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# Practice Characteristics and Lifestyle Choices of Men and Women Physician Assistants and the Relationship to Career Satisfaction

Carol A. Biscardi  
*Seton Hall University*

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Practice Characteristics and Lifestyle Choices of Men and Women  
Physician Assistants and the Relationship to Career Satisfaction

By

Carol A. Biscardi

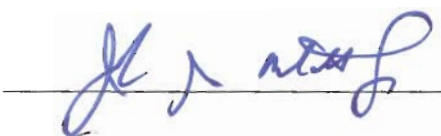
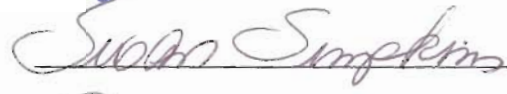
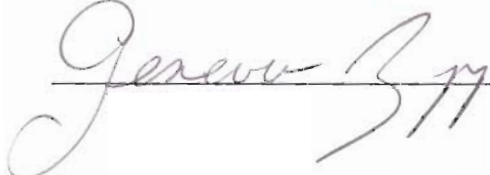
Dissertation Committee:

Dr. Genevieve Pinto Zipp, Chair

Dr. John Mitchell

Dr. Susan Simpkins

Approved by the Dissertation Committee:

	Date	8/9/10
	Date	8/9/10
	Date	8/9/10

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## DEDICATION

To my husband, Joe Monaco, without your support and encouragement I would have not gotten through this. Your tenacity in life and work is what I love best about you.

To my parents, Frank and Marie Biscardi, who always encouraged me to find the best in myself. Mom, I wish you could have been here with me through the last stages of this process, but I know you are looking down and smiling.

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## ABSTRACT

### Introduction:

Since 60% of currently practicing physician assistants (PAs) are women, it is critical to identify any gender-related differences in career satisfaction. Currently, in the PA literature, there are no data regarding women PAs beliefs about the ability to balance personal and professional responsibilities and its influence on career satisfaction. The purpose of this study was to identify practice characteristics and lifestyle choices of practicing PAs, determine if there are any gender-related differences, and ascertain whether a relationship exists between gender and career satisfaction.

### Methods:

This is a descriptive, correlational study using a web-based survey. The survey addresses: career satisfaction, lifestyle choices, professional practice characteristics, and gender concerns. Randomly selected PAs (800 men and 800 women) received an email invitation to complete the survey. Nonparametric testing (Chi-square analysis, Mann Whitney U, and Spearman's rho) was used to analyze the data.

### Results:

One hundred eighty-two clinically practicing respondents (85 men and 97 women) were included in the analyses. The women respondents tended to be younger with more women than men between the ages of 25 to 35 years old. More men (82.4%) than women (59.8%) were married; a significant association between gender and domestic status was found,  $\chi^2(3, N=182) = 11.51, p = .009$ . The way that men rated career satisfaction was not significantly different than the way women did, Mann Whitney U = 3916.5,  $p = 0.47$ , with more than 65% of men and women completely agreeing with the statement, "I am satisfied with my career as a Physician Assistant." Eighty-three percent of men and women PAs believed that they can balance their personal and professional responsibilities.

### Conclusions:

Even as women PAs reported spending more time than men on traditional household tasks, both felt that they were able to effectively balance family and work responsibilities. A relationship between career satisfaction and gender was not found in the population of PAs surveyed. While the sample was small, it does represent the demographics of PAs currently in practice and thus supports the assumption that the PA profession affords the ability to balance responsibilities and potentially promotes career satisfaction.

## Chapter 1

### INTRODUCTION

#### Background of the Problem

Physician assistants (PAs) are health professionals licensed to practice medicine with physician supervision (American Academy of Physician Assistants [AAPA], 2008). The PA profession had its start in the late 1960s. As the Vietnam War came to a close, medical corpsmen returned to the US without any prospect of employment. At the same time, the federal government predicted that there would be a shortage of physicians by the 1990s. It was believed that the generalist physician would become obsolete due to an overwhelming emergence of specialist physicians (Hooker, 2002). To meet the perceived need for primary care providers, Dr. Eugene Stead envisioned the PA to be a medical professional that could be trained to perform the duties of a generalist physician and additionally work in medically underserved areas.

In comparison to other health professionals, PAs are relatively new to health care, with the first class of PAs graduating from Duke University in 1967. The PA profession grew slowly at first. From 1972 to 1992, the number of PA programs remained steady with approximately 1000 to 1500 graduates per year (Cornell, 2004). Beginning in 1993, the profession experienced a tremendous increase in the number of new PA educational programs. Recent estimates indicate that over 4,000 students per year graduate from PA programs. In 2008, the AAPA reported that approximately 68,000 PAs are actively engaged in clinical practice. Today, the U.S. Department of Labor, Bureau of Labor

Statistics projects the number of practicing PAs will grow by 27% over the next decade (Bureau of Labor Statistics, 2008).

Given the projected demand for these health professionals, retention of PAs in the workforce is critical. Thus, it is essential to identify factors that contribute to PA career satisfaction. For some professionals, career satisfaction is based on the ability to balance personal and professional responsibilities. With 60% of practicing PAs women, it is even more critical to identify any gender-related differences in career satisfaction. The contrast between physician and PA education has made an impact on the attractiveness of the profession.

Educational Requirements Physician assistant education is modeled after medical school curriculum. Most PA programs require two years of professional education, which consists of one year of didactic education followed by one year of clinical experiences. Upon completion of PA program requirements, graduates can take the national certification examination and apply for state licensure. In most states, once a PA successfully completes the national certifying exam, the cPA can begin employment. In contrast, physician education requires four years of medical school followed by a three to four year residency program. Thus, the didactic and clinical curriculum for physicians is approximately twice as long as that for PAs. The shorter time required for education has made the PA profession more attractive to women. Jackson and Scharman (2002) reported that women seek out careers that allow them to spend more time with their

children; thus a shorter education time provides a career path that allows women to attain lifestyle choices that may be age dependent, e.g., child bearing.

Demographics of the PA Profession Since the profession was founded to provide medical employment opportunities for military corpsmen returning from the war, the first PAs were predominately men. This trend continued until 1997 when for the first time the number of women PAs outnumbered men, 50.2% and 49.8%, respectively. The most recent data from the 2007 American Academy of Physician Assistants Census finds that 63% of PAs in clinical practice are women (AAPA, 2008). This suggests that the PA profession has become a viable alternative health care career for women.

Hooker (2002) reports that women believe the PA profession will afford the flexibility needed to pursue both lifestyle goals and a rewarding career in patient care. Anecdotally, during PA Program admission interviews women cite the reason they have chosen the PA profession, rather than the medical profession, is that they "want to have a family". Thus, due to the relatively short educational requirements women believe they can achieve their goals to have both a family and a satisfying career. Women may perceive that since it takes half the time to become a PA, they can achieve their professional and family goals earlier than if they became a physician. It is unknown whether this perceived ability to balance personal and professional responsibilities leads to career satisfaction in PAs. Further, it is unknown whether there is a difference in how men and women PAs rate career satisfaction.

An increase in the number of women entering the PA profession is not unique. Women are entering many professions once dominated by men. For example, according to the American Association of Medical Colleges (AAMC), the number of women entering medical school is also increasing. Indeed, the number of women enrolled in medical school has increased from 30,792 women enrolled in 2002 (46.7% of total enrollees) to 34,099 (48.5% of total enrollees) in 2007 (American Association of Medical Colleges, 2008).

Coincident with the increase in the number of women entering more traditionally male dominated professions, the age at which women in the general population have their first child increased over the past three decades. The National Center for Health Statistics (2005) reports that the median age at which women have their first child is increasing. For example, in 2003 women had their first child at the median age of 25.1 years as compared to 22.1 years in 1970. The increase in median age for child bearing might be related to economic issues. Since women may make a significant contribution to the household income, they can not easily leave the workforce to stay at home with their children. In 2001, 24% of women earned a higher income than their husbands as compared to 18% of women in 1978 (Bureau of Labor Statistics, 2004). Thus, with the increased number of working women professionals who have a high earning potential and with the projected increase in demand for health care professionals, the need to retain these health care providers becomes extremely important. The ability to balance professional and personal/family responsibilities is a factor that may contribute to overall job satisfaction for many working women (Milhouse, 2006).

LaBarbera (2004) surveyed men and women PAs to determine factors that lead to career satisfaction. Two thousand twenty-three AAPA members were randomly selected to receive the survey. Over 1100 PAs responded to the survey; 75% of the respondents were in full-time clinical practice. The majority of respondents were satisfied with their career choice. The survey also included some open-ended questions to collect additional comments on career satisfaction. These responses were categorized into themes. The descriptive data analysis showed that almost half of the respondents stated that the ability to help others is an overwhelming factor in their career satisfaction. Other important factors included patient interaction, intellectual challenges, and autonomy. A small percentage (9.3%) of respondents cited professional flexibility and ability to balance work and family as a factor for career satisfaction; 1.5% of respondents cited not being able to balance work and family responsibilities as a reason for dissatisfaction. Other reasons for career satisfaction included the shorter training time and the shorter work hours as compared to what is required for physicians as additional reasons for their satisfaction. The author, however, did not display the data by gender so it is not clear whether the factors leading to career satisfaction are different for men and women PAs.

A qualitative analysis of gender-related PA career satisfaction was reported by Lindsay (2005). The author conducted 15 semi-structured interviews of eight male and seven female clinically practicing PAs. The clinically practicing PAs were selected from New York State, which has one of the highest number of practicing PAs. The PAs were identified through the Internet and registries of

professional associations and educational programs. Questions included why they chose this career and why the profession has seen an influx of women. In addition, six key informants who are knowledgeable about the PA profession were interviewed. The key informants were selected from a review of published literature on PAs. The key informants were questioned on the history of the profession and why an increase in the number of women has occurred. Through inductive analysis of the interviews, the author developed themes that were arranged into a hierarchical code for data analysis. The author also reviewed the 2002 census data from the AAPA for any gender-related differences. The AAPA census was mailed to 51,607 PAs and 19,745 (38.2%) completed surveys were returned.

The interviews inferred that women may be entering the PA profession because of consumer demands. With female patients wanting a female health care provider, female PAs are found working in the areas of preventative and women's health. In addition, women commented that the PA profession was compatible with having a family. The women PAs remarked that they did not feel they were ever penalized for taking time off from their job because of family needs.

The AAPA census data showed that more women were employed in the areas of general internal medicine, general pediatrics, general surgery, obstetrics and gynecology, and pediatric specialties. These findings were in agreement with the data obtained through interviews that found women PAs generally want to work in an area that provide a continuity of care. Whereas the data showed



that the men were employed in the areas of emergency medicine, surgical subspecialties, and industrial/occupational medicine.

The AAPA data also showed that men worked more hours than women, with men working an average of 44 hours per week and women working 39 hours. The shorter work week may be a reason women rate high satisfaction with their PA career.

The author concluded that the PA profession offers women a viable alternative to physician training. However, the data from this study cannot be generalized because the participants were derived from a sample of convenience. It is unknown whether the women PAs were satisfied with working less hours than the men.

If women believe that the PA profession allows flexibility to balance personal and professional responsibilities, then it is important to determine if there is a difference in how men and women PAs rate career satisfaction.

## Chapter 2

### Review of Related Literature

Lifestyle Choices and Practice Characteristics In Men and Women Physicians To date, there are no published quantitative studies comparing personal and professional responsibilities of men and women PAs and how these responsibilities relate to career and lifestyle choices. Since the ability to balance personal and professional responsibilities is important in a career choice (Barnett, 2005), determining whether woman PAs are able to balance professional and personal responsibilities would provide the objective information needed for women to make an educated career choice. Further, educational programs and PA national organizations could use these data for recruitment purposes and as a standard measurement of career satisfaction. Thus, with an increasing number of women entering the PA profession, there is a clear need to identify and practice characteristics and lifestyle choices among women PAs and whether they are related to career satisfaction.

