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Rural Physician Assistant Job Satisfaction and Factors That Lead to Satisfaction

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Rural Physician Assistant Job Satisfaction
and Factors That Lead to Satisfaction

By

Jody Ann Giza

Thesis Submitted in Partial Fulfillment
Of the Requirements for the Degree
Of Master of Science
Physician Assistant Studies

Augsburg College

May 2004

MASTER OF SCIENCE IN PHYSICIAN ASSISTANT STUDIES
AUGSBURG COLLEGE
MINNEAPOLIS, MN

CERTIFICATE OF APPROVAL

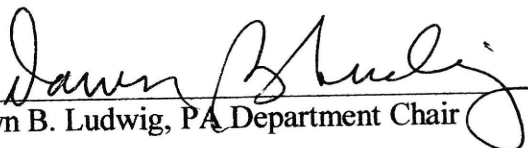
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Jody Ann Giza

Has been approved by the Thesis Review Committee for the Master of Science in
Physician Assistant Studies degree

Date of Oral Defense 3/5/04


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Dedication

I thank my husband and family for their love and support.

I thank my husband, Mark, for his patience and
commitment to our hopes and dreams as we begin our life together.

Abstract

Background

PAs play a critical role in serving underserved rural communities. It will be of benefit to the rural communities in Minnesota to identify what practice and community factors work to recruit and retain a high percentage of PAs to rural practice in Minnesota.

Methods

A written questionnaire was mailed to PAs working in rural Minnesota who are members of MAPA. The survey explored community and practice aspects that contribute to job satisfaction.

Results

Ninety-two percent of respondents stated they were satisfied to very satisfied with their overall practice. Overall practice satisfaction was most strongly positively correlated with acknowledgment from patients and community members, physicians and nurses. Eighty-nine percent of respondents stated they were satisfied to very satisfied with overall community.

Conclusions

Rural Minnesota PAs indicated that satisfaction with practice and satisfaction with community were important co-contributors, therefore, suggesting that efforts toward rural community development are worthwhile and are important in promoting success in retaining local health care personnel. This study identified rural Minnesota PA overall practice satisfaction was most strongly influenced by acknowledgement from patients. This evidence suggests the importance to educate patients, physicians, and other health care workers of the role, education, and experience of PAs.

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Chapter I: Introduction

Introduction

The Physician Assistant (PA) profession was created in the 1960's in response to anticipated physician shortages and trends towards specialization. A physician assistant is educated in the medical model to compliment physician training. A physician assistant is educated and trained to do many of the same functions as a physician, with physician supervision. Some of these skills include conducting physical exams, diagnosis and treatment of illnesses, ordering and interpreting tests, counseling on preventive health care, assisting in surgery, and in most states writing prescriptions (American Academy of Physician Assistants web site, aapa.org, October 14, 2002).

There continues to be areas in this country that are medically underserved. Some rural communities fall into the designation of medically underserved. PAs play a critical role in serving these communities. To succeed in diminishing the number of underserved communities, it is important to consider job satisfaction of those PAs who are currently working in underserved areas.

Addressing job satisfaction of PAs can serve an important function. Identifying and examining what factors lead to satisfying work and community environments can have positive influences on recruitment and retention of PAs, especially in rural practice. Through identification and examination of these factors, the potential exists to reduce the number of underserved communities in the United States by more PAs seeking to practice in rural areas.

Background to the Study

The Physician Assistant (PA) profession was created in the mid-1960's in response to an increasing shortage of physicians. Training programs for PAs were expected to produce graduates who would fill gaps left by the anticipated shortage of physicians in the United States in the 1970's and 1980's. These graduates were taught to perform many tasks previously done only by licensed doctors and could serve a useful role in many types of practices. The PA profession was established to bring quality primary health care to patients, particularly those in underserved urban and rural communities. PAs have been successful in meeting this goal. As the profession has expanded, PAs have moved into medical and surgical specialties and sub-specialties (Ballweg, Stolberg, Sullivan, 1994).

Increasing numbers of physicians are being trained in specialized areas of medicine. Because of this trend, health professional shortage areas remain common in the U.S. A health professional shortage area (HPSA) is a geographic area, population group, or medical facility that has been designated by the Secretary of the Department of Health and Human Services (DHHS) as having a shortage of health professionals (DHHS web site, October 14, 2002). The United States Department of Health and Human Services (DHHS) web site states that 53 million Americans live in communities without access to primary care. Consequently, the role of PAs in providing health services is becoming increasingly important, especially in rural and underserved areas (Muus, Geller, Williams, Ludtke, Knowlton, & Hart, 1998). PAs play a vital role in serving these patients and reducing this statistic, however, the individual PA must feel satisfaction within their practice and community if they intend to serve others.

Statement of the Problem

The Physician Assistant profession was created to fill the gaps created by physician shortages and physician specialization. It will be beneficial to determine what factors lead to satisfaction of PAs working in an underserved area, specifically rural, in attempt to recruit and retain PAs in rural practice. Census data from the American Academy of Physician Assistants (AAPA) revealed that in 2002, 23% of PAs were practicing in rural areas nationwide (American Academy of Physician Assistants web site, aapa.org, October 14, 2002). The Minnesota Academy of Physician Assistants (MAPA) census data from 2002 revealed 47% of Minnesota PAs were practicing in rural areas (Minnesota Academy of Physician Assistants web page, mapaonline.info, October 14, 2002). Minnesota currently has a higher percentage of PAs working rurally compared with nationwide statistics. It will be of benefit to the rural communities in Minnesota to identify what practice and community factors work to recruit and retain a high percentage of PAs to rural practice in Minnesota. Identifying these factors may help to ensure Minnesota does not approach nationwide rural PA statistics. Therefore, the topic of this study is to determine rural Minnesota Physician Assistant job satisfaction and the factors that lead to satisfaction.

Purpose of the Study

The specific objectives of this study were:

1. To determine if PAs working in rural practice are satisfied with their work and community.
2. To determine which practice characteristics lead/contribute to job satisfaction for rural PAs.

3. To determine which community characteristics lead/contribute to job satisfaction for rural PAs.
4. To determine if practice and community factors that affect rural Minnesota PAs are different compared to PAs in other states.

Definition of Terms

Community characteristics A distinguishing trait of the community environment. For the purposes of this study, the community characteristics being examined are size of community, social and recreational opportunities, worship opportunities, overall environment for children, quality of schools, degree of safety, and overall community satisfaction (Muus, et al, 1998).

Job satisfaction is defined for the purpose of this study as the extent to which employees like their work (Price & Mueller, 1986).

Medically underserved area Refers to communities without access to primary health care due to financial, geographic, cultural, language, and other barriers. Individuals living in these areas have little or no access to primary health care services because the demand for services exceeds the available resources, the services are located a great distance away, or are otherwise inaccessible (DHHS web site, September 22, 2002).

Physician Assistant A health care professional licensed to practice medicine with physician supervision. As part of the comprehensive PA responsibilities, PAs conduct physical exams, diagnose and treat illnesses, order and interpret tests, counsel on preventive health care, assist in surgery, and in most states can write prescriptions. Because of the close working relationship the PAs have with physicians, PAs are

educated in the medical model designed to complement physician training (American Academy of Physician Assistants web site, October 14, 2002).

Practice characteristics A distinguishing trait of the work environment. For the purposes of this study the practice characteristics being examined are relationship with supervising physician, quality of care provided by supervising physician, availability of supervising physician, salary from practice, degree of responsibility and autonomy, range of services allowed, level of stress associated with work, workload size, amount of time off, opportunity for continuing medical education, professional acknowledgment from supervising physician, acknowledgment from other physicians, acknowledgment from nurses, acknowledgment from patients, and acknowledgment from community members (Muus, et al, 1998).

Primary care The American Academy of Physician Assistants defines primary care as those areas of medicine that provide care in family medicine, internal medicine, pediatrics, and obstetrics and gynecology (American Academy of Physician Assistants web site, October 14, 2002).

Rural Census Bureau defines rural as “an area with a population less than 2000 residents” (Census Bureau web site, October 21, 2002). The Office of Management and Budget (OMB) defines non-metropolitan as “an area with a population less than 50,000 residents” (OMB web site, October 21, 2002). For the purpose of this study the researcher will define rural as the Office of Management and Budget-designated non-metropolitan areas and in addition, those areas greater than sixty miles distance from the Twin Cities metropolitan area and greater than twenty miles from the metropolitan areas of Duluth, Moorhead, St. Cloud, and Rochester.

