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Pharmacists' Inter-Gender Differences in Behavior and Opinions: Is work Input an Important Mediator?

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ABSTRACT

Objective: Identify and assess inter-gender differences in pharmacists' behavior and perceptions while controlling for number of hours worked. **Design:** Every respondent is classified into two independent categories: gender and work input. Behavior and opinion variables are studied. Behavior variables measure who the pharmacist is and what he/she does; opinion variables measure perceptions related to satisfaction with his/her professional life. **Setting:** Survey questionnaire mailed to 5,000 registered pharmacists throughout the U.S. in 2004. **Results:** Compared to their male counterparts, female pharmacists are younger, possess less experience and job longevity, and earn lower levels of income and wage rates. These patterns are observed in every work-input category. Systematic variation in behavior variables by work-input category is more common within men than within women. Practitioners respond more positively toward job-specific than toward career-specific opinion variables, and this trend occurs more often for men than for women. In their general perception of pharmacy as a profession, women respond more positively than do men, but with respect to their own job situation, fewer gender disparities and more differences by work-input category are detected. As the level of work effort increases, male practitioners report less satisfaction, more appreciation, greater workload, more stress, less autonomy, and fewer advancement opportunities about their jobs, whereas women's response is limited to heavier workloads and more stress. **Conclusion:** Male and female pharmacists exhibit different behavior characteristics, and these differences appear consistently in the three work-input categories. The conclusions derived from the analysis of opinion variables are less definitive, but provide a meaningful contribution towards understanding the forces shaping practitioners' perceptions.

INTRODUCTION

Disparities in the patterns of skills distribution commonly exhibited by men and women gain relevance when one considers the growing emphasis on pharmaceutical care and patient counseling resulting from recent reform initiatives and changes in the delivery and financing of health-related services.¹⁻³ The professional activities demanded by these initiatives and changes have been viewed as consistent with the way women are socialized into gender roles, which may explain the rising proportion of female pharmacy students and graduates observed in the last few years.⁴⁻⁵ Yet women's career success and job satisfaction in pharmacy and other healthcare fields may be influenced by factors largely different from those affecting men in what is perceived often as a male-dominated market.⁶ Thus, a thorough understanding of inter-gender variation in marketplace perceptions and behavior is vital to matching pharmacists' capabilities with available opportunities in the pursuit of a rational and efficient allocation of resources that minimize dissatisfaction and turnover.⁷⁻¹⁰

One of the variables frequently recognized in the literature when analyzing gender-oriented patterns of labor force participation and their impact on career success and job satisfaction is number of hours worked. Human capital theorists argue that men and women tend to choose heterogeneous levels of commitment in the career and home spheres of their lives because of their socially defined, differentiated involvement with child care and household duties. Since personal energy levels are finite, the argument goes, women normally work in the labor market fewer hours than men and show a greater propensity to work part time because they are expected to do relatively more chores at home.¹¹⁻¹⁷ It has even been suggested that women are attracted to the pharmacy profession because jobs offer flexible hours and a work structure easily adaptable to demanding family roles.¹⁸

But what about women who are willing and able to work as many hours as normal men, or men who are willing to work only as few hours as normal women according to this stereotypical dichotomy? Are their career- and workplace-oriented perceptions and behavior more consonant with persons of the same gender committed to work more (or fewer) hours or do they show more affinity with people exhibiting similar workload regardless of gender? That is the main research question addressed here.

OBJECTIVES AND METHODS

This study seeks to identify and assess inter-gender differences in pharmacists' behavior and career- and job-related perceptions while controlling for number of hours worked. The data are gathered from responses to a survey questionnaire mailed in 2004 to 5,000 registered pharmacists throughout the United States whose names and addresses were provided by Medical Marketing Service, a company which maintains a data base estimated to include 98 percent of health-related professionals in the country.^a A postage-free return envelope was provided with the questionnaire. Respondents remain anonymous at all times, so there is no way to ascertain the identity of those who did not reply, with the exception of 78 envelopes returned by the post office as undeliverable for various reasons. A total of 921 individuals mailed back their completed form for a response rate of 18.7 percent. Five of these forms are missing gender and/or workload information, and have been discarded. Thus, the data set analyzed here contains 916 observations, 598 men and 318 women.

Every respondent is classified simultaneously into two independent categories: gender and work input. Three categories of work input are identified: Fewer than 40 hours per week, 40 hours per week, and more than 40 hours per week. Thus, the methodology used here allows testing for significant differences between genders and among work-input categories for different variables. Two types of variables are studied: Behavior, and opinion. Behavior indicators measure who the pharmacist is (*i.e.*, age, schooling, experience) and what he or she does (*i.e.*, type and location of practice, job longevity, income, and commuting time to work). Together they configure one's capabilities, constraints, accomplishments, and options. Opinion indicators measure respondents' perceptions of various aspects related to satisfaction with their professional lives. They encompass views regarding pharmacy and the role of pharmacists in general as well as specific working conditions. The *p* levels of statistical significance between genders and among work-input categories identified for both behavior and opinion variables are 0.01, 0.05, and 0.10.

The psychometric qualities of the opinion variables are ascertained using a two-step exploratory factor approach. First, exploratory factor analysis using oblique rotation (Quartimin) is applied to measure factor structure (*i.e.*, validity). Seven different factors or subscales are identified. Second, a reliability coefficient alpha is calculated for each of the seven subscales and for the entire scale.¹⁹⁻²⁰

RESULTS

On average, only one out of seven (14.2 percent) pharmacists work less than 40 hours per week, and the fraction is greater with women (19.8 percent) than with men (11.2 percent). Conversely, far more men (64.0 percent) than women (36.2 percent) work regularly over 40 hours per week. Within each work-input category other than the fixed 40 hours per week, women work, on average, fewer hours than do men. In the part-time category the difference (30.3 hours for men, 28.4 hours per women) lacks statistical significance, but in the group that works overtime regularly, the difference (49.1 hours for men, 47.0 hours for women) is significant.

Pharmacists in the sample (see Table 1) are predominantly non-Hispanic White, especially men. Significantly more African American and Hispanic pharmacists are women than men, and the difference becomes more noticeable in the categories in which practitioners work more hours. This relationship may throw some bias into inter-gender comparisons.

Table 1. General Characteristics of Pharmacists in the Sample, by Gender and Work-Input Category.