Although there is minimal information on whether PA career satisfaction differs by gender, other health professions have examined this issue and their work can be used as framework to study PAs. For example, there are many published studies on women physicians' perception of how their career choice affects their family life and consequently their career satisfaction. Studies comparing men and women physicians report that significant differences exist in the areas of: (a) marriage and children; (b) family responsibilities; (c) practice characteristics; (d) career changes; (e) career satisfaction (Capek, 1997;

Gordinier, 2000; Pana, 2001; Warde; 1996). This literature can provide a better understanding of how careers in medicine influence men and women's family and career choices, and how men and women physicians balance their career and family responsibilities. The methods and findings from these studies provide a starting point for those interested in exploring these issues in other professions, such as physician assistant. Thus this literature will be used to identify factors for assessing how PAs balance their personal and career responsibilities.

Family Responsibilities Capek et al (1997) surveyed men and women plastic surgeons to determine if there was a difference in how they balanced their professional and family life. The survey was sent to selected members of the American Society of Plastic and Reconstructive Surgery. The survey collected basic information on demographics, training, and professional responsibilities and asked questions pertaining to household activities, childbearing, childcare, maternity/paternity leave, role models, and any episodes of harassment based on race, religion, or gender. In addition, a quality of life assessment of career and life satisfaction was included.

The results showed that significantly fewer women than men were married, 65% and 89%, respectively. Further, there was a statistically significant difference between the number of single (never married) women (18%) and single men (5%). Eighty-six percent of men and 51% of women reported having biologic children; this difference was also statistically significant. The number of children also differed by gender with 42% of men and 19% of women reporting having three or more children. More men (75%) than women (37%) had their

children during their residency training and at least half of the women delayed childbearing until they were in practice as compared to 20% of men. More women (43.6%) than men (22.5%) believed that having children either slowed or markedly slowed the progress of their career. Over 85% of the women and 100% of the men returned to work within 8 weeks of having their child. One limitation of this study is that it did not collect information on what kind of support or childcare system the women utilized to be able to return to work. Other studies have shown differences in the age at which men and women physicians have children.

Limacher et al (1998) surveyed 1064 members of the American College of Cardiology and found that 90% of the men who responded were married compared to 71% of the women. The number of children was similar for the men and women physicians, (average of 2.5 children and 2.1, respectively), however, the women were older than the men when they had their first child (32 years and 30 years, respectively). However, it was not reported at what point in their career the cardiologists had their children, i.e., during residency training or after. Indeed, the timing of child bearing may adversely impact the relationship between women physicians and their spouse/significant other.

Gordinier (2000) surveyed women gynecologic oncologists who were identified from the directory of the Society of Gynecologic Oncologists and women fellows still in training. The survey consisted of general demographic questions, and additional questions for women with children including the timing of childbearing, ideal time for childbearing, and obstacles related to childbearing. The majority of respondents (72%) were currently married and most (61%) had

children. Twenty percent of the women with children reported that the timing of the birth of their child caused moderate to severe stress in their relationship with their spouse or partner. Most women believed that ideally childbearing should occur after completion of fellowship training. The majority of women took a three to seven week maternity leave. Sixty-two percent reported that in retrospect they would have taken a longer maternity leave, while 36% said they would have not changed the duration of their maternity leave. These findings are similar to those reported by Capek. These studies show that there are gender-related differences with respect to childbearing and marriage. Other studies show gender-related differences occur in the family responsibilities undertaken by physicians.

Childcare Being a parent requires a certain amount of time each day to care for children. The time spent on childcare and other household responsibilities can take time away from professional commitments. Carr et al (1998) surveyed faculty from 24 medical schools and found that there was a significant difference between men and women physicians on the time devoted to childcare responsibility. The survey contained questions on demographic characteristics, professional goals, work status, academic status and rank, mentors, experiences of bias and discrimination, family responsibilities, compensation, and career satisfaction. Questions on career progress, satisfaction, child care, and career goals were answered using a 5-point Likert scale. Women reported spending an average of 22 hours per week on childcare responsibilities, whereas men reported an average of 14 hours per week. Women were also significantly more likely than men to care for dependents other

than children (e.g., parents). Specifically, women plastic surgeons also spent more time than men on family responsibilities. Capek (1997) reported that women plastic surgeons spend 11 to 20 hours per week performing household tasks while the men reported spending 10 hours or less. In addition, published data have shown there is a difference between men and women physicians in who the primary caretaker is for children.

Men physicians more often use their spouse for childcare. Fifty-five percent of men physicians reported their wife was the primary caretaker of their children while only 3% of women physicians reported that their spouse was responsible for childcare (Limacher, 1998). Women physicians often can not maintain full responsibility for childcare and resort to using other methods of childcare. For example, female gynecologic oncologists reported using various types of childcare, with the use of a nanny as the most common method. Other methods of childcare used by women physicians include using a relative or spouse, with a small number of women (6%) using daycare facilities (Gordinier, 2000).

These studies clearly show that there are differences in how much time men and women physicians spend on family responsibilities, with women handling more of the responsibility than men.

Professional Responsibilities - As mentioned earlier, in recent years women have begun to enter male-dominated careers. While the previous studies have described differences in family responsibilities, other studies have shown that there are differences in the responsibilities of men and women physicians based

on area of practice specialization. One such practice specialty demonstrating this difference is Sports Medicine. Professional responsibilities in this specialty include various levels of care, for example, physicians may see patients in the office, at athletic events or in training rooms. While health care professionals can not always foresee how many hours they will spend at work each day, providing care during sporting events can make practice hours more unpredictable. Pana in 2001 sent a survey to members of the American Board of Family Physicians who identified themselves as having a Certificate of Added Qualification (CAQ) in Sports Medicine to determine whether any biases could account for differences in career choices between men and women physicians who work in the specialty of sports medicine. The survey, which was not validated, contained both closed- and open-ended questions. The mean age of the women respondents was 38 years and the mean age of men was 41 years. As seen in other studies, there were a significantly greater number of married men than women and more men had children. The men had a greater mean number of years of board certification compared to women, but more women than men completed fellowship training programs.

Though similar numbers of men and women worked in a private group practice, men physicians saw patients at sporting events and in training rooms more often than women physicians. The authors believe this difference may be related to family responsibility. For example, in order to be at an athletic event or evaluate a patient in a training room, a clinician must have a flexible schedule since time spent at these locations is not always predictable. However, the

women physicians in this study reported that they were satisfied with their exclusive office practice. Seeing and treating patients only in the office was perceived by women physicians as a benefit to balancing their personal life and career responsibilities. As stated earlier, balancing personal and professional responsibilities leads to career satisfaction.

Both women and men sports medicine physicians reported being either satisfied or very satisfied with their career. Other specialties report similar findings. Men and women cardiothoracic surgeons rated their career satisfaction equally (Dresler, 1996).

Studies of other medical specialties show differences in practice styles between men and women physicians. A survey of cardiologists reported that 44% of women cardiologists altered their practice to avoid radiation exposure during pregnancy by not performing invasive procedures as compared to 17% of men (Limacher, 1998). Thus, women more often than men chose a practice style that reduced their radiation exposure.

Career Changes (Impact on Career) While conflict between personal and professional responsibilities can arise for both men and women, gender appears to influence how a conflict is resolved. One study looked at how family conflict resulted in career changes, and how the career changes differed between men and women physicians (Warde et al, 1996).

All women physicians and a random sample of men physicians from a southern California county were surveyed on professional characteristics, spouse, family, household help, career changes for family, and attitudes. Four hundred-



fifteen respondents who were married and had children were included in the analyses. In this study men and women were compared by age groups. Two groups were assessed those who were less than 45 years of age were in the “younger” group and those who were 45 years of age or older were in the “older” group. In the younger group (less than 45 years of age) there were 92 men and 87 women. In the older group (greater than 45 years of age) there were 167 men and 57 women.

As seen in other studies, there was a significant difference in the mean number of children between the men and women. Women in the older group had a mean of 2.7 children while the men in the older group had a mean of 3.2 children. Both men and women in the younger group each had a mean of 2.2 children. Family responsibilities that conflict with professional responsibilities can be resolved by making changes in a career. These changes in career can include not working, changing employment, or working fewer hours (part-time). The study authors defined six types of career changes – entire career, work type, practice type, increased hours, decreased hours, and interrupted career. Collectively, both genders experienced conflict between family life and their career, and both genders attempted to resolve these conflicts by making adjustments in their career. The most frequent career change for both men and women was a decrease in work hours. The most frequent reason why the older women made a career change was their marriage or their children. Women in the older group were also more likely than younger women to have interrupted their career for marriage. However, as compared to men, women in both age

groups were significantly more likely to make a career change for children or marriage. The younger men were more likely than older men to make a career change for their children. This was also seen with women physicians in gastroenterology fellowship training who took family leave more frequently than men or altered their family plans during their training (Arlow, 2002).

Career Satisfaction In general, men and women physicians are satisfied with their careers. Frank et al (1999) examined data from the Women Physicians' Health Study (WPHS). The WPHS included 4500 women in the American Medical Association's Masterfile of all U.S. MD-degree physicians. The women physicians were asked, "are you generally satisfied with your career; would you become a physician all over again; and would you change your specialty?"

Eighty-four percent of the women were satisfied with their career and 69% would "probably" or "likely" become a physician again. Specialties with "controllable lifestyles" such as dermatology, anesthesiology, and pathology showed higher rates of "always" or "almost always" satisfied. Specialties with high reports of "sometimes" or "rarely" satisfied were general practice, internal medicine, and radiology.

Other specialties showed high levels of career satisfaction. Both the men and women plastic surgeons were satisfied with their career, 94% and 90%, respectively (Capek, 1997). Of the plastic surgeons that practiced at academic centers more than 50% of the men had tenure while only 21% of the women had tenure. The women physicians were still satisfied with their career choice

despite having lower remuneration and not receiving tenure. Therefore, there may be other factors besides remuneration that lead to career satisfaction.

Gender Concerns Some women physicians with children believed that they experienced discrimination either in their current employment setting or during their fellowship training. The lack of a maternity leave policy in some training programs may support this belief (Gordinier, 2000). The need to address childcare issues and the use of flexible work schedules were important to all the women physicians surveyed. The women physicians suggested that the use of on-site childcare and flexible work schedules would help them balance family and career responsibilities and would lead to greater career satisfaction.

In this study, approximately one-third of respondents had a woman mentor, though most respondents (71%) believed that it was of moderate to great importance to have a same sex mentor. Respondents cited that the ideal mentor should advise a trainee on how to balance personal and professional responsibilities.

Given the need to reconcile work and family responsibilities, most women physicians believe that a same-sex mentor could help advise them how to achieve the right balance. Results from several studies found that respondents pointed out the need for a female mentor for female trainees. A survey of women physicians in internal medicine at academic centers showed that those with mentors had more publications, spent more time on research, and reported greater career satisfaction (Levinson, 1991).

This review of the literature comparing men and women physicians show that there are gender differences in lifestyle choices and practice characteristics among physicians. These factors can be used to assess how PAs balance personal and professional responsibilities. In addition, these studies provide a frame of reference to obtain data to show differences between men and women physician assistants and to determine whether any gender differences exist. An assessment of gender differences must be explored in order to understand if there is any difference in career satisfaction among PAs.

### Summary

Balancing personal and professional responsibilities are concerns for any individual who works full-time. Published research shows that specific factors can be identified to measure differences in personal and professional experiences of women and men physicians. As discussed earlier, PA education is fashioned after the medical model. Further, PAs perform many of the same "job tasks" performed by physicians including diagnosis of medical conditions and implementation of treatment plans. The two professions have similar work schedules and work environments. Because of these similarities, the methods used to study physician career satisfaction may be useful in the study of similar issues in the PA profession. Based on data from the physicians' studies, one would expect that there will be gender differences in the PA profession as well.

The review of the literature comparing men and women physicians found that more women than men chose not to marry and those who did may have delayed childbirth. In some of the studies women with children had help with

childcare; the need for childcare options and flexible work schedules were cited by most women as an important issues. The reconciliation of childcare responsibilities and work schedules could lead to greater job satisfaction.