Assumptions and Limitations

Assumptions.

The topic of rural physician assistant (PA) job satisfaction was of interest to the researcher because the researcher intends to practice in a rural setting upon graduation from the PA program. The researcher was drawn to the profession because the profession was created with the intention to serve the underserved, including rural areas. The researcher will not allow this personal bias to interfere with the study. The researcher will not alter the survey results in any form.

Limitations.

The main limitation of the study was only rural PAs in Minnesota were surveyed. This study may not be generalizable to rural PAs not working in Minnesota or to PAs working in metropolitan (urban or suburban) areas. Another limitation was only consenting members of Minnesota Academy of Physician Assistants (MAPA) were surveyed. It is not required of a PA working in Minnesota to be a member of MAPA. "Consenting" member refers to a member of MAPA who agrees to inclusion on a MAPA membership mailing list, which is available to individuals who request to purchase the list. Recall of distant past events was the final limitation of the study. Some of the survey questions pertained to initial importance of various factors when job searching. It is possible that a respondent may not recall the exact initial importance a given factor was in their job search.

Chapter II: Literature Review

Physician assistants are important resources for the delivery of health care services in rural areas. Census data from the American Academy of Physician Assistants (AAPA) reveals that the proportion of PAs in rural practice has decreased. The AAPA 2002 census data reports 23% of PAs are working in non-metropolitan practices; in 1996 28.5% of PAs were working in non-metropolitan practices (American Academy of Physician Assistants web site, October 14, 2002). These statistics show a trend in decreasing percentages of PAs working in rural practice nationwide, indicating the percentages of PAs working in urban and suburban areas (metropolitan) are increasing. Currently, in 2002, 47% of Minnesota Academy of Physician Assistant (MAPA) members are working in non-metropolitan practices (Table 1). These statistics represent the importance of evaluating issues that affect PAs. This study focused on factors affecting rural practice specifically: what attracts PAs to rural practice, why PAs stay in rural practice, and why they leave rural practice.

Table 2.1: Nationwide rural PA statistics

Year	% of PAs practicing in metropolitan areas	% of PAs practicing in non-metropolitan areas
1996	71.5	28.5
2002	77	23

Approximately 53 million people in the United States reside in communities without access to primary healthcare due to financial, geographic, cultural, language, and other barriers. Individuals living in these areas have little or no access to primary health care sources because the demand for services exceeds the available resources, the

services are located a great distance away, or are otherwise inaccessible (Department of Health and Human Services web site, September 22, 2002).

Job satisfaction

Studies of job satisfaction, or the extent to which employees like their work, have a long history beginning in the 1930s (Muus, et al, 1998). Diener and Diener (1996) found most people express positive satisfaction with their work. They state “just because people report positive levels of satisfaction with their work does not mean inevitably that the work is highly desirable” and “reports of positive satisfaction may say as much about people as about the target of satisfaction.”

Extensive research has been done in the area of job satisfaction. Braude (1975) and Dehn & Asprey (1995) found jobs that provided autonomy and freedom from close supervision to be highly satisfying. Baker et al. (1989) cited use of valued skills and abilities to indicate job satisfaction. With education, training, and experience people desire and expect more autonomy in their jobs as well as the freedom to use their valued skills and abilities. Good pay and benefits have been found to lead to increased job satisfaction (Baker, Oliver, Donahue, & Huckabee, 1989; Bogg & Cooper, 1995) and may lead the person to feel they and their efforts are appreciated. Job security positively correlates with job satisfaction (Braude, 1975; Meissner & Carey, 1994; Wilde, 1995) allowing the person to feel secure in their professional and financial future. Opportunity for promotions is an important factor in job satisfaction (Agho, Mueller & Price, 1993; Perry, 1978), rewarding the person for professional success and loyalty. Variety and interesting work have been associated with high job satisfaction (Braude, 1975) because through these factors, challenge is offered. Occupational prestige (Cassidy & Warren,

1991; Sundstrom & Sundstrom, 1986) leads to job satisfaction in that one feels pride for the chosen profession and effort to achieve prestige. A positive setting based on the employee's needs indicates job satisfaction (Furnham & Walsh, 1991; Holland, 1973) in that the setting leads to higher morale. Research specific to health professionals (including physicians, physician assistants, nurse practitioners, nurses, and paramedical personnel) indicates that satisfaction is influenced by practice characteristics (primary setting, medical specialty, and practice size), demographic characteristics (sex, age, educational level), and personal characteristics (work values, expectations) (Baker, et al, 1989).

Previous studies of PA job satisfaction have identified areas of satisfaction and dissatisfaction among practicing PAs. Factors that have been found to be highly related to job satisfaction include a supportive relationship with the supervising physician (Marvelle & Kraditor, 1999; Baker et al. 1989) and a perceived level of respect from other physicians (Marvelle and Kraditor, 1999; Baker et al. 1989; Perry, 1978) that contributes to the PA's knowledge, ability, and esteem. A perceived level of respect from non-physician coworkers correlates to job satisfaction (Marvelle & Kraditor, 1999; Baker, et al, 1989; Perry, 1978) and indicates professional knowledge and good working relationships. A perceived level of respect and acceptance from patients is an important indicator for job satisfaction (Larson, Hart, & Hummel, 1994; Marvelle & Kraditor, 1999; Baker et al. 1989) because it demonstrates the patient's expectations have been satisfied by the PA's ability to deliver quality medical care. Autonomy (Dehn & Asprey, 1995), challenging work (Holmes & Fasser, 1993; Marvelle & Kraditor, 1999; Krochalk, 1997), and job security (Holmes & Fasser, 1993; Marvelle & Kraditor, 1999) have been

found to be important in PA job satisfaction. The level of responsibility for care entrusted to the PA is an indicator for job satisfaction (Marvelle & Kraditor, 1999) and allowed the PA to feel their knowledge and effort made a difference in the patient's life.

Factors which have been found to be related to PA job dissatisfaction include work overload (Larson et al. 1994), long hours (Price 1993; Krochalk, 1997), and salary issues (Travers & Ellis, 1993; Baker, et al, 1989), all of which lead to feelings of being taken advantage of and underappreciation. Few opportunities for advancement are indicated in PA job dissatisfaction (Baker, et al, 1989; Krochalk, 1997) for failure to award loyalty and dedication. Underutilization (Huntington, 1986) and incompatibility with supervising physician or administrator was indicated in job dissatisfaction (Baker et al. 1989) because the PA was limited in fulfilling their professional potential. Poor access to continuing education leads to job dissatisfaction (Travers & Ellis, 1993) because the PA may not be allowed or encouraged to fulfill their responsibility and desire to pursue new information and techniques.

Vocational Choice Theory

Personal characteristics are an important aspect of job satisfaction. When considering person and environment, Furnham and Walsh (1990) stated:

The concept of an ideal or congruent fit between individuals and their work and home environments has been expressed in various areas of psychology. This need for congruence between a person's interests, preferences, and abilities and the factors inherent in the environment forms the basis for a theory of vocational choice proposed by Holland (1973) and continually updated that offers a measure of person environment (P-E) fit. Holland (1973, 1985) described the relationship

of (P-E) fit with stress disorders, low job satisfaction, and other occupational dependent variables. (p. 187-188)

The theory incorporates personality profiles and states that one can characterize people by their resemblance to a personality type and is a product of characteristic interactions among a variety of cultural and personal influences (Furnham & Walsh, 1990). A person learns at first to prefer some activities to others and later, these activities become strong interests that lead to specific competencies to be developed. It is at this time a person's interests and competencies create a particular disposition that leads him or her to perceive, think, and act in ways that are more appropriate to some occupations (and, possibly, environment) than others (Furnham & Walsh, 1990).

Furnham and Walsh (1990) explain the environments in which people live and work can also be characterized according to their resemblance to model environments corresponding to personality types. Different types have different interests, competencies, and dispositions, they surround themselves with people and situations congruent with their interests, capabilities, and outlook on the world, searching for work environments that will let them exercise their skills and abilities and express their personality (Furnham & Walsh, 1990). Mount & Muchinsky (1978) have suggested that some environments are more satisfying than others, regardless of the person's personality. Furnham and Koritsas (1990) hypothesize that some jobs are simply more desirable than others. Congruent environments provide job satisfaction because people are among others with similar tastes and values where they can perform tasks that they are able to do and enjoy (Furnham & Walsh, 1990).