Work-Input Category	Variable	Both Genders	Men	Women
All work-input categories	Number of observations	916	598	318
	Ethnic composition (percent)	100.0	100.0	100.0
	Non-Hispanic White	86.5	90.8 ^a	78.4 ^a
	African American	3.7	1.5 ^a	8.0 ^a
	Hispanic	4.0	2.9 ^b	6.0 ^b
	Asian American	4.6	3.8	6.0
Other	1.2	1.0	1.6	
Less than 40 hours per week	Number of observations	130	67	63
	Ethnic composition (percent)	100.0	100.0	100.0
	Non-Hispanic White	94.6 ^x	97.0	92.0 ^y
	African American	1.5	B	3.2
	Hispanic	0.8 ^z	1.5	B ^z
	Asian American	2.3	1.5	3.2
Other	0.8	B	1.6	
40 hours per week	Number of observations	288	148	140
	Ethnic composition (percent)	100.0	100.0	100.0
	Non-Hispanic White	81.8 ^x	88.4 ^a	74.8 ^{ay}
	African American	4.2	0.7 ^a	7.9 ^a
	Hispanic	5.3 ^z	4.1	6.5 ^z
	Asian American	7.3	6.1	8.6
Other	1.4	0.7	2.2	
More than 40 hours per week	Number of observations	498	383	115
	Ethnic composition (percent)	100.0	100.0	100.0
	Non-Hispanic White	87.1 ^x	90.6 ^a	75.2 ^{ay}
	African American	4.0	2.1 ^a	10.6 ^a
	Hispanic	4.0 ^z	2.6 ^a	8.9 ^{az}
	Asian American	3.7	3.4	4.4
Other	1.2	1.3	0.9	

^aStatistically significant differences exist between genders ($p = .01$).

^bStatistically significant differences exist between genders ($p = .05$).

^xStatistically significant differences exist among work-input categories ($p = .01$).

^yStatistically significant differences exist among work-input categories ($p = .05$).

^zStatistically significant differences exist among work-input categories ($p = .10$).

Specifically, part of the variation in any variable attributed to gender is conditioned by inter-ethnic differences. Within female pharmacists, the presence of non-Hispanic Whites declines, and the concentration of African Americans^b and Hispanics increases, at higher work-input levels. Thus, female minority pharmacists seem to be committed to working full time and beyond. No differences among work-input categories are detected in any of the ethnic groups for men.

Behavior Variables: Comparisons by Gender and Work-Input Category

The mechanisms by virtue of which costs and benefits affect the allocation of time and effort to work often operate differently for men and women. Whether the roots of the differences lie in dissimilar value systems, unequal socialization patterns, or incongruous interpretations of rewards and penalties, gender seems to function as a universal influence on socioeconomic

outcomes.²¹⁻²² The purpose of this section is to explore if gender differentials in behavior indicators persist after controlling for work-input category.

Perhaps the main focus in the literature toward explaining gender disparities in labor force participation, income, and other behavior variables revolves around identifying the effect of human capital characteristics, the most important of which is schooling.^{16,17,23,25-29} Since pharmacy curricula throughout the nation are fairly homogeneous and graduates have to pass standardized board exams, variation in years of schooling is not as relevant as type of academic degree attained, which is an indicator of quality of schooling. The empirical evidence (see Tables 2-5) reveals that only 13.5 percent of pharmacists have completed academic work beyond the baccalaureate.

While the percentage is virtually identical for both genders, differences appear in the type of post-baccalaureate degree attained. Proportionately more women than men hold a Pharm.D. degree, especially in the category of pharmacists working over 40 hours per week; this difference probably is influenced by the rapidly changing gender composition of newly graduates.¹⁰ But more men than women have attained a master's degree, a particularly noticeable relationship for pharmacists who do not work overtime regularly. This is consistent with the findings of Seiter and Richardson, who report that more women than men identify family responsibilities as the most significant obstacle to overcome in pursuing a residency.³⁰ No significant differences are detected among work-input categories within either gender.

The typical pharmacist in the data set is 45.5 years old, possesses 21.0 years of professional experience, and has held his/her current job for the last 10.4 years, somewhat older and more experienced than reported in the data set gathered by McHugh.¹ Profound disparities appear between the genders: Women are younger than men and have less field experience and job longevity at all three levels of work effort, which lends credence to the contention that pharmacy has been traditionally a male-dominated profession.⁵ Differences among work-input categories are statistically significant within men, but not within women. Male pharmacists who work part time are older and report more years in the profession than do male pharmacists who work at least 40 hours, which suggests that men tend to decrease their work effort as they approach retirement. With respect to current job, however, men who work under 40 hours report greater longevity than men who work at least full time. Gaither, who obtains similar results, attributes this differential to greater career commitment by part-time practitioners.⁹

Type of practice is another indicator often linked in the literature to observed inter-gender differences in satisfaction and related behavior variables throughout healthcare disciplines.^{1,31-34} The data here reveal that respondents are overwhelmingly (76.9 percent) retail practitioners. While there are relatively far more men than women working in independent establishments, there are relatively more women than men working in chain pharmacies. Most interesting is the fact that this relationship applies to practitioners who regularly work part time or overtime, but not to pharmacists working 40 hours per week. Furthermore, the commonly held platitude that more women than men are attracted to hospital pharmacy is true only for part-time workers. Differences among work-input categories are found within men but not within women.³⁵⁻³⁶ An independent setting is the preferred choice of male pharmacists working less and more than 40 hours, but male pharmacists working 40 hours per week seem to prefer by far working in chain stores.

Variations in location of practice site are even more complex to discern. If all observation units are taken together, neither differences by gender nor by work-input category appear. When only part-time practitioners are analyzed, however, one finds that, in relative terms, women outnumber men in the suburbs but abound less in small towns and rural areas. This relationship is partially offset by pharmacists who work 40 hours per week; in this group, relatively more men than women work in the suburbs. And for pharmacists who work over 40 hours per week, a statistically significant gender disparity appears in large cities, where the percentage of women exceeds the percentage of men. Within each gender, significant differences by work-input category are detected for male practitioners working in the suburbs as well as in small towns and rural areas, and for female practitioners working in the suburbs.

Proximity of residence to one's job site usually is related to location. Following the tenets of human capital reasoning, workers act rationally when they invest travel time to obtain and hold attractive positions (*i.e.*, characterized by higher income, more benefits, better advancement opportunities, etc.). If, in spite of these seemingly universal preferences, household responsibilities affect female labor force participation in such a way that women systematically forego more palatable jobs for the sake of working

closely to home, such tradeoff would translate not only into income and advancement differentials by gender, but also into observed disparities in commuting time or distance.^{14,37} Furthermore, availability of part-time employment or overtime pay also is likely to influence proximity-to-work decisions. Proximity to work is measured in this study by the average one-way time (in minutes) commute to work. The only significant difference detected for this indicator is that female pharmacists working less than 40 hours per week spend more time traveling to and from their jobs than do their male counterparts. Thus, the price of securing part-time work seems to be higher for women than for men.