Both men and women physicians are affected by family conflict and both will try to resolve these conflicts by making adjustments in their career. Conflicts may be resolved by making changes in work schedule, usually seen as a decrease in work hours. Women PAs may be able to use similar strategies to balance personal and career responsibilities by adjusting their work schedule and practice style as do women physicians. The ability to use these strategies may contribute to career satisfaction. However, the strategies women PAs use to balance their personal and professional responsibilities needs to be assessed. This is best carried out by collecting data on lifestyle and practice characteristics of men and women PAs using the available physician data as a frame of reference.

Since there have been no studies assessing lifestyle choices and practice characteristics and the relationship to PA career satisfaction, it is important to assess whether these factors affect career satisfaction. Some of the physician studies reviewed here had limitations in study design. Results from some of the studies may have been affected by sample biased. In some cases the studies targeted one specific specialty. In other studies, the participants were not randomly selected. Consequently, the results can not be generalized to the physician profession as a whole. In looking at the PA profession, most PAs work in primary care and the number of PAs in a specialty practice is small. Thus, a

study of PAs should not be based solely on practice specialty. Another limitation of the physician studies is that most of the survey tools used were not validated. Thus, the results from those studies may not be based on accurate measurements, i.e., the survey tools may not have measured the survey constructs.

In general, the studies that were reviewed have reported on married physicians. Thus, the results can only be generalized to legally married physicians. There was no assessment of physicians who may be co-habiting, physicians who adopted children, or physicians who had a family unit with a designated partner. In addition there was no assessment of physicians who may have remarried. In the 21<sup>st</sup> century there are many non-traditional families that have “traditional” family pressures. The role that these events play in career satisfaction and career conflicts was not explored.

Although PAs have patient-care responsibilities similar to physicians, it is not known whether they experience similar lifestyle choices and practice conflicts. If they do, it remains to be seen whether PAs resolve these conflicts with changes in practice styles or other career adjustments as seen with physicians. In addition, it is unknown whether there is a difference in lifestyle choices between men and women PAs.

In order to examine these differences, the following hypotheses were tested:

Hypothesis 1: Women physician assistants are less satisfied with their careers than men physician assistants.

Hypothesis 2: Lifestyle choices and practice characteristics are different between men and women physician assistants.

Hypothesis 3: Lifestyle choices and practice characteristics of men and women PAs are related to career satisfaction

## Chapter 3

### METHODS

#### Research Design

The research design for this study is a correlational descriptive study using a survey. Since there was no previous survey specific to PAs measuring lifestyle choices and practice characteristics, a survey was developed using the physician literature reviewed earlier.

#### Survey Questions

The survey was built around the themes of: demographics, employment role, work time commitment, family responsibilities, and impact on career. The demographic questions gathered information on age, gender, domestic status, number of children, salary, and year of completion of PA school. This was followed by a series of questions related to the respondent's employment. These questions included specialty area, hours worked per week, and whether overnight or weekend call is included in the work schedule.

Family responsibilities were defined by having respondents indicate how many hours they and their spouse/partner spent per week engaged in household tasks such as childcare, laundry, grocery shopping, caring for an elderly parent, and preparing meals for the family. To determine if family responsibilities had any impact on their career, respondents were asked whether they made any work-related changes for their family, e.g., decreasing their work hours, changing



to a different specialty, or relocating to another state, and if they had made any of these changes, did it address the family concerns.

Questions pertaining to gender centered on whether the respondents had or currently have a mentor and, if so, what is the gender of their mentor. In addition, respondents were asked if they ever experienced sexual harassment.

The last section of the survey consisted of a series of questions where the respondents were asked to assess how well they are able to balance family and professional responsibilities and how they rated career satisfaction. The respondents ranked their responses on a Likert scale. The Likert scale used a range consisting of completely agree, somewhat agree, neutral, somewhat disagree and completely disagree. The survey was thus designed to capture data on time spent each week by men and women PAs on work and family responsibilities and whether they were satisfied with their career choice.

#### Survey Validation

Validation of the instrument was by content validity (Portnoy, 2009). The survey instrument was validated by using content experts who reviewed the organization of the survey and provided feedback on the clarity and value of each question. Content experts were identified by the Chair of the Physician Assistant Education Association Research Institute who was asked to provide the names of PA faculty who met at least one of the following criteria:

- Had prior experience validating a survey and completing survey research
- Taught survey design

A letter of solicitation and the proposed survey was sent by email to nine PA faculty. Below each survey question there was a place where the content expert could comment and provide feedback on content and organization of the survey.

Four of the nine surveys were returned. The comments and feedback were reviewed and used to modify the survey instrument. Any question with an acceptance level of 70% or greater was considered valid for use in the survey (Powell, 2003; Rubio, 2003; Oliver, 2006). If the level of acceptance was less than 70%, the question was either re-written or deleted based on the written feedback.

The proposed survey contained 34 questions. Seventeen questions had 70% or greater agreement among the reviewers (Questions # 1,2,3,5,6,10,11,12,17,18,25,29,30,31,32,33,34). Eighteen questions were modified based on the reviewers comments (Questions # 3,7,8,9,12,13,14,15,16,18,19,20,21,22,23,26,27,28). Three questions pertaining to spouse's career type, conflict between PAs and MDs, and type of daycare were deleted and one question asking whether the participant was currently in clinical practice was added.

In addition, after review by the IRB, further questions pertaining to measuring satisfaction with various aspects of job responsibilities were added to increase clarity of the instrument. Due to the structure of web site that housed the survey, groups of questions that required a Likert scale response were listed under a single question number. Thus, the final survey contained 30 questions.

## Subjects

In order to achieve a medium effect size of .30 a minimum of 145 respondents were required in order to obtain a power of 0.95 at the 0.05 level.

The inclusion and exclusion criteria are:

### *Inclusion criteria*

- Men and women PAs who are married, divorced, separated, widowed or living with a significant other
- Currently working clinically as a PA

### *Exclusion criteria*

- Not currently working clinically as a PA

The Seton Hall University Institutional Review Board approved the study at its March 2008 meeting. A copy of the letter is contained in Appendix A.

## Procedure

Medical Marketing Services (MMS), which is a company that owns all mailing and email addresses of PAs, was contacted to obtain email addresses of men and women PAs. The company randomly selected 800 men and 800 women graduate PAs and recreated the IRB-approved letter of solicitation (Appendix B). This letter was emailed to the selected PAs. The letter of solicitation contained a hyperlink to the survey website where participants could immediately access the survey.

The survey (Appendix C) was housed on the Seton Hall University server through Academic Survey System and Evaluation Tool (ASSET), which is maintained through the Department of Information Technology. The survey was

launched on May 19, 2008 and remained open until September 19, 2008. Each respondent who clicked through the hyperlink in the letter of solicitation was brought to the entry page of the survey. In order to maintain anonymity the login name "guest" was present and the respondent just clicked on the login button to enter the survey. Using this procedure, no identifying data were collected from the respondents. Right above Question 1 of the survey was the following phrase, "Completion of this survey signifies your consent to participate in this research study".

#### Data Collection

The data collected from the 199 respondents were downloaded from ASSET into SPSS 17.0. Data from each respondent was coded.

#### Data Analysis

The data were nominal and ordinal, thus statistical testing was limited to descriptive statistics and nonparametric testing. Descriptive statistics comprised of measures of central tendency, ie, mean, median, and mode.

#### *Mann Whitney U Test*

The Mann Whitney U test was used to analyze differences in the Likert scale responses to test the hypothesis that women PAs are less satisfied with their career than men PAs.

#### *Chi square Test of Association*

Chi square using cross tabulation by frequency counts was used to determine if there was any significant difference between two groups, men and

women physician assistants, and their responses to questions on career satisfaction, professional responsibilities, and family responsibilities. In these analyses, the independent variable was gender and the dependant variables were career satisfaction, professional responsibilities, family responsibilities, gender concerns, and impact on career.

#### *Spearman's Rho Test of Correlation*

Spearman's rho correlation was used to determine whether lifestyle choices and practice characteristics are related to career satisfaction.

## Chapter 4

### RESULTS

Sixteen hundred surveys were emailed to 800 women and 800 men PAs. One hundred ninety-eight surveys were completed by 99 women and 99 men. One person did not indicate age or gender and was omitted from the analyses.

Sixteen (14 men and 2 women) of the 198 PA respondents did not meet the inclusion criteria because they were not currently working in clinical practice and thus were excluded from the analyses. Therefore, 182 respondents (85 men and 97 women) were included in the final analyses.

#### DEMOGRAPHICS

The demographic characteristics of the respondents are displayed in Table 1.

Table 1.

*Demographic Characteristics - Percentage of Respondents*

Demographic	Men <sup>a</sup>	Women <sup>b</sup>
<b>Age (years)</b>		
25 – 35	5.9	16.5
36 – 45	25.0	42.3
46 – 55	22.6	26.8
> 55	46.4	14.4
<b>Domestic Status</b>		
Single	7.1	16.5
Married	82.4	59.8
Divorced/Separated	5.9	16.5
Live with Partner	4.7	7.2
Widowed	0	0
<b>Number of Children</b>		
0	16.7	29.8
1	9.5	18.1
2	32.1	35.1
3	20.2	7.4
4	6.0	4.3
5 or more	15.5	5.3

a. n = 85 b. n = 97

The women respondents tended to be younger with more women than men between the ages of 25 to 35 year old, 16 (16.5%) and 5 (5.9%), respectively. The median age group for women was 25 to 35 years while the median age group for men was 46 to 55 years. A significant association between age and gender was found,  $\chi^2(3, N = 181) = 24.29, p = .000$ .

When looking at marital status, more men (82.4%) than women (59.8%) were married. In fact, more than twice as many women than men reported being single, 16.5% and 7.1%, respectively. None of the respondents reported

Widow/Widower status. A significant association between gender and domestic status was found,  $X^2(3, N = 182) = 11.51, p = .009$ .

One hundred seventy-eight of the subjects responded to the question, "How many children do you have?" More women than men reported having no children, 28 (29.8%) and 14 (16.7%), respectively. In addition, more women reported having one or two children whereas more men reported having five or more children. A significant association between gender and the number of children was found,  $X^2(5, N = 178, 15.29, p = .007)$ .

#### *Education and Highest Degree Earned*

Respondents were asked to indicate the year they completed their PA education. The data were aggregated by decade. The majority of respondents (men and women) completed their PA education during the 1990's. Table 2 displays by decade when respondents graduated from their PA program.

Table 2.

#### *Graduation Year Aggregated by Decade – Percentage of Respondents*

Graduation Year, by Decade	Men <sup>a</sup>	Women <sup>b</sup>
1970's	29.4	4.1
1980's	14.1	10.3
1990's	44.7	63.9
2000's	8.2	19.5

a. n = 85 b. n = 97



When asked what was your highest academic degree attained, the majority of respondents reported masters degree with the majority of men (54.1%) and women (57.7%) earning a masters degree.

### *Income*

The majority (53.6%) of men PAs earned more than \$105,000 per year while only 19% of women comparably earned this salary. A significant association between gender and annual salary was found,  $\chi^2(6, N = 180) = 35.85$ ,  $p = .000$  (Figure 1). Most women earned an annual salary in the \$65,000 to \$95,000 range whereas most men annual salary was in the \$85,000 to greater than \$105,000 range.