Furnham and Walsh (1990) state:

In addition to the core idea of P-E fit, some secondary concepts are proposed that can be used to determine more efficiently the goodness of P-E fit. Holland (1973) suggested that within a person or environment, some pairs of types are more closely related than others and that the relationship within (which yields a measure of consistency) and between (which yields a measure of congruence) personality types or environments can be ordered. These degrees of relatedness or *consistency* are assumed to affect job satisfaction and general well-being. A second measure is *differentiation*. Some people and environments are more clearly defined than others; for example, a person or environment may be dominated by a single type (well-differentiated) or may resemble many types equally well (undifferentiated). The better the environment or person is differentiated, the more likely the person is to find a congruent job and the more likely he or she will be to have high job satisfaction and good mental health as a result. The third measure, *congruence*, refers to a person and job type that are very compatible. Incongruence occurs when a personality type lives or works in an environment that provides opportunities and rewards foreign to the person's preferences and abilities. Congruence is therefore the best measure of P-E fit as defined by French, Rodgers, and Cobb (1974) and Cooper (1983) (Furnham & Walsh, 1990).

Furnham and Walsh (1990) reported two correlational studies using English nurses and working adults that examined the relationship between the three measures of P-E fit as derived from Holland's (1973) theory and three dependent work-related

variables (absenteeism, frustration, and various demographic variables). Contrary to their predictions, Furnham and Walsh (1990) found absenteeism was positively correlated with congruence and frustration was moderately negatively correlated with congruence.

Consistency was significantly negatively correlated with stress, as predicted (Furnham & Walsh, 1990). Furnham and Walsh (1990) found the participants of their study were less frustrated if their personality and environments were matched well to their job. Furnham and Walsh (1990) unexpectedly found higher absenteeism with workers whose personalities and environments were well matched to their job; the researchers discussed social factors and cultural norms to address this finding.

Job Stress

Inconsistency between P-E fit, as proposed by Furnham and Walsh (1990), affects job satisfaction and well-being. Stress among health care providers has been implicated as a major cause of emotional withdrawal from patients, poor delivery of health care, and job turnover (Holmes & Fasser, 1993). Holmes and Fasser (1993) studied areas of stress for PAs. Caring for the emotional needs of patients, dealing with difficult patients, and feeling ultimately responsible for patient outcomes were patient factors found by Holmes and Fasser (1993) to lead to stress of the physician assistant. Feeling that opportunities for advancement on the job were poor, keeping up with new developments in order to maintain professional competence, and trying to meet society's expectations for high-quality medical care were professional and practice issues noted to lead to stress.

Patient care issues and stress related to the delivery of health care are shared concerns among health care professionals. Because of patient confidentiality and shared experiences, it is important and appropriate for health professionals to form support

groups to identify stress and discuss implications. Social events with co-workers also can serve to reduce stress. Many PAs use other PAs for support in patient care issues (Ballweg, Stolberg, and Sullivan, 1999). Rural PAs expressed low satisfaction concerning the number of other PAs in their community (Muus, Geller, Ludtke, Pan, Kassab, Luloff, and Hart, 1996).

Ballweg, Stolberg, and Sullivan (1999) identified formal professional issues as potential stressors for PAs. Medical practice acts in some states are still harshly restrictive of PA practice. Institutions that have not previously employed PAs may need help in adapting their credentialing processes for the effective utilization of PAs. Underutilization has been implicated in job dissatisfaction of PAs (Huntington, 1986).

Trying to meet society's expectations for high-quality medical care in a time of rapid change in the health care system is an important aspect in stress associated with health care delivery. Patient respect and acceptance of the PA's ability to deliver quality medical care demonstrates the patient's expectations have been satisfied. Respect and acceptance from patients was a factor in job satisfaction and stress (Larson, Hart, & Hummel, 1994; Marvelle & Krador, 1999; Baker et al. 1989).

Practice Setting

Physician assistants are employed in a variety of settings and communities. Studies comparing urban and rural PAs have explored the personal, professional, and financial factors and the impact these factors have on whether a PA chooses/desires to work in an urban setting or rural setting. In their study of rural and urban non-physician providers in Georgia, Strickland, Strickland, and Garretson (1998) found rural PAs were significantly older, had less education, and had been employed for more years as health

care providers than urban PAs. This study also concluded, compared to urban PAs, rural PAs were more likely to practice in clinic settings, treated more patients and lower proportions of private insurance patients, and received lower salaries during the past year. This study found the most frequently cited reasons for location preference were (in descending order) professional context, family and personal concerns, leisure and special interest activities, general preference, community dynamics, crime rates, and commuting conditions. Providers who preferred smaller communities mentioned community dynamics, including the “family feeling” of small towns, significantly more often than providers who preferred larger communities. Providers who preferred larger communities mentioned issues related to their profession, including opportunities for growth and a challenging work environment more often (Strickland, Strickland, & Garretson, 1998).

Strickland, Strickland, and Garretson (1998) discussed how these rural and urban patterns of provider and practice characteristics might impact health services and the recruitment and retention of rural providers. First, rural areas have significantly lower provider rates per 100,000 residents. Second, rural providers tend to have lower levels of education and possess fewer specialty credentials than urban providers (Strickland, Strickland, and Garretson, 1998). This educational disparity may impact the real or perceived quality of rural health care and create or exacerbate personnel shortages in rural areas. Third, they identified there were a higher percentage of female PAs in urban areas. When coupled with the fact that female PAs tend to prefer urban practice (Strickland, Strickland, and Garretson, 1998), specific strategies may need to be developed to recruit and retain female PAs in rural areas. Fourth, to the extent that lower

salaries for rural PAs cannot be explained by cost-of-living differences, income disparities may need to be addressed to recruit and retain rural PAs. Fifth, providers who preferred smaller communities were significantly more likely to mention the importance of community dynamics, while providers who preferred larger communities were significantly more likely to mention the professional context. This suggests that emphasizing the lifestyle benefits of smaller communities may be a beneficial recruitment strategy for providers who are considering rural areas and that documented differences in career opportunities in rural areas may need to be addressed (Strickland, Strickland, & Garretson, 1998).

Muus et al. (1996) conducted a nationwide study comparing urban and rural PAs and found no differences between urban and rural PA work weeks, PAs uniformly reported practicing approximately 40 hours per week. However, weekly on-call hours increased substantially as rurality increased. Rural PAs reported two to three times more call hours than those who practice in more densely populated areas. They also found primary care PAs in rural areas participated in a wider variety of activities in their practice, spent much more practice time away from the supervising physician, possessed a greater degree of practice autonomy, and had a significantly higher level of satisfaction with professional acknowledgement and respect from nurses, patients, and community residents than did urban PAs. Rural PAs were less satisfied than urban PAs with the number of other PAs in the community, the availability of the supervising physician, the level of work-related stress, and the amount of time off (Muus, et al, 1996).

Muus et al. (1996) found satisfaction with the relationship with the supervising physician and quality of care provided by the supervising physician was consistent

between urban and rural physician assistants. Satisfaction with salary, workload, degree of responsibility and autonomy, and range of services PAs were allowed to provide were also consistent between urban and rural PAs. They did not find discrepancies between urban and rural opportunities for continuing medical education (CME), and professional acknowledgment and respect from supervising physician, other physicians, and other PAs (Muus et al. 1996).

The study revealed rural-based PAs placed significantly more importance than urban PAs did on a considerable degree of autonomy, prescriptive authority, state with favorable reimbursement policies, and quality of public schools. Rural PAs assigned substantially less importance than urban PAs did to good opportunities for CME, proximity to family, comprehensive hospital facilities, access to quality laboratory services and other types of technology, presence of other PAs in the areas, salary, and comprehensive benefits. No meaningful differences were found between rural and urban PAs among issues of reputation and character of the supervising physician or fulfillment of loan obligations (Muus, et al, 1996).

Larson, Hart, and Hummel (1994) surveyed graduates of the MEDEX program and found that while the proportion of PAs in rural practice appears to be dropping, the comparison of rural and urban primary care PAs revealed very few significant differences between the two groups in terms of demographic characteristics or levels of satisfaction with their practices and communities. Similarities between rural and urban PAs were found in average salaries, in the average number of hours per week spent doing inpatient and outpatient care, and in many other aspects of practice.