Reported annual income is greater for men than for women, although the disparity declines substantially beyond part-time employment. The female-to-male income ratio is 68.0 percent for pharmacists working part time, 93.3 percent for pharmacists working 40 hours, and 88.5 percent for pharmacists regularly working overtime. This trend is consistent with recent findings by Carvajal and Hardigan, who conclude that as women pharmacists get more retail jobs, acquire greater experience, and work longer hours, gender disparities in income virtually disappear.³⁸ It is interesting to note that the income standard deviation for men is substantially greater than it is for women, which reveals a great deal of heterogeneity in the earnings distribution of male relative to female practitioners. As might be expected, mean income increases with number of hours worked within both genders.

The observed gender disparities in earnings cannot be attributed solely to number of hours worked because the wage rate, measured as annual dollars earned per weekly hour of labor, also favors men consistently: The female-to-male wage-rate ratios are 67.7 percent for pharmacists working part time, 93.3 percent for pharmacists working 40 hours, and 93.2 percent for pharmacists working overtime, that is, very similar to the income ratios. Surprising is the fact that, for both genders, the wage rate declines as work-input level increases, which suggests the existence of either a negatively sloping labor supply curve or a backward-bending supply curve throughout the profession. At lower wage-rate levels, many pharmacists may be motivated to work more hours, and consequently give up leisure, as the wage rate goes up; hence the traditional upward slope of the labor supply curve. As the wage rate continues to rise, however, an increasing number of pharmacists may no longer be willing to trade additional leisure in return for higher income from working; the income effect then becomes stronger than the substitution effect, and the labor supply curve bends backwards. Or, if the labor supply curve is monotonically declining, the income effect would be stronger than the substitution effect at all levels of effort. Either reaction would explain why the income and wage-rate standard deviations are highest within male part-time practitioners.

Table 2. Percentage distribution, means, and standard deviations of behavior variables of pharmacists in the sample, by gender and work-input category—All Work-Input Categories.

Work-Input Category	Variable	Both Genders	Men	Women
All work-input categories	Academic degree (percent)	100.0	100.0	100.0
	B.S.	86.5	86.3	86.8
	Pharm.D.	7.4	5.9 ^b	10.4 ^b
	Other	6.1	7.8 ^a	2.8 ^a
	Age (years)	45.5 (11.4)	48.5 ^a (11.3)	39.6 ^a (9.3)
	Experience (years)	21.0 (11.8)	24.2 ^a (11.7)	15.1 ^a (9.4)
	Job longevity (years)	10.4 (9.0)	11.9 ^a (9.8)	7.4 ^a (6.3)
	Type of practice (percent)	100.0	100.0	100.0
	Independent	29.8	36.3 ^a	17.7 ^a
	Chain	47.1	42.8 ^a	55.2 ^a
	Hospital	10.7	9.7	12.6
	Other	12.4	11.2	14.5
	Location of primary practice site (percent)	100.0	100.0	100.0
	Large city	28.0	26.9	30.1
	Suburb	28.8	29.2	27.8
	Small town or rural area	43.2	43.9	42.1
	One-way commute time (minutes)	20.2 (15.4)	20.2 (16.0)	20.2 (14.3)
	Annual income (dollars)	80,429 (38,643)	85,370 ^a (44,923)	71,090 ^a (19,265)
	Wage rate (dollars per weekly hour)	1,913 (1,098)	1,973 ^a (1,309)	1,800 ^a (479)

^aStatistically significant differences exist between genders ($p = .01$).

^bStatistically significant differences exist between genders ($p = .05$).

^cStatistically significant differences exist between genders ($p = .10$).

^xStatistically significant differences exist among work-input categories ($p = .01$).

^yStatistically significant differences exist among work-input categories ($p = .05$).

^zStatistically significant differences exist among work-input categories ($p = .10$).

Table 3. Percentage distribution, means, and standard deviations of behavior variables of pharmacists in the sample, by gender and work-input category—Less Than 40 Hours Per Week.

Work-Input Category	Variable	Both Genders	Men	Women
Less than 40 hours per week	Academic degree (percent)	100.0	100.0	100.0
	B.S.	90.8	88.1	93.7
	Pharm.D.	3.8	1.5	6.3
	Other	5.4	10.4 ^a	B ^a
	Age (years)	47.7 ^x (14.1)	55.4 ^{ax} (13.9)	39.5 ^a (8.7)
	Experience (years)	23.3 ^x (13.5)	30.5 ^{ax} (13.4)	16.0 ^a (9.1)
	Job longevity (years)	11.8 ^x (9.9)	14.6 ^{ax} (11.6)	8.8 ^a (6.8)
	Type of practice (percent)	100.0	100.0	100.0
	Independent	38.0 ^x	54.6 ^{ax}	20.6 ^a
	Chain	38.8 ^x	30.3 ^{bx}	47.6 ^b
	Hospital	9.3	3.0 ^b	15.9 ^b
	Other	13.9 ^x	12.1 ^y	15.9
	Location of primary practice site (percent)	100.0	100.0	100.0
	Large city	24.0	27.3	20.6
	Suburb	27.9	16.7 ^{ay}	39.7 ^{az}
	Small town or rural area	48.1	56.0 ^{cy}	39.7 ^c
	One-way commute time (minutes)	18.4 (14.1)	16.2 ^c (13.4)	20.6 ^c (14.6)
	Annual income (dollars)	65,866 ^x (49,295)	78,413 ^{ay} (64,355)	53,318 ^{ax} (20,993)
	Wage rate (dollars per weekly hour)	2,375 ^x (2,460)	2,831 ^{bx} (3,351)	1,918 ^{by} (747)

^aStatistically significant differences exist between genders ($p = .01$).

^bStatistically significant differences exist between genders ($p = .05$).

^cStatistically significant differences exist between genders ($p = .10$).

^xStatistically significant differences exist among work-input categories ($p = .01$).

^yStatistically significant differences exist among work-input categories ($p = .05$).

^zStatistically significant differences exist among work-input categories ($p = .10$).

Table 4. Percentage distribution, means, and standard deviations of behavior variables of pharmacists in the sample, by gender and work-input category—40 Hours Per Week.