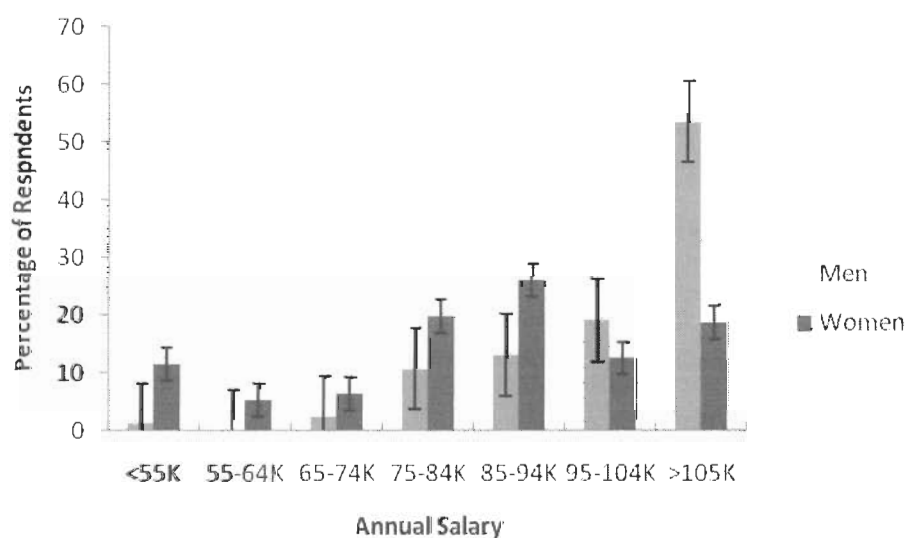


Figure 1. Annual Salary – Percentage (SE) of Respondents

## CAREER SATISFACTION

The way that men rated career satisfaction was not significantly different than the way women responded. The Mann-Whitney U was 3916.5,  $p = 0.47$ , with 66.7% of men and 66.0% of women completely agreeing with the statement, "I am satisfied with my career as a Physician Assistant." This result does not support Hypothesis 1: women physician assistants are less satisfied with their careers than men physician assistants, thus showing no difference in how men and women PAs rate career satisfaction.

When asked, "My family responsibilities interfere with my career as a PA", most men (54.3%) and most women (43.2%) disagreed with this statement. However, 19 (20.0%) women responded that they somewhat agreed with this statement as compared to 6 (7.4%) men. A significant association between gender and whether family responsibilities interfere with career was found,  $\chi^2(4, N = 176) = 9.892, p = .042$ . Figure 2 shows the percentage of men and women rating whether family responsibilities interfere with their career.

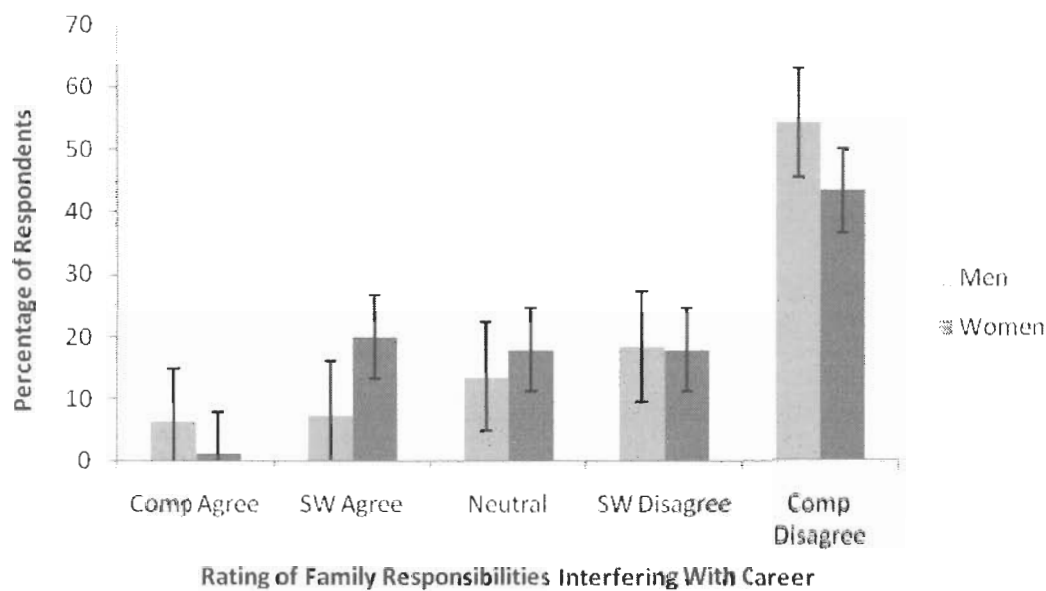


Figure 2: Percentage (SE) of Respondents Rating Family Responsibilities Interfering With Career

Most men (25.9%) and most women (27.1%) completely disagreed with the statement, “My responsibilities at work interfere with my personal life”. No significant association between gender and whether work interfered with personal life was found,  $X^2(4, N = 181) = 1.519, p = .823$ .

Most men (83.3%) and most women (83.5%) either completely or somewhat agreed with the statement, “I am able to balance personal and professional responsibilities”. No significant association between gender and balancing personal and professional responsibilities was found,  $X^2(4, N = 181) = 7.571, p = 1.09$ .

In addition to asking study participants to assess how satisfied they are with their career, they were asked about their satisfaction with their salary/compensation, position/title, job responsibilities, physical work environment, and the quality of personal life.

Most men (87.1%) and women (80.4%) were satisfied with their salary/compensation. However, slightly more women (13.4%) than men (9.4%) reported being somewhat dissatisfied with their salary. No significant association between gender and assessment of salary/compensation was found,  $X^2(4, N = 182) = 2.889, p = .577$ .

Most respondents were satisfied with their physical work environment, though twice as many women (10 [10.3%]) than men (5 [5.9%]) reported being somewhat dissatisfied. No significant association between gender and physical working environment was found,  $X^2(4, N = 182) = 8.716, p = .069$ .

When asked to assess the quality of their personal life, more women (15.6%) than men (9.4%) were somewhat dissatisfied with their personal life. No significant association between gender and quality of personal life was found,  $X^2(4, N = 181) = 4.761, p = .313$ .

More men than women were dissatisfied with their job responsibilities, 10.6% and 7.2%, respectively. However, more than 50% of men and women were completely satisfied. No significant association between gender and job responsibilities was found,  $X^2(3, N = 182) = 2.392, p = .495$ .

Lastly, men and women were equally satisfied with their position/title.

## LIFESTYLE CHOICES

Respondents were asked to identify the number of hours per week spent on the following household tasks: childcare-related tasks, household chores, financial responsibilities, laundry, grocery shopping, caring for adult dependent,

preparing meals for family, and yard work. Respondents were then asked to identify how many hours per week their spouse/partner spent on these same tasks.

#### *Childcare*

A similar number of men and women PAs spend zero hours per week on childcare, 45 (60.0%) and 51(53.7%), respectively. However, more women (29.5%) than men (5.3%) spend more than 20 hours per week on childcare (Figure 3). A significant association between gender and time spent on childcare was found,  $\chi^2(5, N =170) = 19.99, p = .001$ .

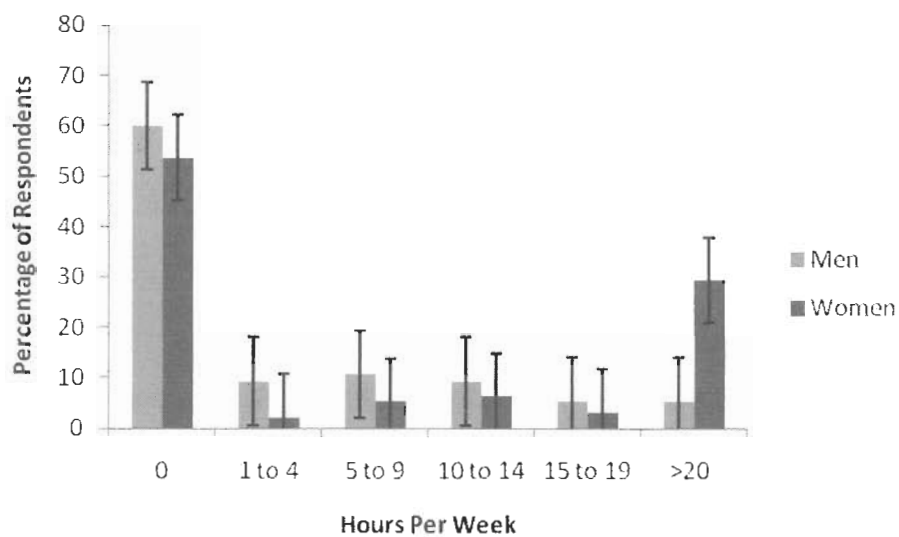


Figure 3. Hours Per Week Percentage (SE) of Respondents Spend on Childcare

### Household chores

A significant association between gender and the number of hours per week spent on household chores (e.g., cleaning) was found,  $X^2(5, N = 172) = 15.739, p = .008$ . A larger number of women than men spend more than 15 hours per week on household chores. Figure 4 shows the number of hours per week men and women spend on chores.

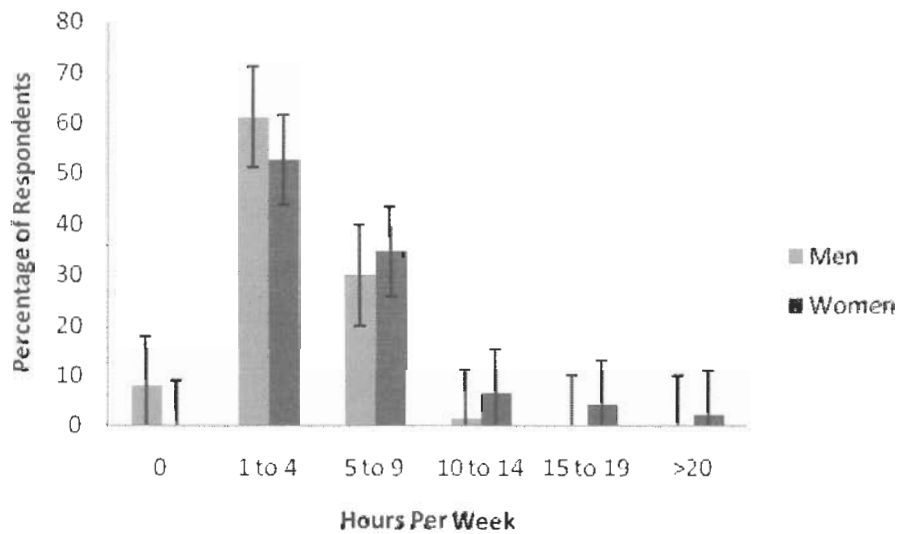


Figure 4. Hours Per Week Percentage (SE) of Respondents Spend on Household Chores

### Financial (Paying Bills)

More women (81.4%) than men (72.9%) spent at least one hour per week handling financial responsibilities, e.g., paying bills, in the household. A significant association between gender and financial responsibilities was found,  $X^2(5, N = 182) = 11.806, p = .038$ . Figure 5 shows hours per week respondents spend on financial responsibilities.

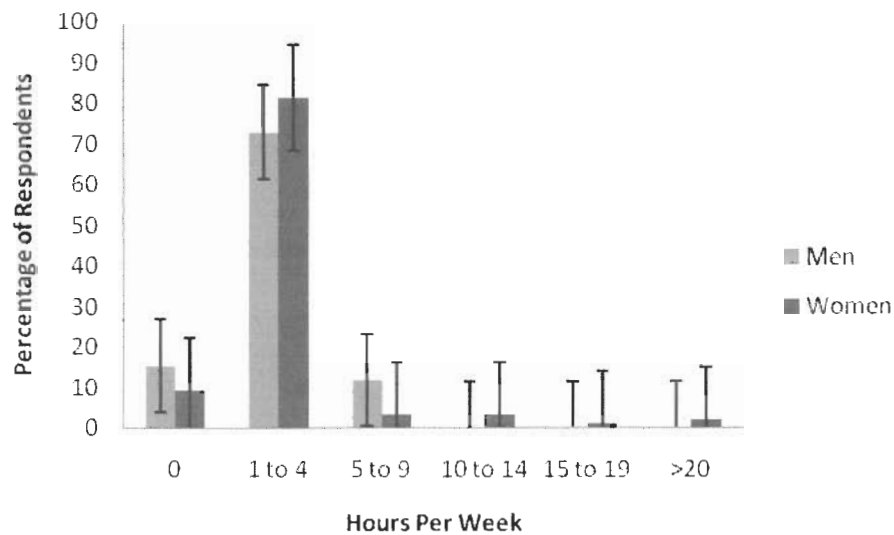


Figure 5. Hours Per Week Percentage (SE) of Respondents Spend on Financial Responsibilities

### Laundry

A significant association between gender and the number of hours spent doing laundry was found,  $\chi^2(5, N = 178) = 30.677, p = .000$ . Most men (71.6%) and women (71.1%) spend 1 to 4 hours per week doing laundry; however, 22% of men and only 1% of women spend zero hours per week doing laundry.