Larson, Hart, and Hummel, (1994) found both rural and urban PAs indicated high levels of satisfaction with most aspects of their practice situations, except for levels of stress. More than half of rural and urban PAs expressed dissatisfaction with the level of stress in their respective practices. Rural primary care PAs in the Larson, Hart, and Hummel (1994) study expressed higher levels of dissatisfaction with professional acknowledgement and respect than did urban primary care PAs. These PAs expressed high levels of satisfaction with their relationships with, and respect for, their supervising physician. The authors of the study stated they did not anticipate this response and possible sources of this dissatisfaction included lack of acknowledgement from other health professionals such as nurses and administrators or difficulty in gaining acceptance as legitimate health care providers from patients. Written comments offered by many respondents suggested that more difficulties were experienced with patients than with other health professionals, but the issue was not explored systematically in the survey (Larson, Hart, Hummel, 1994).

Larson, Hart, and Hummel (1994) found large differences in the scope of medical practice conducted by rural versus urban primary care PAs. Rural PAs had a much broader scope of practice and participated to a greater extent in supervisory and administrative activities. Rural PAs also spent fewer hours than their urban counterparts working with their physician sponsors, suggesting a slightly greater degree of autonomy among rural PAs. Rural PAs, however, did discuss patients with physicians as often as urban PAs.

The difficulties of recruiting health professionals to rural areas make retention of current staff a priority. PAs who are satisfied with their rural practice are a major

marketing resource for recruitment into similar setting, and PAs who leave rural practice are likely to discourage peers from choosing those practice sites (Travers & Ellis, 1993). Travers and Ellis (1993) evaluated reasons PAs leave rural primary care practice and identified the following reasons PAs left rural practice: higher education, greater salary, practice settings without after-hours call, social settings that are not so isolated, MD/PA incompatibility, PA/administrator incompatibility, and to be closer to home (Travers & Ellis, 1993).

Summary

Addressing job satisfaction of PAs can serve an important function. Identifying and examining what factors lead to satisfying work and community environments can have positive influences on recruitment and retention of PAs, especially in rural practice.

The researcher will address person-environment fit in the context of how well the PA's values and desires of community and practice issues were satisfied relative to expectations and previous experiences. The researcher will inquire about other PAs in the rural community and surrounding communities in which the surveyed PA works or socializes with. The researcher will address prescriptive authority as an example of restrictive or less-restrictive policies affecting PAs and the previous use or current use of other PAs indicating ability and willingness to accommodate a PA's abilities and limitations. Utilization of skills, as an indicator of opportunity for the PA to fulfill professional goals and abilities, will also be evaluated in the survey. The practice qualities that will be addressed in the survey include degree of responsibility and autonomy, reputation and character of supervising physician, salary and benefits, access to quality hospital and lab facilities, and CME opportunities. Community qualities that

will be addressed in the study include proximity to family, small town environment, quality of public schools, social/recreational activities, place of worship, environment for children, and degree of community safety.

Minnesota currently has a higher percentage of PAs working rurally compared with nationwide statistics, however, the percentage of Minnesota residents living in rural areas is 30%, just above the median nationwide percentage of 27% living in rural areas (Census Bureau web site, census.gov, May 10, 2003). It will be of benefit to the rural communities in Minnesota to identify what practice and community factors work to recruit and retain a high percentage of PAs to rural practice in Minnesota. Identifying these factors may help to ensure Minnesota does not approach nationwide rural PA statistics. The practice and community characteristics identified as important to rural Minnesota PAs through this study will be compared to previous nationwide studies of rural PA satisfaction to determine if PAs in Minnesota receive and value different practice and community benefits and how the limitations of living and working in a rural area affect satisfaction.

Minnesota state law allows more autonomy to PAs than other states concerning scope of practice, prescribing/dispensing laws, and supervision requirements (American Academy of Physician Assistants web site, aapa.org, May 10, 2003). Therefore, these factors will likely increase Minnesota PA job satisfaction, despite if the PA is practicing in a metropolitan or non-metropolitan area.

The theory of vocational choice and one's preference of job setting, community, and environment are important aspects when considering expectations and therefore,

satisfaction. The study will explore expectations and satisfaction related to vocational choice and rural practice and community.

Through identification and examination of rural practice and community factors, the potential exists to reduce the number of underserved communities in Minnesota (and possibly throughout the United States) by more PAs seeking to practice in rural areas. Statistics represent the importance of evaluating issues that affect PAs, what attracts PAs to rural practice, why PAs stay in rural practice, and why they leave rural practice.

Chapter III: Methodology

Description of the Methodology

The study was a quantitative study that utilized descriptive and exploratory methodology. The purpose of this study was to further research knowledge of the topic of rural Physician Assistant (PA) job satisfaction. This study contributed to previous research and knowledge of national PA job satisfaction. In addition, this study was expanded to specifically evaluate job satisfaction of rural PAs in Minnesota by addressing practice and community characteristics. This study utilized exploratory methodology by asking questions about job satisfaction and factors that lead to satisfaction. This study sought new insight into the satisfaction of rural PAs in Minnesota. This study utilized descriptive methodology by attempting to portray an accurate profile of those PAs attracted to and working in rural Minnesota. The researcher's desire was to describe what aspects of practice and community will attract PAs who may not have previously considered rural practice.

Research Design

This study utilized a survey strategy. The written questionnaire was mailed to Physician Assistants (PA) working in rural Minnesota who are consenting members of the professional organization, Minnesota Academy of Physician Assistants (MAPA). The PA was instructed to complete the survey and return it to the researcher in the enclosed, return-addressed, postage paid envelope. The survey addressed job satisfaction of PAs working in rural practice in Minnesota and factors that lead to satisfaction. The survey explored community aspects and practice aspects that contribute to job

satisfaction (Augsburg College Institutional Review Board Approval Number 2003-2-2, Appendix A).

This study was a replicate of a study performed by Muus et al. Muus and colleagues worked in a collaborative effort involving researchers from University of North Dakota, WWAMI (Washington-Wyoming-Alaska-Montana-Idaho) Rural Health Research Centers, and the American Academy of Physician Assistants in a nationwide PA survey in late 1993 (Muus et al, 1998). Muus et al. (1998) conducted the survey to determine what attracted PAs to rural settings and what they found satisfying about their work and community. The researcher chose this study to replicate because the factors addressed in the study are of interest to the researcher and of importance to the underserved rural population in Minnesota. Minnesota currently has a higher percentage of PAs working rurally compared with nationwide statistics. It is of benefit to the rural communities in Minnesota to identify what practice and community factors work to recruit and retain a high percentage of PAs to rural practice in Minnesota. The identification of these factors may help to ensure Minnesota does not approach nationwide rural PA statistics.

Sample and Population

The written survey was mailed to Physician Assistants (PAs) working in rural Minnesota practices. The rural PAs were identified using a membership mailing list provided by the Minnesota Academy of Physician Assistants (MAPA).

There are 783 PAs registered to work in the state of Minnesota (Jeanne Hoffman, Board of Medical Practice, State of Minnesota, personal communication March 17, 2003). Of these, 407 are members of MAPA. Membership in MAPA is not mandatory

of a PA working in Minnesota; however, the researcher expected MAPA members working in rural areas to be representative of all PAs working in rural areas in Minnesota because of similar work environments, social and community environments, and clinical and educational requirements.

MAPA is a constituent chapter of the American Academy of Physician Assistants (AAPA), the professional organization that represents and serves physician assistants nationally. MAPA is the professional organization that represents and serves physician assistants in Minnesota. The AAPA and MAPA share values and missions. A mission of both of these organizations is to “support the professional and personal development of PAs” (AAPA and MAPA web sites, October 14, 2002). Awareness of job satisfaction in rural Minnesota can lead to improved support of the PA, both professionally and personally. In addition, MAPA states on their web site “supporting the growth of PA training programs in Minnesota is an issue identified to further the development of the profession in Minnesota” (October, 2002). Job satisfaction of rural PAs is an important topic because rural areas remain to be a generally underserved population in Minnesota. Identification and exploration of factors that lead to satisfaction may serve to bring more providers to these areas, thereby addressing MAPA’s issue to improve access to health care for all Minnesotans (MAPA web site October 14, 2002).