Work-Input Category	Variable	Both Genders	Men	Women
40 hours per week	Academic degree (percent)	100.0	100.0	100.0
	B.S.	86.1	85.1	87.1
	Pharm.D.	9.4	8.1	10.8
	Other	4.5	6.8 ^c	2.1 ^c
	Age (years)	43.6 ^x (12.0)	48.0 ^{ax} (12.4)	38.8 ^a (9.5)
	Experience (years)	18.9 ^x (12.3)	23.6 ^{ax} (13.0)	14.1 ^a (9.5)
	Job longevity (years)	8.4 ^x (7.8)	9.9 ^{ax} (9.1)	6.9 ^a (5.6)
	Type of practice (percent)	100.0	100.0	100.0
	Independent	14.6 ^x	13.5 ^x	15.7
	Chain	56.6 ^x	56.7 ^x	56.4
	Hospital	11.1	12.2	10.0
	Other	17.7 ^x	17.6 ^y	17.9
	Location of primary practice site (percent)	100.0	100.0	100.0
	Large city	30.3	29.5	31.2
	Suburb	29.6	34.2 ^{cy}	24.6 ^{cz}
	Small town or rural area	40.1	36.3 ^y	44.2
	One-way commute time (minutes)	19.8 (13.6)	20.9 (13.9)	18.6 (13.3)
	Annual income (dollars)	75,278 ^x (14,500)	77,810 ^{ay} (15,021)	72,569 ^{ax} (13,459)
Wage rate (dollars per weekly hour)	1,868 ^x (396)	1,945 ^{ax} (376)	1,814 ^{ay} (336)	

^aStatistically significant differences exist between genders ($p = .01$).

^bStatistically significant differences exist between genders ($p = .05$).

^cStatistically significant differences exist between genders ($p = .10$).

^xStatistically significant differences exist among work-input categories ($p = .01$).

^yStatistically significant differences exist among work-input categories ($p = .05$).

^zStatistically significant differences exist among work-input categories ($p = .10$).

Table 5. Percentage distribution, means, and standard deviations of behavior variables of pharmacists in the sample, by gender and work-input category—More than 40 Hours per Week.

Work-Input Category	Variable	Both Genders	Men	Women
More than 40 hours per week	Academic degree (percent)	100.0	100.0	100.0
	B.S.	85.6	86.4	82.6
	Pharm.D.	7.2	5.8 ^b	12.2 ^b
	Other	7.2	7.8	5.2
	Age (years)	46.0 ^x (10.1)	47.5 ^{ax} (9.9)	40.8 ^a (9.4)
	Experience (years)	21.6 ^x (10.8)	23.4 ^{ax} (10.5)	15.9 ^a (9.5)
	Job longevity (years)	11.1 ^x (9.3)	12.2 ^{ax} (9.7)	7.4 ^a (6.7)
	Type of practice (percent)	100.0	100.0	100.0
	Independent	36.5 ^x	41.9 ^{ax}	18.4 ^a
	Chain	43.7 ^x	39.5 ^{ax}	57.9 ^a
	Hospital	10.9	10.0	14.0
	Other	8.9 ^x	8.6 ^y	9.7
	Location of primary practice site (percent)	100.0	100.0	100.0
	Large city	27.7	25.9 ^c	33.9 ^c
	Suburb	28.5	29.5 ^y	25.2 ^z
	Small town or rural area	43.8	44.6 ^y	40.9
	One-way commute time (minutes)	20.9 (16.7)	20.6 (17.1)	20.6 (15.3)
	Annual income (dollars)	87,068 ^x (43,474)	89,424 ^{ay} (48,266)	79,104 ^{ax} (18,124)
	Wage rate (dollars per weekly hour)	1,815 ^x (742)	1,844 ^{bx} (810)	1,719 ^{by} (425)

^aStatistically significant differences exist between genders ($p = .01$).

^bStatistically significant differences exist between genders ($p = .05$).

^cStatistically significant differences exist between genders ($p = .10$).

^xStatistically significant differences exist among work-input categories ($p = .01$).

^yStatistically significant differences exist among work-input categories ($p = .05$).

^zStatistically significant differences exist among work-input categories ($p = .10$).

Opinion Variables: Comparisons by Gender and Work-Input Category

The behavior characteristics analyzed above are manifested within the framework of job perceptions which may vary between genders and ultimately influence, or are influenced by, number of hours worked. If men and women were motivated to work more or fewer hours by different factors, observed disparities in pay, type of practice, job longevity, and other behavior variables might reflect such differences in interpretation. This might happen, for instance, if men attempted systematically to maximize wages, fringe benefits, and advancement opportunities without much regard to nature or volume of job activity, stress associated with it, or other inconveniences while women showed a greater propensity to trade off financial rewards for more flexible work schedules or a more pleasant job atmosphere.

Opinion variables are designed to ascertain pharmacists' perceptions of their role in the healthcare delivery system as well as their individual working conditions, and relate to various aspects of career and job satisfaction. They develop in response to social cues and actual work experiences which may affect men and women differently, or simply be interpreted differently by both genders.³⁹ For example, according to Kirchmeyer, women report that they are as successful in their careers as are their male counterparts in spite of their observed lower levels of income.²¹ All opinion variables are measured along zero-to-ten intensity scales, ten showing the greatest intensity. This procedure involves some response homogeneity insofar as pharmacists are able to express their perception of various facets of their careers and jobs following a common measurement rod. For each opinion variable (*i.e.*, satisfaction, burnout, etc.) two responses are recorded—one regarding respondent's role as a pharmacist, independently of any job conditions, and another regarding current employment. This methodology allows for probing simultaneous differences in response along three different lines: Career- versus job-related, between genders, and among work-input categories. The computed mean and standard deviation values are presented in Table 6-9.

The use of career- and job-satisfaction indices as accurate and reliable socioeconomic indicators is viewed by some as unconventional.⁴⁰ Yet satisfaction is the ultimate opinion variable because it reflects an overall evaluation of the mixture, good and bad, of one's experiences, either in general as a long-term practitioner or specifically to a given position. It has been linked to employees' organizational commitment and excessive turnover, quality of patient care, and various health-system outcomes, including medication errors.^{7-9,31,41} Practitioners in the sample report a greater level of satisfaction with their current job than with their perceived role as pharmacists. This feeling is universal and statistically significant across genders and levels of work effort. On average, women are more satisfied with their careers than are men, especially those working 40 hours per week, and no differences among work-input categories are detected. With responses pertaining to current employment, however, the trend is the opposite: No gender differences emerge, but the level of job satisfaction declines significantly for pharmacists who work longer hours.

Feelings of career and job burnout are closely related to satisfaction and can lead to reduced quality of work.³⁰ They also are associated with longevity at current work site because, with time, tasks become repetitive and boredom tends to sink in.³⁵ In this study, pharmacists report moderate and virtually identical levels of career and job burnout. Although men complain more about both than do women, which is consistent with the job-longevity differential reported earlier, the gender disparity gains statistical significance only for career burnout, and only when respondents are analyzed aggregately; in fact, the relationship is mildly reversed for pharmacists working more than 40 hours per week. No significant differences in career or job burnout exist among work-input categories.

Pharmacists believe that their profession is very important within the healthcare framework, and that their job is even more important to patients' well-being. These are two opinion variables with some of the highest reported scores, and there is a lot of agreement judging by the low values of the standard deviations. Women score consistently higher than do men in both career- and job-importance scales, but no disparities by work-input category are apparent.

