is specific to the U.S. It is increasingly recognized that professional services play a critical role not only in the U.S., but throughout the world. In Europe, for example, they play an increasingly critical economic role (Bednarzik, 2000). The presence of gender effect in other mature economies may have similar negative long term economic implications. The ability to contrast the gender effect in different nations and the role of these nations' institutional environments would provide insight to the role of these institutional environments on successful entrepreneurial efforts.

This research examines service providers at one point and time. Thus, whether the gender effect is a continuing factor determining the success or failure of a practice needs to be explored. Kalleberg and Leicht (1991) found that in competitive markets, women over time are more likely to fail than men because they are pushed into lower-quality opportunities – by family constraints, lack of business contacts – and hence make poor business decisions. Longitudinal research is needed to address this issue. There is evidence that the gender effect in some areas such as pay, while continuing, is less than it was 10 years ago. Therefore, future research should continue to build on these findings and examine the gender effect longitudinally.

The findings also have methodological implications for future research. First, the findings support the need for more rigorous analysis of homogeneous groupings of professional service providers. The impact of structural factors imbedded within an industry is found to influence owner income. Size of community, number of associates in the practices, and number of locations are all salient and statistically related to owner income. This suggests that even sampling from within one industry does not control for all the factors influencing income. However, such problems can only be far greater when sampling across industries.

The use of the sample of individuals who found and ran their practices can be criticized. The tradeoff in using professionals is that while controlling for many extraneous industry variables, the age of the practices was older than would be ideal. Future research should build on this use of the focused sample that controls for extraneous variables. However, other target groups should be examined to not only ensure that the results here are not industry specific, but also that the gender performance relationship are not idiosyncratic to our sample.

In summary, this research is a well grounded and thorough examination of the potential gender effect on professional service ventures. The findings have broad implications for society as a whole as well as theoretically support for the future use of the feminist theory. Future research should build on these findings and expand our understanding of this critical issue.

References

Aiken, L. and West, S. 1992. Multiple regression: Testing and interpreting interactions, Newbury Park, CA: Sage Publications.

Bamford, C. E., Dean. T. J., Douglas, T. J. 2004. The temporal nature of growth determinants in new bank foundings: Implications for new venture research design. Journal of Business Venturing. 19:899-920.

Baron, R.M. & Kenney, D. A. 1986. The moderator-mediator variable distinction in social psychology research: Conceptual, strategic, and statistical considerations. Journal of Personality and Social Psychology, 51: 1173-1182.

Belcourt, M., Burke, R., and Lee-Gosselin, H. 1991. The glass box: Women business owners in Canada. Ottawa, Canada: The Canadian Advisory Council on the Status of Women.

Bednarzik, R. W. 2000. The role of entrepreneurship in U.S. and European job growth. Monthly Labor Review, 123(7): 3-17.
Brush, C. G. 1992. Research on women business owners: Past trends, a new perspective and future directions. Entrepreneurship Theory and Practice, 16(4), 5-30.
Brown, J. P. & Silverman, J. D. 1999. The current and future market for veterinarians and veterinary medical services in the United States. Journal of the American Veterinary Medical Association, 215,2: 161-183.
Buttner, E. H. 2001. Examining female entrepreneurs' management style: An application of a relational frame, Journal of Business Ethics, 29: 253-269.
Chaganti, R. & Parasuraman, S. 1997. A study of the impacts of gender on business performance and management patterns in small business. Entrepreneurship Theory & Practice, 21: 73-75.
Cohen, L. Musson, g., Duberley, J., 2004, Enterprising professionals – scientists, doctors, and their customers. International Journal of Entrepreneurship & Innovation. 5: 15-25.
Cron, W. L., Slocum J. W., Goodnight, D. B., & Volk, J. O. 2000. Effectiveness of veterinarians. American Veterinary Medical Association, 217(3): 332-338.
DeMartino, R. & Barbato, R. 2003. Differences between women and men MBA entrepreneurs: Exploring family flexibility and wealth creation as career motivations. Journal of Business Venturing, 18: 815-832.
Eagly, A.H. and Johnson, B.T. 1990. Gender and leadership style: A meta-analysis. Psychological Bulletin, 108: 233-256.
Eisnehardt, K. M. & Schoonhoven, C. B. 1990. Organizational growth: Linking founding team, environment, and growth among US semiconductor ventures, 1978-1988. Administrative Science Quarterly, 35: 504-530.
Fasci, M. and Valdez, J. 1998. A performance contrast of male- and female-owned small accounting practices. Journal of Small Business Management, July: 1 – 7.
Ferber, M. and Nelson, J. A. 1993. Femist Economics Today: Beyond Economic Man. University of Chicago Press: Chicago.
Fischer, E. M., Reuber, A. R., & Dyke, L. S. 1993. A theoretical overview and extension of research on sex, gender and entrepreneurship. Journal of Business Venturing, 8, 151-168.
Fletcher, J. 1998. Relational practice: A feminist reconstruction of work. Journal of Management Inquiry, 7(2): 163-186.
Freeman, R. E. & Gilbert, D. R. 1992. Business, ethics, and society: A critical agenda. Business & Society 31: 9-18.
Gibb, A. 2002. In pursuit of a new 'enterprise' and 'entrepreneurship' paradigm for learning: creative destruction, new values, new ways of doing things and new combinations of knowledge. International Journal of Management Reviews, 4: 213-232.
Halpern, J.J. & Parks, J.M. 1996. Vive la difference: Differences between males and females in process and outcomes in a low-conflict negotiation. International Journal of Conflict Management, 7(1): 45-70.
Hisrich, R. D., & Brush, C. G. 1984. The women entrepreneur: Implications of family, educational and occupational experience. Journal of Small Business Management, 22(1), 30-37.
Hooks, B. 2000. Feminist Theory: From Margin to the Center. South End Press: Chicago.
Iyigun, M. F. and Owen, A. L. 1998. Risk entrepreneurship and human capital accumulation. American Economic Review, 88: 454-459.
Jermier, J. M. & Clegg, S. R. 1994. Critical Issues in Organization Science: A Dialogue. Organization Science: A Journal of the Institute of Management Sciences, 5: 1-13.
Kalleberg, A., & Leight, K. T. 1991. Gender and organizational performance. Determinants of small business survival and success. Academy of Management Journal, 34, 136-161.
Lei, D & Slocum, J. 2005. Strategic and organizational requirements for competitive advantage. Academy of Management Executive 19, 31-45.
Lerner, M & Brush, C. 1997. Israeli women entrepreneurs: An examination of factors affecting performance. Journal of Business Venturing, 12: 315-340.
Loscocco, K. A., Robinson, J., Hall, R. H., & Allen, J. K. 1991. Gender and small business: An inquiry into women's relative disadvantage. Social Forces 70, 65-85.
Lustgarten, Steven 1995. Business ownership as an employment opportunity for women. Office of Advocacy, U.S. Small Business Administration. Washington, D.C.: Government Printing Office.
Marn, M. & Rosiello, R. 1992. Managing price, gaining profits. Harvard Business Review, (September-October): 84-94.
Mirchandani, K. 1999. Feminist insight on gendered work: New directions in research on women and entrepreneurship. Gender, Work, & Organization. 6: 224-236.