Bev Kimball, President of MAPA, describes the process of obtaining the MAPA membership mailing list (Site Approval Letter, Appendix B; MAPA Mailing List Rental Agreement For Student Members of MAPA, Appendix C):

Student members of MAPA may purchase one set of mailing labels for current consenting MAPA members, each year, for the cost of administrative time. This

does not include the electronic copy of the membership list. The member must submit a signed mailing list rental agreement form and provide information about the purpose of the mailing. "Consenting" member means that when a person joins/renews as a MAPA member they have the option of designating that they do not want their name included in the list for sale. (B. Kimball, personal communication, October 11, 2002).

Minnesota Academy of Physician Assistants has 407 members. Of these members, ninety-four work in rural Minnesota practices. The researcher mailed a total of ninety-four surveys. A mailed survey typically has a thirty percent return rate. The researcher mailed a total of ninety-four surveys and expects twenty-eight surveys returned. For the purposes of external validity, the researcher must have acquired a minimum of twenty respondents. A minimum of eighty-five surveys must be mailed in an attempt to achieve this return rate.

Instrumentation

The Rural Physician Assistant Job Satisfaction Survey was developed by Muus et al. (1998) to measure satisfaction (Rural Physician Assistant Job Satisfaction Survey, Appendix D). A scale to measure satisfaction was created by Muus et al. using information from previous studies about satisfaction among PAs and other closely related health providers (e.g., NPs, RNs, and physicians). In addition, findings from studies about general job satisfaction and existing theoretical models were used to construct the scale and select independent variables (Muus et al, 1998). Questions were omitted from the Muus et al. survey that did not fit within the researcher's stated objectives and purpose. These questions were also deleted to attempt to abbreviate the survey to

encourage a higher return rate (revised Rural Physician Assistant Job Satisfaction Survey, Appendix E).

Community satisfaction was measured using a seven-item scale to address the level of satisfaction with the following: size of community, social and recreational activities, worship opportunities, overall environment for children, quality of schools, degree of safety, and overall community satisfaction (Muus et al. 1998). The items comprising the measure were scored from 1 (not satisfied) to 5 (very satisfied).

Job satisfaction was measured with the following job aspects: relationship with supervising physician, quality of care provided by supervising physician, availability of supervising physician, salary from practice, degree of responsibility and autonomy, range of services allowed, level of stress associated with work, workload size, amount of time off, opportunity for continuing medical education, professional acknowledgement from supervising physician, acknowledgment from other physicians, acknowledgment from nurses, acknowledgment from patients, and acknowledgment from community members (Muus et al, 1998). The items comprising the measure were scored from 1 (not satisfied) to 5 (very satisfied).

Muus et al performed reliability studies and found the survey questions to be reliable. Community satisfaction was measured using a seven-item scale ($\alpha=0.83$) that was used in a previous study on nursing satisfaction (Dunkin, et al, 1994). The job satisfaction measure had adequate internal consistency based on its 0.85 Cronbach's alpha coefficient. Cronbach's alpha is a commonly used test for determining the reliability of a scale, the repeatability or stability of an instrument (Norusis, 1993) (Muus, et al, 1998). Cronbach's alpha measures how well a set of variables measures a single

unidimensional latent construct. A reliability coefficient of .80 or higher is considered acceptable in most Social Science applications (University of California-Los Angeles SPSS FAQ web site, March 15, 2003).

Data Collection and Analysis

The written survey was mailed to Physician Assistants working in rural Minnesota and were identified using the Minnesota Academy of Physician Assistants mailing list. The participants were instructed to respond by sending the completed survey via the return-addressed, postage-paid envelope. The surveys were numbered and the researcher mailed a reminder post card two weeks after the initial mailing to those who had not returned the survey in an attempt to obtain a higher return rate.

The researcher used a quantitative data analysis package. The researcher used the Likert scale developed by Muus, et al, (1998) to quantitatively analyze the information.

The researcher looked for trends between respondents and similarities and differences as seen in previous studies of physician assistant job satisfaction and factors that lead to satisfaction. The researcher first performed descriptive analysis and statistics for percentages of responses then performed further bi- or multi-variable analysis based on trends. The results of this study were compared and contrasted to the Muus et al. study.

Chapter IV: Results

Demographics

A total of 95 surveys were mailed to physician assistants identified as working in rural Minnesota by the Minnesota Academy of Physician Assistants membership. Sixty-two percent (n=59) of the rural physician assistants responded to the survey. Two surveys were returned incomplete and therefore were not included in the data set. A total of 57 surveys were included in the data set. Of the respondents thirty-six were female and twenty were male, one respondent did not fill in the gender question.

TABLE 4.1 Age distribution of rural PA respondents

Age in Years	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	>59
n	0	3	14	5	5	10	12	7	1

Seven respondents did not spend any time as a student training at a rural location. Range of months spent training at a rural location by all other respondents was 1 to 48 months, average 9.1 months. There was no correlation between time spent as a student at a rural location and practice (-.011) and community (.050) satisfaction.

Forty respondents work in family practice (one of these respondents marked both family practice and emergency medicine), two work in general internal medicine, one in general surgery, and six in subspecialties of surgery (five of these responded orthopedic surgery). Eight respondents work in “other” areas not listed by the surveyor and written in by these respondents as: psychiatry, urgent care, orthopedics, and geriatrics.

Fifty-six respondents answered “yes” to current certification; one respondent left the question blank. First year of certification ranged from 1975 to 2002, with a mean of 1993. Total years practicing as a PA ranged from 1 to 28 years, with an average number of years practicing as a PA of 10. All respondents are currently practicing as a PA, fifty-

three are practicing full-time (32 or more hours per week) and four are practicing part-time (18, 25, 28, 28 hours per week).

Respondents working full-time worked an average (excluding call) of 40.3 hours per week, with a range of 32 to 70 hours. On call hours ranged from 0 to 100 per week with an average of 30.9 hours. Thirty-four respondents do not work on-call. One respondent works 100 hours per week on call, excluding this one response; the average call is 27.7 hours per week of those that do work call.

Of those respondents working full time the average number of out patient visits was 76.8 per week. Thirty-one respondents did not have inpatient responsibilities. Of those with inpatient responsibilities, the average number of inpatient visits per week was 12.0, with a range of 2 to 50 visits. The highest number of inpatient visits was by those practicing in orthopedic specialty surgery, psychiatry, general surgery, and geriatrics.

The respondents interacted with an average of 1.6 other PAs per week, with a range of 0 to 5. An average of 2.5 PAs are employed at the respondent's location (including the respondent) with a range of 1 to 13. An average of 11.5 MDs were employed at the respondent's location with a range of 1 to 78.

Fifty respondents practice in the same location as their supervising MD (SMD). Two respondents practice in the same town but different location as their SMD. One PA works fewer than 10 miles from location of SMD; one respondent works 10-20 miles from SMD. Two respondents work 20-30 miles from SMD and one PA works greater than 30 miles from SMD's location.

Forty-seven respondents lived in a town less than 25,000 population at the age of twelve, with thirty-eight of those less than 5000 population. Ten respondents lived in a city with a population greater than 25,000 at age twelve. Eighty-two percent of

respondents' spouses lived in a town with less than 25,000 population at age twelve with seventy-five percent of those living in a town with less than 5000 residents at age twelve. Four respondents are currently living in a town greater than 25,000, with remaining respondents currently living in a town with less than 25,000 population. Five respondents had not lived in a city with less than 25,000 population before becoming a PA; of those four are now living in a town with less than 10,000 residents (Table 2).

TABLE 4.2 Population of towns of previous and current residency

Population	<2500	2500-5000	5000-10,000	10,000-25,000	25,000-50,000	50,000-100,000	>100,000
At age 12	n=32	6	4	5	3	2	4
Spouse at age 12	23	7	6	4	3	3	4
Smallest ever	38	7	4	3	1	1	1
Current residency	20	13	8	12	2	2	0

Practice Satisfaction

Practice satisfaction was addressed in the survey by asking respondents to rate their level of satisfaction with a number of factors thought to relate to practice satisfaction. Job satisfaction was measured with the following job aspects: relationship with supervising physician, quality of care provided by supervising physician, availability of supervising physician, salary from practice, and degree of responsibility and autonomy. Range of services allowed, level of stress associated with work, workload size, amount of time off, and opportunity for continuing medical education were also measured. Professional acknowledgement from supervising physician, acknowledgment from other physicians, acknowledgment from nurses, acknowledgement from patients, and acknowledgement from community members was also used to measure practice

satisfaction. The items comprising the measure were scored from 1 (not satisfied) to 5 (very satisfied).