A somewhat similar pattern emerges when practitioners express their perceptions of career and job appreciation. Most pharmacists believe that their chosen field is highly respectable relative to other professions, and that their job is greatly appreciated by the institution where they work. Overall, job-appreciation levels exceed career-appreciation levels, although this differential can be attributed only to part-time practitioners of both genders and men who work overtime on a regular basis. Women manifest higher levels of career appreciation than do men, but when it comes to job appreciation, male pharmacists report significantly higher scores than do female pharmacists, even though the disparity occurs solely within workers putting in over 40 hours per week. Significant differences in job-appreciation responses are detected by work-input category, especially for men; yet there is no clear trend: the level of job appreciation is highest for male practitioners working overtime and lowest for male practitioners working 40 hours per week.

Workload is the fifth opinion variable analyzed here. Male and female respondents alike express their dissatisfaction with what they consider heavy workloads (*i.e.*, too many prescriptions, long hours, etc.) both in pharmacy as a profession and *vis-a-vis* other workers in their own job site. Here again, low standard deviation values reveal a great deal of response homogeneity. As

one might expect, the workload response index goes up with number of hours worked. This trend is detected in both genders and is particularly noticeable for job-specific responses.

Stress, often associated with too much work, is another indicator related in the literature to low levels of organizational commitment, disillusionment, and excessive turnover.^{9,42,43} Virtually all respondents here concur that pharmacy is a very stressful profession, yet they perceive much less stress in their jobs than in the discipline at large. This relationship holds across genders and work-input categories. Men experience more career stress than do women, which supports the findings of Mott.¹⁰ In terms of job stress, no gender differences appear, but there are differences by category of work input: In both genders the level of reported job-related stress increases significantly with number of hours worked.

More autonomy in the development of one's professional activities has been linked to greater levels of career and job satisfaction, as well as better patient care, in various healthcare disciplines.^{7,33,35,44} In this study pharmacists report moderate levels of autonomy in their jobs, significantly higher than the levels they perceive prevailing for the profession at large; this differential is detected for practitioners of both genders and all three work-input categories. Then conflicting trends appear. Within the part-time group, men experience more career and job autonomy than do women; within practitioners who work at least 40 hours per week, however, women report higher levels of career autonomy, and approximately equal levels of job autonomy, *vis-a-vis* men. Furthermore, men's perception of both career and job autonomy tends to decline as level of work effort rises, but women experience no such significant differences.

Inequities in the distribution of salaries also have been identified as a cause of practitioners' discontent with their careers and jobs which may lead to excessive turnover.^{10,45} By and large, respondents believe that pharmacists' salaries are competitive with salaries in other professions. They also believe, even more strongly, that their own salaries compare favorably with the salaries of their peers. Women have a more optimistic outlook than do men with respect to overall career earnings, but less optimistic with respect to their own earnings compared to other area pharmacists, a difference in perception which, of course, is supported by reality. There are no disparities in salary perceptions by category of work input.

Judging by the sample gathered here, practitioners believe that, in general, pharmacy jobs are endowed with a great deal of stability, and that they personally enjoy an even greater level of job security. In fact, these are the opinion variables with the highest reported scores in the survey. Such high scores are found consistently throughout both genders and all categories of work input, with no statistically significant differences of any kind detected.

Yet practitioners believe that there are relatively few advancement opportunities available in pharmacy, and even fewer opportunities in the jobs they currently hold. These are the two lowest-scoring variables, and complex relationships can be discerned. For example, Table 3 shows no significant difference by gender for availability of career opportunities when the entire data set is considered. But a more detailed analysis reveals the existence of significant, opposing inter-gender variations within work-input categories. If one focuses on part-time practitioners, women are more pessimistic than are men; but within pharmacists who work overtime, women feel less pessimistic than men. When it comes to perceptions about their own jobs, women are significantly more critical than are men about lack of advancement opportunities only within the part-time level of effort. Significant variation by work-input category is registered only for male respondents: Men who work at least full time manifest higher levels of pessimism regarding both career and job advancement opportunities than do men who work only part time.

Table 6. Means and standard deviations (in parentheses) of opinion variables of pharmacists in the sample, by gender and work-input category.—All Work-Input Categories.

Work-Input Category	Variable	Career-Specific Response			Job-Specific Response		
		Both Genders	Men	Women	Both Genders	Men	Women
All work-input categories	Satisfaction	6.34 ¹ (2.39)	6.16 ^{1a} (2.46)	6.68 ^{2a} (2.20)	6.94 ¹ (2.26)	6.89 ¹ (2.31)	7.04 ² (2.17)
	Burnout	5.35 (2.65)	5.47 ^c (2.62)	5.13 ^c (2.71)	5.36 (2.75)	5.40 (2.72)	5.30 (2.81)
	Importance	8.22 ¹ (1.73)	8.11 ^{2a} (1.85)	8.42 ^{2a} (1.45)	8.44 ¹ (1.46)	8.31 ^{2a} (1.55)	8.69 ^{2a} (1.25)
	Appreciation	7.78 ¹ (1.78)	7.67 ^{1a} (1.84)	7.98 ^a (1.62)	8.05 ¹ (2.25)	8.15 ¹ (2.20)	7.88 (2.34)
	Workload	7.95 (1.38)	7.96 (1.41)	7.94 (1.33)	7.86 (1.83)	7.89 (1.85)	7.82 (1.80)
	Stress	8.25 ¹ (1.48)	8.14 ^{1a} (1.54)	8.44 ^{1a} (1.35)	6.88 ¹ (2.36)	6.88 ¹ (2.34)	6.87 ¹ (2.41)
	Autonomy	5.82 ¹ (2.17)	5.70 ^{1b} (2.26)	6.05 ^{1b} (1.99)	6.61 ¹ (2.15)	6.61 ¹ (2.21)	6.60 ¹ (2.03)
	Salary	6.43 ¹ (2.28)	6.26 ^{1a} (2.29)	6.75 ^{3a} (2.22)	6.76 ¹ (2.36)	6.95 ^{1a} (2.30)	6.40 ^{3a} (2.43)
	Job security	8.26 ¹ (1.84)	8.22 ¹ (1.91)	8.33 (1.72)	8.52 ¹ (1.81)	8.60 ¹ (1.77)	8.38 (1.87)
	Advancement opportunities	4.82 ¹ (2.64)	4.80 ¹ (2.64)	4.87 ¹ (2.64)	3.97 ¹ (2.86)	4.09 ^{1c} (2.87)	3.75 ^{1c} (2.83)

¹Statistically significant differences exist between career-specific response and job-specific response ($p = .01$).

²Statistically significant differences exist between career-specific response and job-specific response ($p = .05$).

³Statistically significant differences exist between career-specific response and job-specific response ($p = .10$).

^aStatistically significant differences exist between genders ($p = .01$).