Figure 6 displays the number of hours respondents spend each week doing laundry.

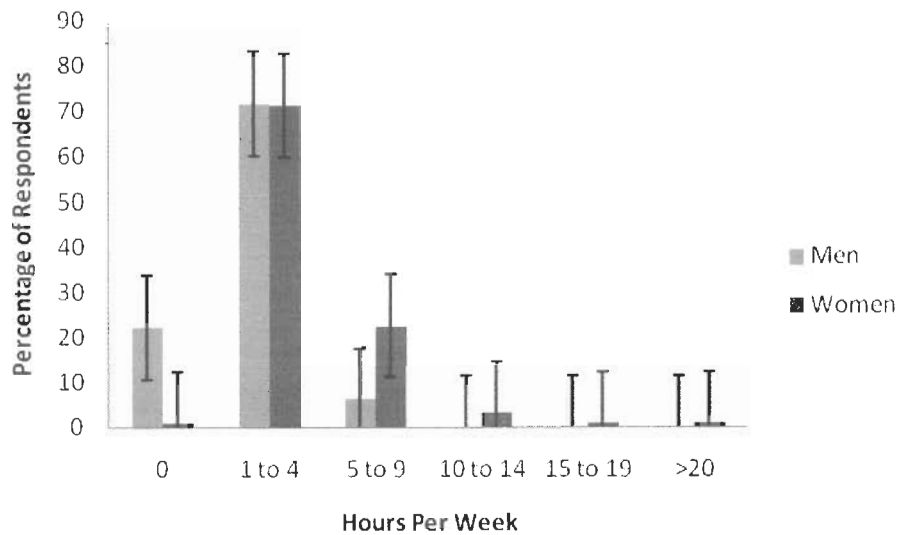


Figure 6. Number of Hours Percentage (SE) of Respondents Spend Per Week Spent on Laundry Tasks

### *Grocery Shopping*

Men and women respondents spend similar amount of hours per week grocery shopping. For both men and women the majority spend one to four hours per week completing this task (83% of men and 89% of women). No significant association between gender and time spent on grocery shopping was found,  $\chi^2(4, N = 180) = 6.628, p = .157$ .

### *Caring for an Adult Dependent*

There was no significant association between gender and the amount of time spent per week caring for an adult dependent,  $\chi^2(3, N = 165) = 3.370, p = .338$ . Most men (97.2%) and women (98.9%) respondents reported spending zero hours per week on this task.



### Preparing Meals for the Family

Most women (44.3%) spend five to nine hours per week preparing meals for the family. Only 17.5% of men spent the same amount of time on this task. Most men (57.5%) only spend one to four hours per week preparing meals for the family (Figure 7). A significant association between gender and time spent preparing was found,  $\chi^2 (4, N = 177) = 23.576, p = .000$ .

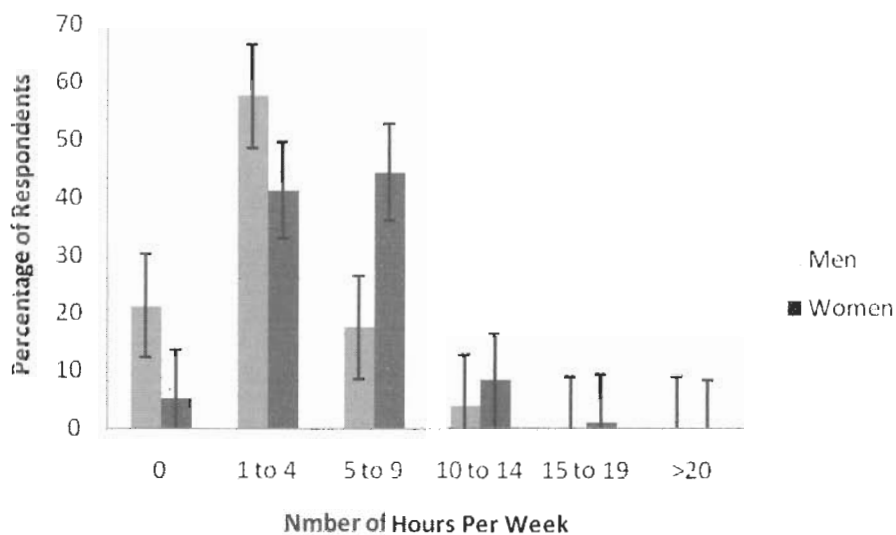
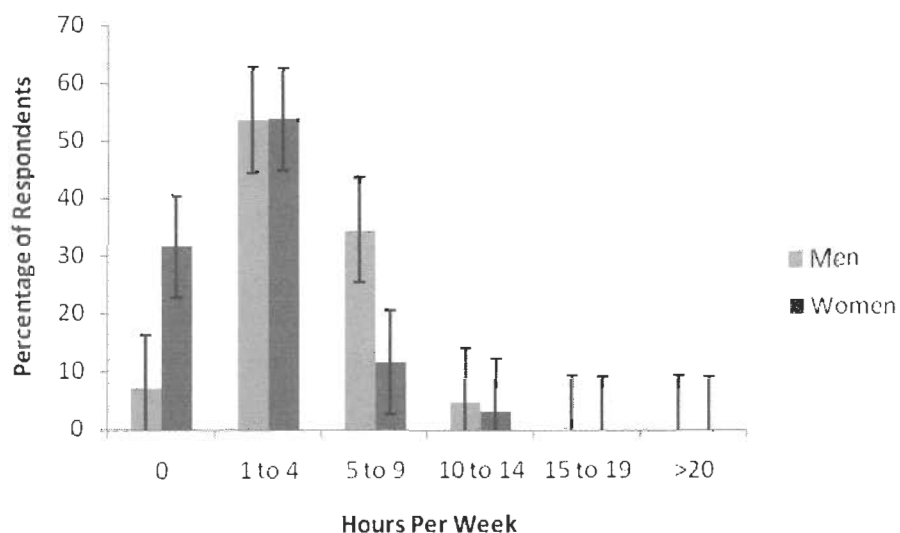


Figure 7. Hours Per Week Percentage (SE) of Respondents Spend on Preparing Meals for the Family

### Yard Work

Most men (53.6%) and women (53.7%) spend one to four hours per week doing yard work. However, more men (34.5%) than women (11.6%) spend five to nine hours per week completing this task; a significant association between gender and the amount of time doing yard work was found,  $\chi^2 (3, N = 179) =$

24.033,  $p = .000$ . No one reported spending more than 15 hours per week doing yard work. The hours per week spent on yard work is shown in Figure 8.



**Figure 8.** Hours Per Week Percentage (SE) of Respondents Spend on Yard Work

Additionally, respondents were asked to categorize the number of hours per week that their spouse or partner spent on the activities of childcare, grocery shopping, laundry, caring for an adult dependent, preparing meals for the family, financial tasks, and yard work.

#### *Spouse/Partner's Childcare*

A significant association between gender and the amount of time each respondent's spouse spends on childcare-related tasks was found,  $\chi^2 (5, N = 152) = 12.947, p = .024$ . Figure 8 shows the amount of time per week respondent's spouse/partner spends on childcare-related tasks.

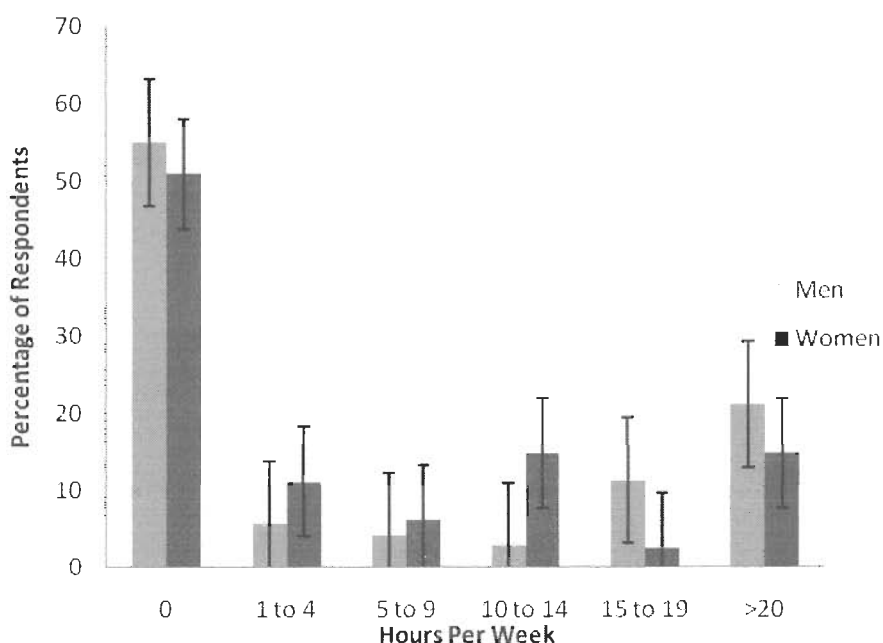


Figure 9. Hours Per Week Percentage (SE) Respondents' Spouse/Partner Spends on Childcare-Related Tasks

Eight (11.3%) male respondents reported that their spouse/partner spends fifteen to 19 hours per week on childcare-related tasks. While only two (2.5%) women respondents reported that their spouse/partner spent the same amount of time on these tasks.

#### *Spouse/Partner's Household Chores*

Overall, more men reported that their spouse/partner spent between 5 to 14 hours per week on household chores. A significant association between gender and hours spent by respondent's spouse on household cleaning was found,  $X^2(5, N = 157) = 48.247, p = .000$ . Figure 10 displays these data.

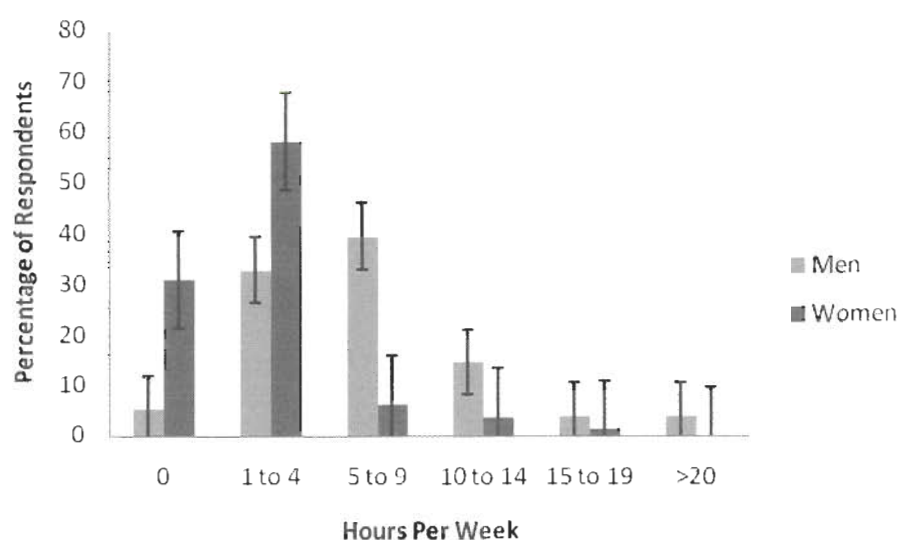


Figure 10. Number of Hours Per Week the Percentage (SE) of Respondent's Spouse/Partner Spend on Household Chores

#### *Spouse/Partner's Financial (Paying Bills)*

No significant association between gender and the amount of hours per week the respondent's spouse/partner spent on financial tasks was found,  $X^2 (4, N = 156) = 4.524, p = .340$ .