Ninety-two percent of respondents stated they were satisfied to very satisfied with their overall practice. Overall practice satisfaction was positively correlated based on Pearson correlation with acknowledgment from patients (.822**) and community members (.810**), other physicians (.755**), supervising physician (.728**), and nurses (.711**). Positive correlation means for the purpose of this study that as satisfaction with individual practice factors increases, overall practice satisfaction increases. Practice satisfaction was also positively correlated with satisfaction with salary (.710**), relationship with SMD (.660**), quality of care provided by (.553**) and availability (.515**) of SMD. Satisfaction with level of stress (.481**), responsibility and autonomy (.436**), range of services allowed to provide (.350*) and acknowledgement from other PAs (.305*) was also positively correlated with overall practice satisfaction. Satisfaction with number of other PAs in town (.146), access to quality lab and technology (.143), and availability of quality continuing medical education opportunities (.054) was not correlated with overall practice satisfaction. Correlations between overall practice satisfaction and practice characteristics are reported in Table 3.

TABLE 4.3 Satisfaction with practice characteristics and overall practice

	Relationship with SMD	Quality care by SMD	Availability of SMD	Number of other PAs in town	Salary	Autonomy	Range of services	Stress level	Quality lab/tech	Quality CME
Overall Practice Satisfaction	.660**	.553**	.515**	.146	.710**	.436**	.350*	.481**	.143	.054

	Acknowledgement from:	SMD	Other MDs	Other PAs	Nurses	Patients	Community members
Overall Practice Satisfaction		.728**	.755**	.305*	.711**	.822**	.810**

*p<.05 **p<.01

Community Satisfaction

Community satisfaction was measured using a seven-item scale to address the level of satisfaction with the following: size of community, social and recreational activities, worship opportunities, overall environment for children, quality of schools, degree of safety, and overall community satisfaction. The items comprising the measure were scored from 1 (not satisfied) to 5 (very satisfied).

Eighty-nine percent of respondents stated they were satisfied to very satisfied with overall community. Overall community satisfaction was positively correlated with satisfaction with size of town (.744**), quality of schools (.685**), social/recreational activities (.607**), degree of safety (.582**), environment for children (.537**), and community member's acceptance of spouse (.474**). Satisfaction with places of worship (.252) was not correlated with overall community satisfaction. Correlations between community characteristics are reported in Table 4.

TABLE 4.4 Satisfaction with community characteristics and overall community

Satisfaction with:	Overall community satisfaction
Size of town	.744**
Social/rec activities	.607**
Place of worship	.252
Environment for children	.537**
Town's acceptance of spouse	.474**
Quality of schools	.685**
Degree of safety	.582**

* p<.05 ** p<.01

Interaction of Practice and Community Satisfaction

Individual factors comprising community satisfaction were found to be correlated to overall practice satisfaction. Satisfaction with size of town (.450**), social and recreational activities (.485**), environment for children (.354**), quality schools (.421**), and degree of safety (.475**) were individual community characteristics positively correlated with practice satisfaction (Table 5). Positive correlation means for the purpose of this study that as satisfaction with community characteristics increases, overall practice satisfaction increases.

TABLE 4.5 Correlation of practice satisfaction and community characteristics

Satisfaction with:	Overall Practice
Size of town	.450**
Social & recreational activities	.485**
Environment for children	.354**
Quality of schools	.421**
Degree of safety	.475**
Overall community satisfaction	.674**

* p<.05 ** p<.01

Overall community satisfaction was positively correlated to overall practice satisfaction (.674**). Satisfaction with relationship with supervising MD (SMD) (.400**), quality of care provided by SMD (.346**), and availability of SMD (.443**) were positively correlated to community satisfaction. Satisfaction with number of other PAs in town (.285*), salary (.327*), services allowed to provide (.326*), and work-related stress (.682**) was positively correlated with community satisfaction. Acknowledgement from SMD (.518**), other physicians (.503**), nurses (.476**), patients (.381**), and community members (.537**) were also positively correlated with overall community satisfaction (Table 6).

TABLE 4.6 Correlation of community satisfaction and practice characteristics

Satisfaction with:	Overall Community
Relationship with SMD	.400**
Quality of care by SMD	.346**
Availability of SMD	.443**
Number of other PAs in town	.285*
Salary	.327*
Services allowed to provide	.326*
Work-related stress	.682**
Acknowledgement by: SMD	.518**
Other physicians	.503**
Nurses	.476**
Patients	.381**
Community members	.537**
Overall practice	.674**

* p<.05 ** p<.01

Initial Importance of Practice and Community Factors and Current Satisfaction

A correlation study of initial importance of practice and community factors with current satisfaction revealed the following: those who felt a small town environment was important in selecting their present location to practice medicine are satisfied with the size of the town (.437**), the social and recreational activities (.299*), environment for children (.482**), quality of schools (.375**), overall community (.416**), relationship with SMD (.261*), quality of care by SMD (.350**), salary (.360**), degree of autonomy (.277*), and work-related stress (.283*). Satisfaction with acknowledgement by SMD (.417**), other physicians (.365**), nurses (.402**), patients (.436**), and community members(.479**) were also correlated to those valuing a small town environment (Table 7).

TABLE 4.7 Initial importance of small town environment and satisfaction with practice and community factors

Satisfaction with:	Initial Importance of Small Town Environment
Size town	.437**
Social and recreational activities	.299*
Environment for children	.482**
Quality of schools	.375**
Overall community satisfaction	.416**
Relationship with SMD	.261*
Quality of care by SMD	.350**
Salary	.360**
Degree of autonomy	.277*
Stress	.283*
Acknowledgment by: SMD	.417**
Other physicians	.365**
Nurses	.402**
Patients	.436**
Community members	.479**
Overall Practice	.422**

* p<.05 ** p<.01

Rural Primary Care Practice Satisfaction and Specialty Practice Satisfaction

A one-way ANOVA was performed to determine differences between primary care and specialty PAs level of satisfaction (Table 8). PAs working in Family Practice and General Internal Medicine were combined to form the category "Primary Care." The "Specialty" category was comprised of Ob/Gyn, general pediatrics, subspecialty of pediatrics, general surgery, subspecialty of surgery, emergency medicine, industrial occupational medicine, and "other," reported as orthopedics, urgent care, psychiatry, and geriatrics. As demonstrated in Table 8, those PAs working in primary care were more satisfied than PAs in specialty practice in the areas of relationship with SMD, quality of care provided by SMD, number of other PAs in town, salary, degree of responsibility/autonomy, range of services allowed to provide, stress associated with work, access to quality lab and technology, number of quality CME opportunities, and professional acknowledgement and respect from SMD, other physicians, other PAs, nurses, patients, and community members. PAs working in primary care were more satisfied with their overall practice than those PAs working in specialty areas of medicine. Specialty PAs were more satisfied with availability of SMD than PAs working in primary care (Table 8).