^bStatistically significant differences exist between genders ($p = .05$).

^cStatistically significant differences exist between genders ($p = .10$).

^{*}Statistically significant differences exist among work-input categories ($p = .01$).

[†]Statistically significant differences exist among work-input categories ($p = .05$).

[‡]Statistically significant differences exist among work-input categories ($p = .10$).

Table 7. Means and standard deviations (in parentheses) of opinion variables of pharmacists in the sample, by gender and work-input category—Less Than 40 hours per week.

Work-Input Category	Variable	Career-Specific Response			Job-Specific Response		
		Both Genders	Men	Women	Both Genders	Men	Women
Less than 40 hours per week	Satisfaction	6.54 ¹ (2.40)	6.31 ¹ (2.79)	6.78 (1.90)	7.51 ^{1x} (2.15)	7.67 ^{1y} (2.32)	7.33 (1.97)
	Burnout	5.02 (2.67)	5.31 (2.80)	4.71 (2.50)	4.97 (2.77)	5.04 (2.84)	4.89 (2.72)
	Importance	8.19 (1.50)	8.19 (1.74)	8.19 (1.20)	8.39 (1.39)	8.31 (1.59)	8.48 (1.16)
	Appreciation	7.63 ³ (1.75)	7.61 (1.97)	7.65 (1.49)	8.06 ^{3x} (2.06)	8.03 ^x (2.32)	8.10 (1.78)
	Workload	7.83 ^{1z} (1.26)	7.86 ¹ (1.28)	7.79 (1.26)	7.25 ^{1x} (1.81)	7.11 ^{1x} (1.92)	7.39 ^y (1.69)
	Stress	8.09 ¹ (1.55)	7.91 ¹ (1.73)	8.28 ¹ (1.32)	6.05 ^{1x} (2.48)	5.85 ^{1x} (2.51)	6.27 ^{1y} (2.44)
	Autonomy	6.10 ¹ (1.97)	6.48 ^{2by} (2.05)	5.72 ^{2b} (1.82)	6.88 ¹ (1.96)	7.30 ^{2by} (2.13)	6.44 ^{2b} (1.68)
	Salary	6.61 (2.25)	6.67 ² (2.07)	6.56 (2.43)	6.81 (2.46)	7.48 ^{2a} (2.33)	6.11 ^a (2.42)
	Job security	8.22 ² (1.57)	8.14 ² (1.81)	8.32 (1.28)	8.65 ² (1.52)	8.87 ² (1.54)	8.43 (1.49)
	Advancement opportunities	4.94 ² (2.72)	5.49 ^{2bz} (2.70)	4.35 ^{2b} (2.65)	4.09 ² (2.86)	4.89 ^{2y} (2.93)	3.24 ^{2a} (2.55)

¹Statistically significant differences exist between career-specific response and job-specific response ($p = .01$).

²Statistically significant differences exist between career-specific response and job-specific response ($p = .05$).

³Statistically significant differences exist between career-specific response and job-specific response ($p = .10$).

^aStatistically significant differences exist between genders ($p = .01$).

^bStatistically significant differences exist between genders ($p = .05$).

^cStatistically significant differences exist between genders ($p = .10$).

^xStatistically significant differences exist among work-input categories ($p = .01$).

^yStatistically significant differences exist among work-input categories ($p = .05$).

^zStatistically significant differences exist among work-input categories ($p = .10$).

Table 8. Means and standard deviations (in parentheses) of opinion variables of pharmacists in the sample, by gender and work-input category—40 Hours per week.

Work-Input Category	Variable	Career-Specific Response			Job-Specific Response		
		Both Genders	Men	Women	Both Genders	Men	Women
40 hours per week	Satisfaction	6.49 ² (2.30)	6.20 ^{2b} (2.38)	6.80 ^b (2.17)	6.96 ^{2x} (2.19)	6.79 ^{2y} (2.15)	7.14 (2.22)
	Burnout	5.28 (2.73)	5.53 (2.70)	5.01 (2.75)	5.34 (2.77)	5.50 (2.69)	5.17 (2.86)
	Importance	8.25 ³ (1.61)	8.01 ^a (1.80)	8.50 ^{3a} (1.35)	8.48 ³ (1.31)	8.21 ^a (1.38)	8.77 ^{3a} (1.17)
	Appreciation	7.85 (1.55)	7.68 ^c (1.60)	8.03 ^c (1.48)	7.69 ^x (2.41)	7.62 ^x (2.37)	7.77 (2.47)
	Workload	7.84 ^z (1.41)	7.77 (1.44)	7.91 (1.39)	7.64 ^x (1.96)	7.51 ^x (2.02)	7.77 ^y (1.90)
	Stress	8.18 ¹ (1.55)	8.01 ^{1c} (1.62)	8.34 ^{1c} (1.47)	6.80 ^{1x} (2.43)	6.78 ^{1x} (2.44)	6.82 ^{1y} (2.44)
	Autonomy	5.88 ¹ (2.07)	5.65 ^{1cy} (2.14)	6.12 ^{2c} (1.97)	6.54 ¹ (2.17)	6.46 ^{1y} (2.19)	6.62 ² (2.15)
	Salary	6.57 (2.13)	6.30 ^{2b} (2.18)	6.86 ^{2b} (2.04)	6.65 (2.40)	6.95 ^{2b} (2.27)	6.34 ^{2b} (2.51)
	Job security	8.22 (1.74)	8.16 (1.79)	8.29 (1.69)	8.41 (1.79)	8.41 (1.76)	8.41 (1.83)
	Advancement opportunities	4.73 ¹ (2.55)	4.65 ^{1z} (2.53)	4.81 ¹ (2.58)	3.83 ¹ (2.82)	3.79 ^{1y} (2.81)	3.88 ¹ (2.83)

¹Statistically significant differences exist between career-specific response and job-specific response ($p = .01$).

²Statistically significant differences exist between career-specific response and job-specific response ($p = .05$).

³Statistically significant differences exist between career-specific response and job-specific response ($p = .10$).

^aStatistically significant differences exist between genders ($p = .01$).

^bStatistically significant differences exist between genders ($p = .05$).

^cStatistically significant differences exist between genders ($p = .10$).

^xStatistically significant differences exist among work-input categories ($p = .01$).

^yStatistically significant differences exist among work-input categories ($p = .05$).

^zStatistically significant differences exist among work-input categories ($p = .10$).

Table 9. Means and standard deviations (in parentheses) of opinion variables of pharmacists in the sample, by gender and work-input category—More than 40 Hours per week.