#### *Spouse/Partner's Laundry*

A significant association between gender and the amount of hours per week the respondent's spouses/partners spend doing laundry was found,  $X^2 (5, N = 157) = 38.595, p = .000$ . These data are displayed in Figure 11.

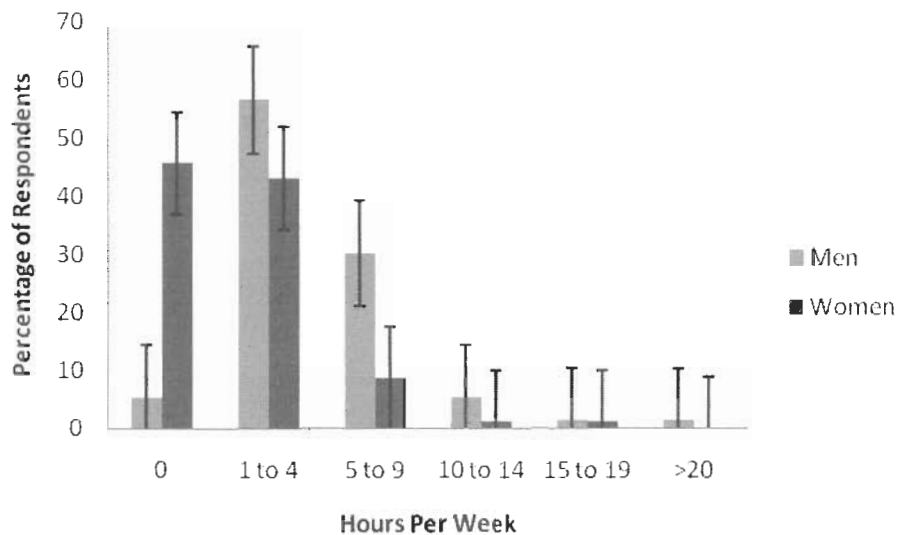


Figure 11. Number of Hours Per Week the Percentage (SE) the Respondent's Spouse/Partner Spend on Laundry

The majority (53.1%) of women reported that their spouse/partner spent zero hours per week doing laundry. Only seven (9.3%) men reported that their spouse spent the same amount of time on laundry. Twenty-three (30.3%) men reported that their spouse/partner spend five to nine hours each week doing laundry while only seven (8.6%) of the women respondents reported their spouse/partner completed this task.

#### *Spouse/Partner's Grocery Shopping*

The majority of men respondents indicated that their spouse/partner spent one to four per week on the task of grocery shopping. A significant association between gender and the amount of hours per week the respondent's spouses/partners spend grocery shopping was found,  $\chi^2(4, N = 156) = 37.827, p = .000$ . These data are displayed in Figure 12.

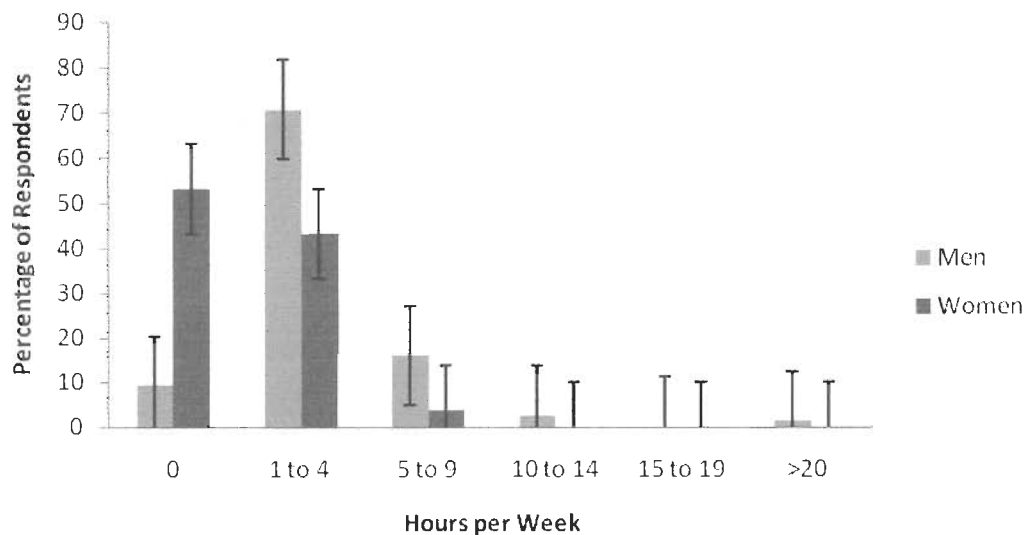


Figure 12. Number of Hours Per Week the Percentage (SE) the Respondent's Spouse/Partner Spend on Grocery Shopping

The majority (53%) of women respondents indicated that their spouse partner spent zero hours per week on grocery shopping. In fact, none of the women reported that their spouse/partner spent more than nine hours per week on this task.

#### *Spouse/Partner's Caring for Adult Dependent*

Only 145 respondents responded to the question, "How many hours per week does your spouse/partner spend caring for an adult dependent?" A similar number of men (93.9%) and women (100%) reported that their spouse/partner did not spend any time per week caring for an adult dependent. No significant association between gender and time spent on caring for an adult dependent by respondent's spouse/partner was found,  $\chi^2(3, N = 145) = 4.924, p = .177$ .

### *Spouse/Partner's Preparing Meals for the Family*

A significant association between gender and the amount of time the spouse/partner spent per week preparing meals for the family was found,  $\chi^2 (5, N = 157) = 35.361, p = .000$ . These data are displayed in Figure 13.

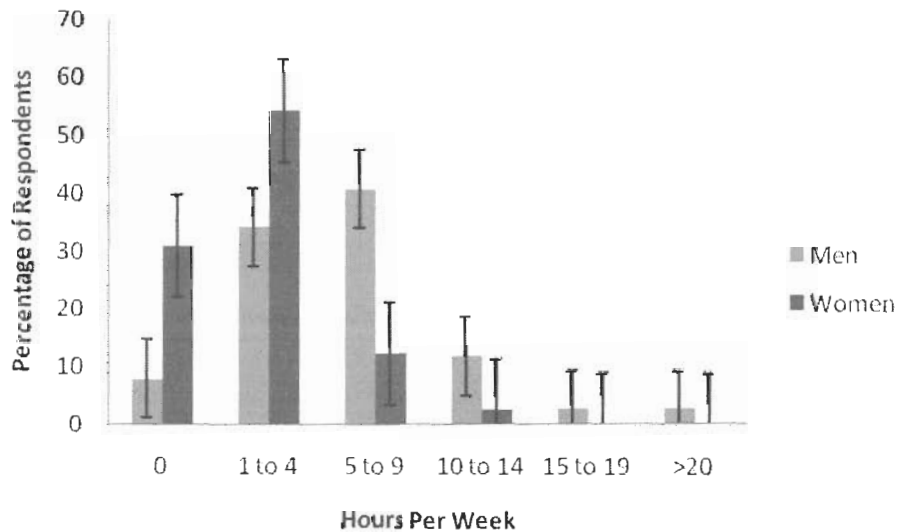


Figure 13. Hours Per Week the Percentage (SE) of Respondent's Spouse/Partner Spend Preparing Meals for Family

### *Spouse/Partner's Yard Work*

The men and women respondents reported that their spouse/partners spend similar amount of hours per week on yard work. The association was not significant ( $\chi^2 (5, N = 154) = 10.879, p = .054$ ).

## Daycare Choices

Respondents were asked whether they used in-home or out-of-home daycare and the number of hours per week each method was used. A significant association between gender and the amount of hours used for out-of-home daycare was found,  $\chi^2(4, N = 34) = 10.531, p = .032$ , but not for time spent utilizing in-home daycare ( $\chi^2(4, N = 24) = 8.640, p = .071$ ). Figure 14 shows the number of hours used for out-of-home daycare by the men and women respondents.

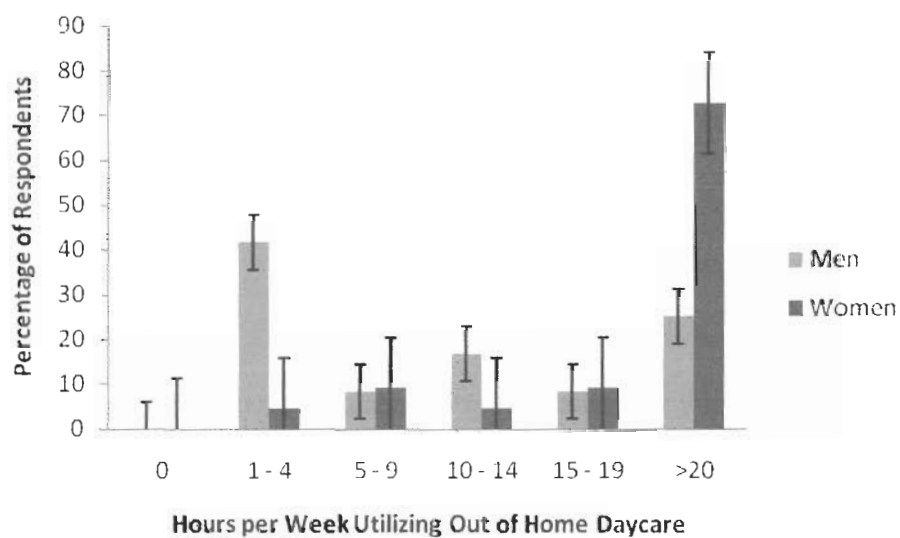


Figure 14. Percentage (SE) of Respondents Utilizing Out-Of-Home Daycare

Of the 22 women who reported using out-of home daycare the majority (72.7%) used this method more than 20 hours per week. Only 12 men reported utilizing out-of-home daycare; the majority of men (41.7%) used this method one to four hours per week. Twenty-four respondents (nine men and fifteen women)



reported utilizing in-home daycare. The majority (53.5%) of women reported using in-home daycare more than 20 hours per week, while 66.7% of men reported using this method one to four hours per week.

### **PRACTICE CHARACTERISTICS**

One hundred eighty-two respondents reported that they were working in clinical practice. The respondents were asked to either select an area of practice listed in the survey or to provide an area of employment if not listed. Since this was an open-ended question, similar responses in the category of “Other” were grouped together. The highest percentage of women (16%) worked full-time in the area of family medicine where the most men (19%) worked full-time in emergency medicine. The second most common full-time area of employment for men was family medicine and for women was “surgical subspecialty”. Tables 3 and 4 list the respondents’ areas of employment.

Table 3

*Percentage of Men and Women Working Full-time and Part-time and Their Primary Area of Employment*

Specialty Area	Men <sup>a</sup>	Women <sup>b</sup>
<u>Area (Full-time)</u>		
Family medicine	18	16
Pediatrics	1	2
Gynecology	2	2
Geriatrics	1	1
Emergency medicine	19	7
Internal medicine	2	6
Medical Subspecialty	3	4
General surgery	2	2
Surgical subspecialty	17	13
<u>Area (Part-time)</u>		
Family medicine	8	7
Pediatrics	0	2
Gynecology	0	0
Geriatrics	1	1
Emergency medicine	5	9
Internal medicine	1	3
Med Subspecialty	0	2
General surgery	2	2
Surgical Subspecialty	2	4

Numbers may not add up to 100 percent since some respondents indicated two primary areas of employment

<sup>a</sup> n = 85. <sup>b</sup> n = 97.

Table 4

*Percentage of Men and Women Working in an Area of Employment Listed as "Other"*

Specialty Area	Men <sup>a</sup>	Women <sup>b</sup>
Addiction medicine	2	0
Biological medicine	0	1
Cardiology	0	2
Clinical research	1	0
Correctional medicine	0	1
Critical care	1	0
Dermatology	0	3
Genetic Counseling	0	1
Gyn Oncology	0	1
HIV Medicine	0	3
Hem/Onc	0	2
Nephrology	1	2
Psychiatry	6	1
Radiology	1	2
Occupational Medicine/Health Services	6	7
Ortho/Sports medicine	4	0
Otolaryngology	1	0
PM&R	1	1

Numbers may not add up to 100 percent since some respondents indicated two primary areas of employment

<sup>a</sup> n = 85. <sup>b</sup> n = 97.