TABLE 4.8 Practice satisfaction of primary care vs. specialty PAs

Satisfaction with:	Mean	SD	95% Confidence Interval for Mean	
			Lower Bound	Upper Bound
Relationship with SMD				
Primary Care	4.3333	0.78606	4.0884	4.5783
Specialty	4.2000	1.01419	3.6384	4.7616
Quality of care by SMD				
Primary Care	4.5714	0.66783	4.03633	4.7795
Specialty	4.2667	1.03280	3.6947	4.8386
Availability of SMD				
Primary Care	4.4524	0.80251	4.2023	4.7025
Specialty	4.5333	0.74322	4.1217	4.9449
Number of other PAs				
Primary Care	3.8333	1.16696	3.4697	4.1970
Specialty	3.3333	1.17514	2.6826	3.9841
Salary				
Primary Care	3.8780	0.92723	3.5854	4.1707
Specialty	3.8000	1.26491	3.0995	4.5005
Degree of autonomy				
Primary Care	4.3810	0.76357	4.1430	4.6189
Specialty	4.1333	0.63994	3.7789	4.4877
Range of services				
Primary Care	4.3571	0.82111	4.1013	4.6130
Specialty	4.1333	0.83381	3.6716	4.5951
Stress				
Primary Care	3.8571	0.75131	3.6230	4.0913
Specialty	3.5333	1.12546	2.9101	4.1566
Quality lab/tech				
Primary Care	4.2143	0.89812	3.9344	4.4942
Specialty	3.6667	0.81650	3.2145	4.1188
Quality CME				
Primary Care	3.9286	0.97262	3.6255	4.2317
Specialty	3.2143	1.12171	2.5666	3.8619
Respect from:				
SMD				
Primary Care	4.5476	0.59274	4.3629	4.7323
Specialty	4.4000	1.05560	3.8154	4.9846
Other MDs				
Primary Care	4.1429	0.84309	3.8801	4.4056
Specialty	3.9333	1.09978	3.3243	4.5424
Other PAs				
Primary Care	4.5476	0.59274	4.3629	4.7323
Specialty	4.3571	0.63332	3.9915	4.7228
Nurses				
Primary Care	4.5952	0.58683	4.4124	4.7781
Specialty	4.4000	0.63246	4.0498	4.7502
Patients				
Primary Care	4.6190	0.53885	4.4511	4.7870
Specialty	4.4667	1.06010	3.8796	5.0537
Community members				
Primary Care	4.5714	0.54740	4.4008	4.7420
Specialty	4.3333	1.04654	3.7538	4.9129
Overall Practice				
Primary Care	4.4444	0.65222	4.2238	4.6651
Specialty	4.2308	1.09193	3.5709	4.8906

Chapter V: Discussion

Implications and Recommendations

Results indicate that PAs in rural Minnesota tend to be satisfied with their practice and community. This is consistent with findings from previous studies on practice satisfaction among PAs (Muus et al., 1998; Muus et al., 1996; Baker et al., 1989; Perry, 1978) and workers in general (Diener & Diener, 1996).

Acknowledgement from patients is the strongest predictor of all other characteristics of practice satisfaction. Acknowledgement from community members, other physicians, supervising MD (SMD), and nurses are also strongly correlated with practice satisfaction. These findings are consistent with previous studies of PAs by Cassidy and Warren (1991), Sundstrom and Sundstrom (1986), Marvelle and Kraditor (1999), Baker et al. (1989), and Perry (1978). Cassidy and Warren (1991) and Sundstrom and Sundstrom (1986) found occupational prestige to be an important factor leading to job satisfaction. Occupational prestige as indicated by acknowledgment from physicians, nurses, patients, and community members was found in the current study to be the most important factors leading to overall job satisfaction for PAs in rural Minnesota. Larson, Hart, and Hummel (1994) found in their study of MEDEX graduates working in rural practice that many expressed a high level of dissatisfaction with professional acknowledgement, respect, and acceptance from patients. On the contrary, in this study of rural Minnesota PAs, satisfaction with acknowledgment and respect was high among PAs. The evidence provided by this and other studies suggests the importance of the PA profession to educate patients, physicians, and other health care workers of the role,

education, and experience of the PA. This education effort can also be enhanced by facilities that employ PAs such as clinics, hospitals, and skilled nursing facilities.

Satisfaction with salary is also highly correlated with overall job satisfaction by rural Minnesota PAs. Male PAs are more satisfied with their salaries than female PAs in rural Minnesota. Travers and Ellis (1993) and Baker et al. (1989) found salary to be a factor of dissatisfaction. Travers and Ellis (1993) studied why PAs left rural practice in Maine, and Baker et al. (1989) surveyed PAs in the Midwest. These studies suggest the PAs surveyed were dissatisfied. The methods to assess the conclusion of dissatisfaction with salary in the Travers and Ellis (1993) and Baker et al. (1989) studies would be useful to ascertain true discrepancies in level of satisfaction/dissatisfaction between the populations studied. Good pay and benefits have been found to be important in job satisfaction by Baker, Oliver, Donahue, and Huckabee (1989) and Bogg and Cooper (1995). The rural PAs in Minnesota in the current study are satisfied with their salary. A study by Strickland, Strickland, and Garretson (1998) found salary differences between rural and urban PAs could not be explained by cost of living differences. However, Larson, Hart and Hummel (1994) found no difference in salaries taking into account cost of living differences. The current study did not ask specific personal salary. This information would be helpful to address male and female levels of satisfaction with salary in Minnesota. This information would also help to decipher if there are salary differences between PAs in rural Minnesota and PAs in other areas of rural America taking into account cost of living and education differences as well as responsibility, experience, number of hours seeing patients, and on-call time.

Characteristics of SMD are also indicative of job satisfaction. Respondents valued their relationship and acknowledgement by SMD as well as quality of care and availability of SMD. These supportive characteristics of the SMD may encourage a supportive and mutually respectful relationship and environment, allowing the PA to fulfill professional goals. A supportive and respectful relationship with SMD can also serve by example to encourage good working relationships between the PA and other physicians, nurses, and health care workers. Respect from the SMD will also likely foster respect from patients and community members. Baker et al. (1989) found incompatibility with SMD to be an important factor in PA job dissatisfaction.

Satisfaction with work-related stress was positively correlated to satisfaction with relationship with SMD and availability of SMD. This may reflect the dependent nature of the PA profession through good working relationships allowing the PA to discuss patients with the SMD who has had more education and training. Rural Minnesota PAs indicate their overall practice satisfaction is correlated with satisfaction with work-related stress. Holmes and Fasser (1993) studied stress among PAs. They found high stress levels to be implicated as a major cause of emotional withdrawal from patients, poor delivery of health care, and job turnover. Larson, Hart, and Hummel (1994) found in their survey of MEDEX graduates that more than half of rural PAs were dissatisfied with their level of stress. Only three of the respondents in the current study were dissatisfied with work-related stress. It is likely if the PA has what they consider to be a tolerable and acceptable level of stress, that the PA will be better able to deal with emotional needs of patients and dealing with difficult patients. A PA who does not feel excessive amounts

of work-related stress will be better prepared to deal with the burden of responsibility for patient outcomes and society's expectations for high quality medical care. Satisfaction with range of services allowed to provide and salary is correlated to an acceptable stress level, therefore, indicating PAs feel they are adequately compensated for their knowledge and responsibility of patient care.

Rural Minnesota PAs do not associate number of other PAs in town to overall job satisfaction. Muus et al (1996) found rural PAs to express low satisfaction concerning the number of other PAs in their community. The researcher expected a stronger correlation between these factors because of the unique benefits and limitations to the profession. Ballweg, Stolberg, and Sullivan (1999) proposed many PAs use other PAs for support in patient care issues and to socialize with, thereby theoretically reducing work-related stress. It is possible that the rural Minnesota PAs receive professional support from well-functioning relationships with SMD and other health care providers. It is also possible these rural PAs communicate with other PAs professionally that are not employed by the same practice. It is possible rural PAs in Minnesota have formed personal networks through education and professional affiliations with other PAs.

PAs who work in Minnesota enjoy prescribing laws that are among the best in the country (American Academy of Physician Assistants web site, aapa.org, May 10, 2003). State laws that are restrictive of PA practice have been implicated in contributing to stress (Ballweg, Stolberg, and Sullivan, 1999). Because of PA-friendly laws, PAs who work in Minnesota are less likely to find this issue threatening to their practice satisfaction. Respondents did not state prescribing authority to be highly important in

initial importance while job searching. The researcher believes this is a very important issue but not a significant standout issue in Minnesota, rural or urban, because prescribing authority is the same throughout the state of Minnesota and between facilities.

Satisfaction with autonomy and scope of practice (range of services allowed to provide) by the responding PA was addressed to evaluate utilization of skills. Dehn and Asprey (1995), Baker et al. (1989), and Braude (1975) found jobs that allowed autonomy, use of valued skills, and variety and interesting work to lead to high job satisfaction, respectively. Marvelle and Kraditor (1999) found the level of responsibility for patient care entrusted to the PA to be an indicator of job satisfaction. Huntington (1986) found underutilization to be associated with PA job dissatisfaction. Overall practice satisfaction was positively correlated by Minnesota rural PAs to satisfaction with autonomy and range of services allowed to provide. Satisfaction with degree of autonomy was highly correlated with satisfaction with range of services allowed to provide. These findings suggest rural Minnesota PAs strive for opportunities to utilize and expand their knowledge and skills for patient care and the patient's benefit.