Work-Input Category	Variable	Career-Specific Response			Job-Specific Response		
		Both Genders	Men	Women	Both Genders	Men	Women
More than 40 hours per week	Satisfaction	6.20 ¹ (2.43)	6.11 ¹ (2.44)	6.49 (2.38)	6.78 ^{1x} (2.31)	6.79 ^{1y} (2.35)	6.74 (2.21)
	Burnout	5.48 (2.60)	5.47 (2.56)	5.50 (2.74)	5.48 (2.73)	5.42 (2.71)	5.68 (2.77)
	Importance	8.21 ² (1.84)	8.13 ^{3c} (1.89)	8.44 ^c (1.68)	8.43 ² (1.56)	8.35 ^{3b} (1.61)	8.71 ^b (1.37)
	Appreciation	7.77 ¹ (1.90)	7.67 ^{1b} (1.91)	8.09 ^b (1.84)	8.26 ^{1x} (2.18)	8.37 ^{1cx} (2.09)	7.89 ^c (2.46)
	Workload	8.05 ^z (1.39)	8.04 (1.42)	8.08 (1.29)	8.16 ^x (1.70)	8.17 ^x (1.71)	8.11 ^y (1.69)
	Stress	8.33 ¹ (1.42)	8.23 ^{1a} (1.48)	8.65 ^{1a} (1.18)	7.14 ^{1x} (2.24)	7.10 ^{1x} (2.22)	7.25 ^{1y} (2.29)
	Autonomy	5.71 ¹ (2.27)	5.58 ^{1by} (2.31)	6.15 ^{3b} (2.09)	6.58 ¹ (2.18)	6.55 ^{1y} (2.21)	6.67 ³ (2.08)
	Salary	6.30 ¹ (2.37)	6.17 ^{1b} (2.37)	6.71 ^b (2.32)	6.81 ¹ (2.31)	6.87 ¹ (2.30)	6.63 (2.34)
	Job security	8.29 ² (1.97)	8.26 ¹ (1.97)	8.40 (1.96)	8.55 ² (1.89)	8.62 ¹ (1.82)	8.32 (2.12)
	Advancement opportunities	4.84 ¹ (2.67)	4.73 ^{1cz} (2.66)	5.22 ^{1c} (2.67)	4.02 ¹ (2.88)	4.07 ^{1y} (2.86)	3.88 ¹ (2.96)

¹Statistically significant differences exist between career-specific response and job-specific response ($p = .01$).

²Statistically significant differences exist between career-specific response and job-specific response ($p = .05$).

³Statistically significant differences exist between career-specific response and job-specific response ($p = .10$).

^aStatistically significant differences exist between genders ($p = .01$).

^bStatistically significant differences exist between genders ($p = .05$).

^cStatistically significant differences exist between genders ($p = .10$).

^xStatistically significant differences exist among work-input categories ($p = .01$).

^yStatistically significant differences exist among work-input categories ($p = .05$).

^zStatistically significant differences exist among work-input categories ($p = .10$).

In an attempt to ascertain the psychometric qualities of the opinion variables, seven factors or subscales are configured. They are satisfaction and burnout, pharmacists and the healthcare system, workload and stress, autonomy, compensation and support, job security, and availability of advancement opportunities. A reliability coefficient alpha is calculated for each subscale and for the entire scale (see Table 4). These coefficients show acceptable measurement qualities for the survey instrument.

Table 10. Factors or subscales grouping opinion variables and their reliability coefficient alpha.

Factor	Definition	Reliability Coefficient Alpha
All	Entire scale	0.78
One	Job satisfaction and burnout	0.78
Two	Pharmacists and the healthcare system	0.77
Three	Workload and stress	0.66
Four	Autonomy	0.82
Five	Compensation and support	0.82
Six	Job security	0.82
Seven	Availability of advancement opportunities	0.81

DISCUSSION

The two main issues addressed in this paper are 1) whether male and female pharmacists exhibit differences in behavior and opinion variables and, if such differences exist, 2) whether they occur only in selected work-input categories or they are present consistently throughout the data set. The empirical evidence for the behavior variables (see Table 11) shows that, compared to male practitioners, women are younger, possess less experience and job longevity, and earn lower levels of income and wage rates. These patterns are observed in every work-input category. The evidence also reveals patterns which are statistically significant in some, but not all, work-input categories, yet their cumulative effect permeates the entire data set. Thus, proportionately more women than men hold a Pharm. D. degree and work in a chain establishment, but more men than women have attained a master's degree and report an independent retail setting as their primary (or only) type of practice. And for other behavior variables, although differences between genders are detected in a work-input category, the aggregate effect lacks statistical significance: Within the part-time category, but not the others, proportionately more women than men report working in a hospital pharmacy and in the suburbs, while, compared to women, men prefer job sites in small towns or rural areas and spend less time commuting to work. The gender preference for suburban job sites is reversed for practitioners who work 40 hours per week; in this category there are proportionately fewer women than men. Finally, in the overtime category more women than men indicate a preference for working in large cities.

If the focus of analysis of the behavior variables changes from gender variation within work-input category to variation by work-input category within gender, an interesting picture appears. Men exhibit statistically significant differences among work-input categories, which translate into significant differences for the whole data set; but women show differences among work-input categories in only three variables: suburban location of practice site, income, and wage rate. In the latter two variables the patterns are similar for women and men: As the level of work effort increases, income rises but the wage rate declines. In terms of practitioners working in suburban locations, however, the percentage of female pharmacists is higher for part-time *vis-a-vis* other workers, while for male pharmacists there is no clear trend.

Further analysis of the responses reveals significant differences between pharmacists' perceptions of the profession at large and the corresponding perceptions of their own work conditions in eight of the ten opinion variables surveyed (see Tables 12-13). Only burnout and workload show no disparity. Practitioners express more satisfaction with their current job than with their role as pharmacists. They also respond more positively (or less negatively) toward their specific job situation *vis-a-vis* their career role regarding importance, appreciation, stress, autonomy, salary, and job security. Availability of advancement opportunities is the only opinion variable in which respondents feel more negatively toward their own jobs compared to the profession in general. In

all eight variables the relationship between general and specific perception is statistically significant for men, but for women the significance is reduced to five variables—satisfaction, stress, autonomy, salary, and advancement opportunities.

Significant differences between genders are recorded in seven of the ten career-specific responses. In their perception of pharmacy as a profession, women respond more positively (or less negatively) than men with respect to career satisfaction, burnout, importance, appreciation, autonomy, and salary, although they report more stress than do men. No significant differences between men and women are found for workload, job security, or availability of advancement opportunities. These patterns are validated in almost every instance for practitioners who work at least 40 hours per week, but not for part-time workers; virtually no gender differences in career-specific responses appear throughout this latter group. Surprisingly, there is a consistent absence of statistically significant differences in career-specific responses among work-input categories both when the entire data set is analyzed and within each gender.