The respondents were asked to identify the length of time at their current (primary) place of employment. The majority of men (25%) and the majority of women (30.9%) stated that they were at their current job for six to ten years. More men (21.4%), however, than women (6.2%) stated that they were at their current job for more than 15 years. No significant association between gender and length of time at current employment was found,  $X^2(5, N = 181) = 9.303$ ,  $p = .098$ .

The majority of respondents work a regular office hour schedule, e.g., 9 A.M. to 5 P.M. The percentage of respondents working this schedule was similar

between the men and women, 44.7% and 55.7%, respectively. Slightly more men (31.7%) than women (17.5%) had schedules that included different shifts and/or included weekends.

As for specific tasks while at work, 64.7% of men spend 90 to 100% of their time with patient care activities; 58.7% of women spend similar of time on this activity. Men and women respondents only spend a minimal amount of time (up to 10%) on administrative, supervisory, and educational activities.

A similar number of men and women stated that their employer provided a flexible work schedule (that is, the ability to modify their work schedule). However, when asked "how often do you need to modify your schedule", more men (12.2%) than women (3.8%) frequently modified their schedule. No significant association between gender and adjusting work schedule was found  $\chi^2(2, N = 110) = 2.648, p = .266$ .

Lastly, respondents were asked to identify the mode of taking on-call, e.g., from home or on site. A similar number of men and women respondents take on-call from their home as well as a similar number take on-call while on-site. No significant association between gender and having on-call responsibilities was found,  $\chi^2(2, N = 179) = .709, p = .701$ .

To address Hypothesis 2, lifestyle choices and practice characteristics are different between men and women physician assistants, these variables were compared as two independent samples. When looking at lifestyle choices, the time spent on household cleaning was significantly different between the men and women PAs, Mann-Whitney  $U = 2840.5, p = .002$ . In addition, time spent

doing laundry, was significantly different between the two groups, Mann-Whitney  $U = 2544$ ,  $p = .000$ .

Looking at practice characteristics, only the specialty emergency medicine was significantly different between men and women PAs, Mann-Whitney  $U = 108.5$ ,  $p = .038$ .

In order to address Hypothesis 3, lifestyle choices and practice characteristics of men and women physician assistants are related to career satisfaction, Spearman's rho for age and career satisfaction was  $\rho = -.142$ ,  $p < .058$ . This indicates a weak inverse non-significant relationship between age and career satisfaction. One specialty area, Emergency Medicine, showed a significant, positive correlation with career satisfaction ( $\rho = .404$ ,  $p < .05$ ). A flexible work schedule ( $\rho = .152$ ,  $p = .042$ ) and length of employment ( $\rho = -.252$ ,  $p = .001$ ) were other practice characteristics significantly related career satisfaction.

## **GENDER CONCERNS**

### *Timing of Marriage and Childbearing*

Most respondents, when answering the question whether they had to postpone marriage or childbearing while enrolled in PA school, chose the response "Not applicable". Of those who did choose an answer, more women than men postponed both marriage and childbearing until their PA education was completed. No significant association between gender and postponing marriage

was found,  $\chi^2 (2, N = 181) = 3.367, p = .186$ . Fifteen (15.5%) women reported postponing marriage until their PA education was completed while only eight (9.5%) of men answered similarly. In addition, twenty-four (24.7%) women and fifteen (17.9%) men reported they did not postpone marriage until PA school was over.

Twenty-eight (29.5%) women and eleven (12.9%) men stated that they had delayed childbearing until their PA education was completed. While twenty (23.5%) men and twelve (12.6%) women stated they did not postpone childbearing. A significant association between gender and postponing childbearing was found,  $\chi^2 (2, N = 180) = 8.891, p = .012$  (Figure 15).

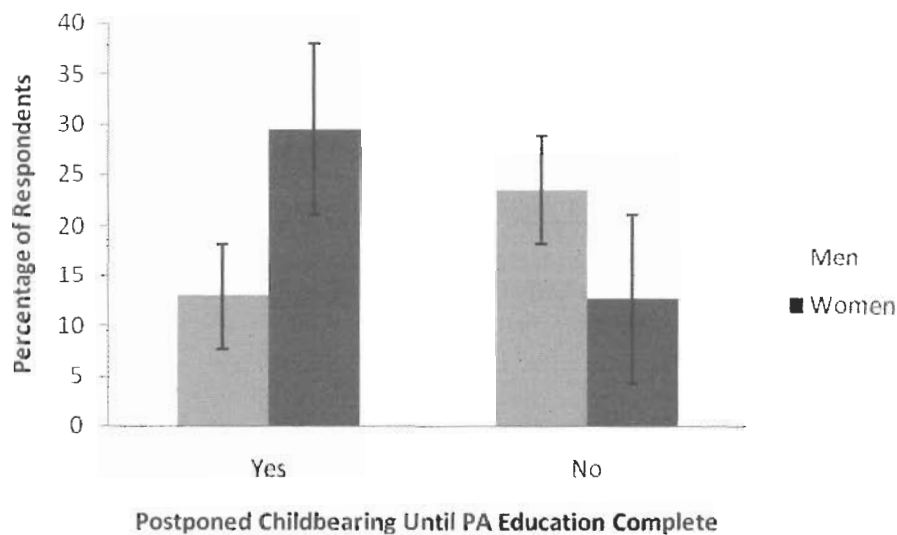


Figure 15. Percentage of Respondents Who Postponed Childbearing Until PA School Completed

### *Mentors*

Respondents were asked to indicate whether they had a mentor while in PA school or whether they currently have a mentor while employed.

Respondents were allowed multiple responses to this question. Table 5 displays percentage of respondents having or not having a mentor.

Table 5

#### *Percentage of Men and Women Respondents with a Mentor*

Time of Mentor	Men <sup>a</sup>	Women <sup>b</sup>
While in PA School	24.7	35.1
While Employed	40.0	48.5
Never Had a Mentor	47.1	37.1

<sup>a</sup> n = 85. <sup>b</sup> n = 97.

Thirty-eight percent of respondents having a mentor received educational mentorship. Only 17.6% of respondents received advice on how to balance family and professional responsibilities. The men respondents were more likely to have a mentor of the same gender. The women respondents reported a similar number of male and female mentors.

### *Sexual Harassment*

When asked whether they ever experienced sexual harassment, the majority of men and women denied ever experiencing sexual harassment at their primary place of employment, 91.8% and 85.6%, respectively.

## IMPACT ON CAREER

Respondents were asked whether they had ever made a change in their career to accommodate their family needs and what type of change they had made. The most common responses for women were that they never made a change (40.2%) and if they did they decreased their work hours (38.0%). Alternately, men most commonly reported that they never made a change (54.2%) and if they did they changed specialty (22.9%). Finally, about 10% of women reporting that they stopped working whereas only 1.2% of men reported doing the same.

Interestingly, both the majority of men and women believed that the changes that they made for family adequately addressed family responsibilities, 82.1% and 80.4%, respectively.



## Chapter 5

### DISCUSSION

This was an exploratory study to determine if there were any gender-related differences in the way PAs rate career satisfaction. Data collected included lifestyle choices and practice characteristics of men and women PAs in order to determine if there were gender-related differences and whether these factors were related to career satisfaction.

The respondent population was reflective of PAs currently in clinical practice. In the population analyzed for this study there were more women than men, 53.2% and 46.7%, respectively. Presently, there are a greater percentage of women than men in practice, 65.2% and 38.8%, respectively (AAPA, 2009). The AAPA census report states that the top three areas of employment for PAs regardless of gender are family medicine, emergency medicine, and surgery/surgical subspecialties (AAPA, 2009). This employment trend was also reflected in the study population.

Other demographic characteristics of the study population were similar to the demographics of the respondents in the physician studies discussed earlier. For example, more women PAs than men PAs reported their domestic status as single; this was also seen in the physician studies reviewed (Capek, 1997, Limacher, 1998). The women PAs had fewer children (or no children at all) as compared to the men PAs, which again was similar to the physician data (Limacher, 1998).

Since PAs and physicians have similar job tasks and the demographics of the respondent population of this study paralleled that of the physicians' one might expect that the way men and women PAs would rate career satisfaction similar to physicians, i.e., a gender difference would occur. However, in contrast to findings from the physician studies there was no statistically significant gender-related difference between how the men and women PAs rated career satisfaction. This may mean that the professional demands of a PA are manageable and the women respondents' expectations of the profession are being met.

There were also no significant associations between gender and how the men and women PAs rated satisfaction with respect to salary/compensation, job title, physical working environment, and job responsibilities. It is interesting to note that though there was no significant association between gender and satisfaction with salary/compensation, the data showed marked differences in salaries between men and women PAs: 56% of men earned more than \$105,000 per year while only 19% of women earned the same salary. In fact, in general, more men earned salaries in the higher categories, e.g., more than \$95,000, whereas more women earned salaries in the lower categories, e.g., less than \$55,000 to \$94,000. The lower salaries earned by the women PAs may be due to the women being younger in age and having less time in the profession. Overall, these data indicate that despite being paid less than men, women PAs are equally satisfied with their career. Therefore, there must be other factors contributing to career satisfaction in women PAs. Indeed, prior findings suggest

that rather than having higher salaries women would choose flexible schedules, having time for family responsibilities, and helping others (Milhouse, 2006). The results from this study support these factors and are available to women PAs.

In this study, over 80% of men and women PAs completely or somewhat agreed that they were able to balance personal and professional responsibilities. Interestingly, women physicians working in the area of obstetrics and gynecology indicated that having a flexible work schedule would lead to greater career satisfaction (Gordinier, 2000). This is consistent with the perspective advanced by Jackson and Scharman (2002) in that a women's ability to balance personal and professional responsibilities is an important factor contributing to career satisfaction. Interestingly though, there was a significant association in this study between gender and how respondents assessed the statement, "family responsibilities interfere with my career." In this study we can only observe from this finding that the PA career is flexible whereas family responsibilities sometimes are not. Consequently, when respondents report that family responsibilities interfere with career it may be related to the number of hours the women PAs reported spending on lifestyle tasks.

Furthermore, the women PAs as compared to the men PAs reported spending more hours per week on lifestyle tasks traditionally carried out by women, e.g., laundry. Chi-square analysis revealed that there were significant associations between gender and the amount of time respondents spent per week on the traditional household responsibilities such as laundry, household chores, preparing meals for the family, and childcare. Whitmarsfr et al (2007)

found that many women working in a female-dominated profession will come home and work a “second shift”. This is consistent with the findings reported here: women PAs spend more time on these traditional tasks as compared to their male counterparts. It remains to be seen whether these differences will change over time as men take on more family-related responsibilities (Gerson, 2007).

Comparatively, the lifestyle tasks of laundry, childcare, household cleaning, and preparing meals were identified as having a significant association between gender and the amount of time the respondent’s spouse/partner spent on them. In looking at these tasks individually we see that the majority of women PAs reported that their spouse/partner spent either zero hours per week or one to four hours per week on these tasks. This minimal assistance from the spouse/partner may be contributing to why more women respondents believe that their family responsibilities interfere with their career.