Moore, D. P. & Buttner, E. H. 1997. Women Entrepreneurs: Moving Beyond the Glass Ceiling, Thousand Oaks, CA: Sage, 1997.

National Women's Foundation. 2004. Capturing the impact: Women-owned businesses in the United States. Center for Women's Business Research. http://www.nfwbo.org/pressreleases/nationalstatetrends/capturingtheimpact.htm

Pitt, M. 2004. External influences on the enterprising identity – the case of small owner-managed engineering firms. International Journal of Entrepreneurship & Innovation. 5: 37-42.

Porter, M. 1980. Competitive strategy. New York: Free Press.

Powell, G. and Graves, L.M., 2003. Women and Men in Management, Thousand Oaks, CA: 3rd. ed Sage

Stuhlmacher, A.F. & Walters, A. E. (1999). Gender differences in negotiation outcome: A meta-analysis. Personnel Psychology, 52(3): 515-532.

Scherer, R., Brodzinski, J. & Wiebe, F. 1990. Entrepreneurship career selection and gender: A socialization approach. Journal of Small Business Management. 28(2): 37-44.

Sexton, D. & Bowman-Upton, N. 1986. Female and male entrepreneurs: Psychological characteristics and their role in gender-related discrimination. Journal of Business Venturing. 5: 29-36.

Sexton, D. L. & Bowman-Upton, N. 1990. Female and Male Entrepreneurs: Psychological Characteristics and Their Role in Gender-Related Discrimination. Journal of Business Venturing, 5: 29-37.

Shackelford, J. 1992. Feminist pedagogy: A means for bringing critical thinking and creativity to the economics classroom. American Economic Review. 82: 570-577.

Shane, S., Kolvereid, L. & Westhead, P. 1991. An Exploratory Examination of the Reasons Leading to New Firm Formation Across Country and Gender. Journal of Business Venturing, 6: 431-447.

Silversides, G. 2001. Networking and identity: The role of networking in the public image of professional service firms. Journal of Small Business and Enterprise Development, 8(2): 174-184.

Small Business Administration. 2004. http://www.sba.gov/financing/special/women.html

Stevenson, L. 1986. Against all odds: The entrepreneurship of women. Journal of Small Business Management 24(4): 30-36.

Steiner, L. & Greenwood, R. 2000. *Entrepreneurship and the evolution of angel financial networks.* Organization Studies 21: 163-193.

U.S. Bureau of Labor Statistic, 1998 Occupational Employment Statistics, Professional, Paraprofessional, and Technical Occupations. Available at: www.statis.bls.gov/oes/national/.

Valian, V. 1998. Why So Slow? The Advancement of Women, Cambridge, MA: The MIT Press.

Volk, J. 2005. Personal Communication, Vice President, Brakke Consulting, Chicago, IL.

Volk, J., Felsted, K., Cummings, R., Slocum, J., Cron, Wm., Ryan, K. and Mossbrugger, M., 2005. Executive Summary of the AVMA-Pfizer Business Practice Study. JAVMA, 226 (2), January, 15.

Watkins, J. and Watkins, D. 1983. The female entrepreneur: Her background and determinants of business choice – Some British data. In J. Hornada, J. Timmons, and K. Vesper, eds., Frontiers of Entrepreneurship Research. Wellesly, MA: Babson College, 271-288.

Zimmerman, M. A. & Zeitz, G. J. 2002. Beyond survival: Achieving new venture growth by building legitimacy. Academy of Management Review, 27: 414-432.

* The authors wish to thank Igor Filatotchev, Gary Powell, Steve Mueller and Don VandeWalle for their cogent commentary and contributions to earlier drafts of this manuscript. This research was sponsored by the Brakke Consulting Firm, Bayer Animal Health, and the American Veterinarian Association. Portions of this paper were presented at the Academy of Management meetings in Honolulu, 2005.