A probe into job-specific perceptions yields a somewhat different picture: There are fewer gender disparities, and more differences among work-input categories, than with career-specific perceptions. When it comes to their own work situation, women respond more positively than do men regarding the importance of their job to patients' well-being, but are less optimistic comparing their salaries to the salaries of other area pharmacists and assessing advancement opportunities available to them. While significant gender variations within work-input categories generally accord with those recorded for the entire data set, no definitive pattern can be generalized.

When the focus of analysis of job-specific responses is reversed, it becomes obvious that significant differences among work-input categories occur more often within male than within female pharmacists. As the level of work effort increases, male practitioners tend to report less satisfaction, more appreciation, greater workload, more stress, less autonomy, and fewer advancement opportunities about their jobs, whereas the experience of female practitioners with increasing work-effort levels is limited to heavier workload and more stress.

Table 11. Patterns of statistically significant differences in behavior variables: Differences by gender and work-input category.

Behavior Variable	Is Measured Disparity Statistically Significant?						
	Gender Differences by Work-Input Category				Work-Input Category Differences by Gender		
	All work-input categ.	Less than 40 hours	40 hours	More than 40 hours	Both genders	Men	Women
Academic degree							
B.S.	T			T			
Pharm.D.	T	T	T				
Other	T						
Age	T	T	T	T	T	T	
Experience	T	T	T	T	T	T	
Job longevity	T	T	T	T	T	T	
Type of practice							
Independent	T	T		T	T	T	
Chain	T	T		T	T	T	
Hospital		T					
Other					T	T	
Location of practice							
Large city				T			
Suburb		T	T			T	T
Small town or rural		T				T	
Commute time		T					
Annual income	T	T	T	T	T	T	T
Wage rate	T	T	T	T	T	T	T

Table 12. Patterns of statistically significant differences in opinion variables: Comparison of career-specific versus job-specific responses and differences by gender and work-input category.

Opinion Variable	Is Measured Disparity Statistically Significant?											
	Career-Specific Response Compared to Job-Specific Response by Work-Input Category and Gender											
	All Work-Input Categories			Less than 40 Hours			40 Hours			More than 40 Hours		
	Both genders	Men	Women	Both genders	Men	Women	Both genders	Men	Women	Both genders	Men	Women
Satisfaction	T	T	T	T	T		T	T		T	T	
Burnout												
Importance	T	T	T				T		T	T	T	
Appreciation	T	T		T						T	T	
Workload				T	T							
Stress	T	T	T	T	T	T	T	T	T	T	T	
Autonomy	T	T	T	T	T	T	T	T	T	T	T	T
Salary	T	T	T		T			T	T	T	T	
Job security	T	T		T	T					T	T	
Opportunities	T	T	T	T		T	T	T	T	T	T	T

Table 13. Patterns of statistically significant differences in opinion variables: Comparison of career-specific versus job-specific responses and differences by gender and work-input category (continued).

Opinion Variable	Is Measured Disparity Statistically Significant?													
	Career-Specific Response							Job-Specific Response						
	Gender Differences by Work-Input Category				Work-Input Category Differences by Gender			Gender Differences by Work-Input Category				Work-Input Category Differences by Gender		
	All work-input categ.	Less than 40 hours	40 hours	More than 40 hours	Both genders	Men	Women	All work-effort levels	Less than 40 hours	40 hours	More than 40 hours	Both genders	Men	Women
Satisfaction	T		T									T	T	
Burnout	T													
Importance	T		T	T			T		T	T				
Appreciation	T		T	T						T		T	T	T
Workload					T							T	T	T
Stress	T		T	T								T	T	
Autonomy	T	T	T	T				T					T	
Salary	T		T	T			T	T	T					
Job security														
Opportunities		T		T				T	T				T	

Limitations

Inter-gender differences in pharmacists' behavior outcomes and opinions are not easy to assess. When they are detected in an experiment, they often appear intertwined with other effects. In this study, significantly more minority practitioners are women than men, especially at greater levels of work effort. Consequently, one may question if observed inter-gender differences are caused, or at least influenced, by inter-ethnic variation.

Another limitation is that the findings rest on a survey administered only once. The instrument was designed to measure complex relationships existing at the time the data were gathered, and it seems to have performed well, but it is inadequate to establish whether the values of behavior and opinion variables fluctuate over time, or the extent to which such fluctuations are affected by the rapidly changing gender composition of the pharmacist labor force. Future research ought to include longitudinal data in an attempt to understand better the evolving nature of these variables over time.

A third limitation of this study is that the relatively small number of part-time workers may have contributed to the few instances of statistically significant differences found between genders in this work-input category. Furthermore, there is no explanation why some pharmacists work less than 40 hours per week. Does their observed behavior respond to a lack of opportunities to work longer hours, that is, a labor demand constraint, or is it a conscious, volitive decision on their part, which would make it a labor supply issue? And if the latter is the case, do men and women pursue less than full-time employment for the same or different reasons? For example, the empirical data from this study suggest that part-time male practitioners are not only substantially older than part-time female practitioners, but also are older than male practitioners who work at least 40 hours per week. Does this reflect a tendency by men to work fewer hours as they approach retirement while women who work fewer hours do so in response to other stimuli, say, devote more time to household matters? Future research should address these concerns.

Conclusion

Within the limitations of the data, the empirical evidence developed here supports the hypothesis that male and female pharmacists exhibit different behavior characteristics, and these differences surface consistently in the three work-input categories. The evidence also shows that systematic variation in behavior variables by work-input category is far more common within men than within women.

The conclusions derived from the analysis of opinion variables are less definitive. Practitioners respond more positively toward job-specific than toward career-specific variables, and again this trend is more common for male than female practitioners. In their general perception of pharmacy as a profession, women tend to respond more positively than do men, and this pattern appears within pharmacists who work 40 hours or more per week, but not in the part-time group. Neither gender shows significant variation in career-specific responses by work-input category. In the appraisal of their own specific job situation, inter-gender differences by category of work input are less frequent than are differences among work-input categories within gender. Variation of the latter form occurs more often within male than within female pharmacists.

Although these findings may be somewhat limited by the methodological constraints identified above and others which may have gone undetected, the focus and development of this paper provide a meaningful contribution towards understanding the forces shaping practitioners' views of their general roles as well as specific job conditions. As current trends in the demographics of the pharmacy profession accelerate in the immediate future, proper identification of inter-gender differences in behavior and opinion variables is likely to become increasingly relevant in the process of matching successfully existing capabilities and preferences with available opportunities in search of a more rational and efficient resource allocation in the pharmacy labor market.

NOTES

^a The address of Medical Marketing Service, Inc. is P.O.Box 87916, Carol Stream, IL 60188-7916. Its telephone numbers are (630) 350-1717 and (800) 633-5478.

^b Differences in the incidence of African American pharmacists among work-input categories lack statistical significance.

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