When family responsibilities conflict with work, health professionals may have the ability to work different shifts. Though the majority of men and women PAs surveyed reported the availability of flexible work schedules, this was used only sometimes by the PAs. Why don’t PAs make more use of flexible schedules? It maybe because their training and work responsibilities teach them how to prioritize tasks or multitask. Given that this is speculation, future studies could be developed to specifically look at what strategies PAs use to manage with competing responsibilities. Warde (1996) reported that physicians responded to overwhelming family and/or professional responsibilities by making a career

change, i.e., decrease work hours, change specialty, change jobs. Emmons (2006) reported that women obstetrician/gynecologists were more likely than men to work part-time due to family responsibilities. When asked if they ever made a career change because of family responsibilities, the majority of both men and women PA respondents stated they never made a change. However, those women (38%) who did make a change did so by decreasing their work hours. Only 14% of men reported decreasing their work hours. Warde found that both men and women physicians decreased work hours in response to family needs. In this study, the men PAs who did make a career change for family did so mostly (23%) by changing specialty. The ability to change medical specialties is unique to the PA profession. Physician assistant education is primary care focused thus giving students experience in various specialties. The PA national certifying body currently requires graduates to pass a recertification examination every six years thus graduates continually become refamiliarized with primary care subjects and can move to other specialties if so desired. This career flexibility is considered a very desirable characteristic of the PA profession and may be more important to men. Future studies could address how often PAs actually change their specialty area and whether this change occurs for family-related reasons.

In some of the physician studies reviewed the women physicians commented that having a female mentor may help them in developing strategies to balance personal and professional responsibilities. Also, those in an academic center who had a female mentor were found to be productive with scholarly

activities and reported greater career satisfaction (Levinson, 1991). In this study, more women PAs than men had mentors, with almost 50% of women PAs reporting having a mentor while employed. Interestingly, the mentors the women PAs had were of either gender, male or female. This suggests that the gender of mentor may not be as important as is the advice the mentor gives.

When looking at other gender concerns, more women PAs than men postponed childbearing until their PA education was completed. Approximately 30% of women PAs postponed childbearing in contrast to 13% of men. The choice to delay childbearing may be one strategy to address the intensity of professional education. Women should not have to choose between starting a family and having a career. Career counselors must be diligent in providing advice to women on their vocational development and strategies to manage family and professional responsibilities. Having a career and a family must not be thought of as dichotomous, i.e., you have to be a full-time mother or full-time career women, but strategies on how to blend both goals must be discussed with women (Jackson and Scharman, 2002). Perhaps future studies could quantify strategies that women PAs use to balance their personal and professional responsibilities and these could be used by other professional women.

Limitations of this study include a low response rate. Though a 12% response rate is acceptable, a higher rate may have produced more statistically significant findings or trends. In addition, with many of the survey questions being personal in nature, respondents may have answered with some bias.

Survey questions asking respondents to recall time spent on tasks may only be an estimate and may not truly represent actual time.

Future studies will need to assess whether health care reform, continuing demographic changes in the PA profession or changes in family roles, e.g., men being more involved with family responsibilities, will affect PA career satisfaction.

In conclusion, the results of this study found that women PAs are as satisfied with their career as men PAs. In addition, the results indicate that some lifestyle choices are significantly different between men and women PAs, and only some practice characteristics are related to career satisfaction. Jobs are available that allow PAs to have flexibility to adjust their schedule to meet demands of personal responsibilities. This allows PAs to balance personal and professional responsibilities likely contributing to overall career satisfaction. Accordingly, women who choose to enter the PA profession can be confident that they can have a satisfying career in medicine and the time to meet their family responsibilities. Women PAs rate career satisfaction comparably to men and the PA profession affords women the ability to balance personal and professional responsibilities.

## APPENDIX A

## LETTER OF SOLICITATION

## SETON HALL UNIVERSITY

May 15, 2008

Dear Physician Assistant:

My name is Carol Biscardi and I am a doctoral candidate in Seton Hall University's PhD program in Health Sciences and I am the Program Director of the Seton Hall University Physician Assistant Program. My research project, "Practice Characteristics and Lifestyle Choices of Men and Women Physician Assistants and Their Relationship to Career Satisfaction" is designed to determine if there is a difference between men and women PAs family and professional responsibilities. In addition, I seek to find out if the differences are related to career satisfaction.

I am contacting you to ask your participation in a survey. The survey consists of 30 questions and should take approximately 30 to 35 minutes to complete. The survey contains questions on your employment, e.g., specialty, full or part-time, and your family responsibilities, e.g., hours per week spent on household tasks.

Your participation in this survey is strictly voluntary. There are no penalties for not participating.

In order to participate, you can click on the link below which will bring you to the survey. The survey is completely anonymous. Your name, address, or other identifying data will not be collected. You will only be asked to supply your age and gender.

All survey data will be downloaded to a USB memory key ("flash drive"). The only persons who will have access to the data will be me and my dissertation committee. The USB memory key will be kept in a file cabinet drawer locked in my office.

This research has been approved by Seton Hall University's Institutional Review Board (IRB). If you should have any questions about the survey, you may contact me at [biscarca@shu.edu](mailto:biscarca@shu.edu) or my dissertation chair, Dr. Genevieve Pinto-Zipp at [zippgene@shu.edu](mailto:zippgene@shu.edu). Any questions about the research or research subject's rights can be directed to the SHU IRB at 973-313-6314.

To access the survey, click on the link below:

<http://asset.tlc.shu.edu/servlets/asset.AssetSurvey?surveyid=2477>

Yours truly,

*Carol Biscardi*

Carol A. Biscardi, PA-C, MS

**School of Graduate Medical Education**

**Department of Graduate Programs in Health Sciences**

Tel: 973.275.2076 • Fax: 973.275.2370 • TDD: 973.275.2169  
400 South Orange Avenue • South Orange, New Jersey 07079 • [gradmeded.shu.edu](http://gradmeded.shu.edu)



## APPENDIX B

## SURVEY

INSTRUCTIONS: Completion of this survey signifies your consent to participate in this research study. Please place a check mark next to your response:

1. Gender  Male  Female

2. Age (years)  22 – 24  
 25 – 35  
 36 – 45  
 46 – 55  
 > 55

3. What is your domestic status?  
 Single (never married)  
 Married  
 Divorced/Separated  
 Widowed  
 Live with partner

4. Number of children  
 0  
 1  
 2  
 3  
 4  
 5 or more

5. List the ages of your children


6. Year graduated from PA Program and degree/credential earned:

\_\_\_\_\_

7. Highest academic degree earned

\_\_\_\_\_

8. Are you currently working clinically as a PA?

Yes  
 No (survey complete)

9. Please indicate whether you primarily work full-time (32 or more hours per week) or part-time (20 hours or less per week) and the clinical area you primarily work (check all that apply)?

<input type="checkbox"/>	Family medicine	FT	PT
<input type="checkbox"/>	Pediatrics	FT	PT
<input type="checkbox"/>	Obstetrics/ Gynecology	FT	PT
<input type="checkbox"/>	Geriatrics	FT	PT
<input type="checkbox"/>	Emergency medicine	FT	PT
<input type="checkbox"/>	Internal medicine	FT	PT
<input type="checkbox"/>	Medical subspecialty	FT	PT
<input type="checkbox"/>	General surgery	FT	PT
<input type="checkbox"/>	Surgical subspecialty	FT	PT
<input type="checkbox"/>	Other (specify): _____		

10. Which of the following best describes your work hours at your primary place of employment?

- Regular office hours – 9 AM – 5 PM, Monday - Friday
- Daytime, 12 hour shifts, no weekends
- Daytime, 12 hour shifts, includes weekends
- Rotating (day/evening/night) 12 hour shifts
- 24 hour shifts, including weekends
- Regular (non-rotating nights), no weekends
- Regular (non-rotating nights), weekends
- Other (please explain \_\_\_\_\_)

11. How long have you been in your current position (primary place of employment)?

- < 1 year
- 1 to 2 years
- 3 to 5 years
- 6 to 10 years
- 11 to 15 years
- > 15 years

12. Does your employer offer a flexible work schedule policy (that is the ability to modify your work schedule)?

- Yes
- No

13. If you answered **yes** to Question 11, how often do you **need** to modify your schedule

- Frequently  
 Sometimes  
 Never

14. If you are **required** to be on-call (additional work hours on nights and weekends), you:

- Take call **from** home  
 Take call on site  
 I am not required to take call

15. How much time (%) per week do you **spend** at your primary place of employment performing the following tasks (should add to 100%)?

- Patient care (eg, patient **evaluation**, completion of charts)  
 Administrative duties, (e.g., ordering supplies, office management)  
 Supervisory (e.g., supervising other clinical and/or clerical staff)  
 Education (eg, preceptor to PA students or other **health care** professional students)

16. How many hours **per week** do you **spend**, on **average**, on the following family related tasks that are primarily **your responsibility** (**you** are responsible for completing the task more than 50% of the time)?

	0 hours	1 – 4 hrs	5 – 9 hrs	10 – 14 hrs	15 – 19 hrs	> 20 hrs
Childcare-related tasks						
Household (cleaning)						
Financial (paying bills)						
Laundry						
Grocery shopping						
Caring for adult dependent						
Preparing meals for the family						
Yard work						

17. How many hours per week, on average, does your spouse or partner spend on the following family related tasks (check all that apply)?

	0 hours	1 – 4 hrs	5 – 9 hrs	10 – 14 hrs	15 – 19 hrs	> 20 hrs
Childcare-related tasks						
Household (cleaning)						
Financial (paying bills)						
Laundry						
Grocery shopping						
Caring for adult dependent						
Preparing meals for the family						
Yard work						

18. If you utilized childcare, please indicate the location of childcare and the number of hours per week.

	1 – 4 hrs	5 – 9 hrs	10 – 14 hrs	15 – 19 hrs	> 20 hrs
Out of home daycare					
In home daycare					

19. Have you ever made the following PA career changes because of family responsibilities (check all that apply)?

- Never made change  
 Changed specialty  
 Decreased work hours  
 Increased work hours  
 Relocation to another state  
 Stopped working

20. If you made any the above changes, did it enable you to adequately address family responsibilities?

- Yes  
 No  
 Unsure

21. What is your individual annual income as a PA (combining full- and part-time employment)?

- <\$55,000
- \$55-64,000
- \$65-74,000
- \$75-84,000
- \$85-94,000
- \$95-104,000
- >\$105,000

22. What is your spouse's or partner's annual income (combining full- and part-time employment)? (If no spouse or partner, continue to next question.)

- <\$55,000
- \$55-64,000
- \$65-74,000
- \$75-84,000
- \$85-94,000
- \$95-104,000
- >\$105,000

23. A mentor is someone who is a trusted friend, counselor, teacher or advisor. Did you or do you now have a mentor (check all that apply)?

- while in PA school
- when employed
- never had a mentor

24. Did or does your mentor provide (check all that apply):

- Educational mentorship
- Strategies on how to balance family and professional responsibilities
- Professional development
- Other \_\_\_\_\_
- N/A

25. If you currently have or had a mentor, is/was your mentor:

- Male
- Female
- N/A

26. At your primary place of employment, have you ever experienced sexual harassment?

Yes  
 No

27. If you were in a relationship while you were enrolled in PA school, did you postpone your marriage until your education was completed?

Yes  
 No  
 Not applicable

28. Did you and your partner postpone having children until your PA education was completed?

Yes  
 No  
 Not applicable

For the Questions 29 - 34, please use the following scale:

Completely Agree	Somewhat Agree	Neutral	Somewhat Disagree	Completely Disagree
1	2	3	4	5

29. I am satisfied with my career as a Physician Assistant.

1                      2                      3                      4                      5

30. My family responsibilities interfere with my career as a PA.

1                      2                      3                      4                      5

31. My responsibilities at work interfere affect the quality of my personal life.

1                      2                      3                      4                      5

32. I am able to balance my personal and professional responsibilities.

1                      2                      3                      4                      5

33. I would recommend postponing childbearing until after PA school.

1                      2                      3                      4                      5

34. I would recommend postponing marriage until after PA school.

1                      2                      3                      4                      5

For Questions 35 - 39, please use the following scale:

Completely Satisfied	Somewhat Satisfied	Neutral	Somewhat Dissatisfied	Completely Dissatisfied
1	2	3	4	5

In your current position, are you satisfied with your:

35. Salary/compensation

1                      2                      3                      4                      5

36. Position/title

1                      2                      3                      4                      5

37. Job responsibilities

1                      2                      3                      4                      5

38. Physical working environment

1                      2                      3                      4                      5

39. Quality of personal life

1                      2                      3                      4                      5