Satisfaction with quality lab/technology and access to quality CME opportunities was not associated with overall practice satisfaction among rural Minnesota PAs. In a study performed by Muus et al. (1996) urban and rural PAs did not indicate a discrepancy between urban and rural PA satisfaction with availability of quality CME. The researcher found this to be an interesting finding of the current study because the researcher associated these qualities to facilities that were committed to developing a more fully

functioning facility and one that would be more aggressive in satisfying the needs of providers and patients.

Eighty-nine percent of respondents stated they were satisfied to very satisfied overall with their community. Overall community satisfaction was most strongly correlated with the respondent's level of satisfaction with size of the town in which they currently reside. It did not seem satisfaction with current community could be predicted by size of current town of residence. This lack of association recognizes individual preferences and values. Satisfaction with quality of schools, social/recreational activities, degree of safety, and environment for children and town's acceptance of spouse were all correlated with overall community satisfaction. Place of worship was the only community satisfaction factor that was not indicated towards satisfaction with community. There was no correlation between time spent training at a rural site as a student and current community satisfaction, this lack of association may indicate an individual's ability to adjust to advantages and disadvantages of rural life.

Strickland, Strickland, and Garretson (1998) found providers who preferred smaller communities were significantly more likely to mention the importance of community dynamics. They suggested that emphasizing the lifestyle benefits of smaller communities may be a beneficial recruitment strategy for providers who are considering rural areas and that documented differences in career opportunities in rural areas may need to be addressed. Acknowledgement and respect from physicians, nurses, patients and community members and satisfaction with salary and autonomy are career benefits of rural Minnesota practice as demonstrated by this study.

The interaction of practice and community factors are important to overall satisfaction of rural Minnesota PAs as demonstrated in Tables 5 and 6 of Chapter IV. Satisfaction with social and recreational activities followed by degree of safety was the most important community factors that contributed to overall practice satisfaction.

Satisfaction with work-related stress was the single most important practice factor for overall community satisfaction. The interaction of these factors may represent the importance of preserving the expectations of rural life, that is, a safe and low stress environment that allows people to enjoy their surroundings. This is further supported by respondents stating that a small town community was important in their job search and satisfaction with their environment is associated with overall practice satisfaction. Those respondents who felt the small town environment to be important initially are now satisfied with their SMD, including relationship, quality of care, and acknowledgment by SMD. The rural PAs who felt small town environment to be important are also satisfied with salary, degree of autonomy, level of stress and acknowledgment by other physicians, nurses, patients, and community members. These findings support Strickland, Strickland, and Garretson's (1998) conclusion to emphasize lifestyle benefits of small communities and the many positive characteristics of rural practice.

Practice satisfaction was compared between rural primary care PAs and rural specialty practice PAs. While both types of PAs are generally overall satisfied with areas of practice, primary care PAs are more satisfied with relationship with SMD, quality of care provided by SMD, number of other PAs in town, salary, degree of responsibility/autonomy, range of services allowed to provide, stress associated with

work, access to quality lab and technology, number of quality CME opportunities, and professional acknowledgement and respect from SMD, other physicians, other PAs, nurses, patients, and community members. PAs working in primary care were more satisfied with their overall practice than those PAs working in specialty areas of medicine while PAs working in rural specialty practice are more satisfied than rural primary care PAs with availability of SMD. These findings may be due to the relatively new field of PAs in rural specialty practice. Specialty care practices/facilities and the patients they serve may be more restrictive with the PA's functions and responsibilities than primary care practices. Patients and health care providers expect an even higher level of care by specialty providers. This may affect confidence level in the PA by physicians, nurses, patients, and community members because of limited knowledge by these groups of the PA's education, experience, abilities, and role in the specialty arena.

Limitations

It was discovered by the researcher during the course of data collection there was an additional limitation than what was identified prior to beginning this study. This limitation was that the researcher did not ask specifically if the PA practiced in the same community of residence. This limitation is not expected to significantly alter the results because of care taken in choosing PAs to survey by limiting the definition of rural. Limitations previously discussed continued in Chapter 1 were found to be valid. This study may not be generalizable to rural PAs not working in Minnesota or to PAs working in metropolitan (urban or suburban) areas because of the survey population.

Conclusion

The majority of rural Minnesota physician assistants surveyed were satisfied to very satisfied with their practice (92%) and community (89%). Acknowledgment and respect from patients was the factor most strongly correlated with overall practice satisfaction. Acknowledgement and respect from physicians, nurses, and community members was also correlated with overall job satisfaction. These factors have been shown in previous studies to be correlated to practice satisfaction, however, previous studies did not show as strong a correlation as discovered in this study. Satisfaction with salary, SMD, work-related stress, and autonomy are other factors rural Minnesota PAs correlate to overall practice satisfaction.

Rural Minnesota PAs tended to be satisfied with their overall community. Overall community satisfaction was most strongly correlated with the respondent's level of satisfaction with size of the town in which they currently reside. It did not seem satisfaction with current community could be predicted by size of current town of residence. This lack of association recognizes individual preferences and values. There was no correlation between time spent training at a rural location as a student and current community satisfaction. This lack of association demonstrates an individual's ability to adjust to positive and negative factors of rural living. Other factors correlated to overall community satisfaction were satisfaction with quality of schools, social/recreational activities, degree of safety, and environment for children and town's acceptance of spouse.

Rural Minnesota PA responses indicated that satisfaction with practice and satisfaction with community were important co-contributors. This finding supports the theory that efforts toward rural community development are worthwhile and actually are important in promoting success in retaining local health care personnel. The strong association between community and practice satisfaction also suggests that clinic and hospital managers and other community leaders need to actively initiate and participate in a wide range of community development ventures. Such efforts would improve chances of recruiting and retaining health care professionals and also improve the quality of living of local residents.

This study identified rural Minnesota PA overall practice satisfaction was most strongly influenced by acknowledgement from patients. It would be of benefit to rural Minnesota communities if future research projects focused on this finding and further discussed the implications of this. Future research could focus on what issues lead to, and distract from, acknowledgement from patients, gathering information from both the PA and patients. This education effort can also be enhanced by facilities that employ PAs such as clinics, hospitals, and skilled nursing facilities. Future research may also focus on initiating education tools to these focused groups and assess the effectiveness of the tools.

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Appendix A

Institutional Research Board
Augsburg College
Box 107

January 21, 2003

To: Jody Giza

From: Norma C. Noonan, Chair



I am pleased to inform you that the IRB has approved your application the project: Rural Physician Assistant Job Satisfaction and Factors That Lead to Satisfaction

as submitted

as revised

with the following conditions:

Please use the departmental phone number, rather than a personal phone number, for inquiries about your project.

Your IRB approval number which should be noted in your written project and in any major documents alluding to the research project is as follows:

2003-2-2

I wish you success with your project. If you have any questions, you may contact me: 612-330-1198 or noonan@augsborg.edu.

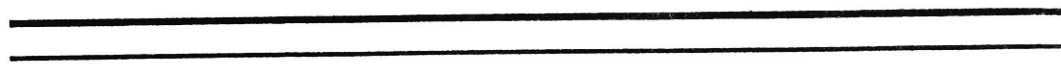
c. Dawn Ludwig ✓

Bev Kimball PA-C President

14258 Raven Street NW

Andover, MN 55304

MAPA



November 10, 2002

To Whom it May Concern,

Jody Giza has requested permission to access the Minnesota Academy of Physician Assistants mailing list to facilitate her thesis work.

She has agreed to abide by the guidelines for use of the mailing list established by the Academy.

Mailing labels for consenting MAPA members will be made available to Jody when she is ready to proceed with that portion of her thesis work.

Sincerely,

Bev Kimball PA-C
MAPA President 2002-2004

A handwritten signature in cursive script, appearing to read "Bev Kimball".

MAPA Mailing List Rental Agreement For Student Members of MAPA

Please be advised that the rental of the MAPA mailing list is for one time only use of the list. However, a follow-up mailing may be approved when requested on the original proposal, and when directed only to those addressees who do not respond to the original mailing.

When a follow-up mailing is approved, two sets of labels will be provided with the expectation that any unused labels will be destroyed. The bill for the mailing list will be increased to retrieve the cost of the materials only. Late requests for a follow-up mailing will be reviewed and billed separately from the original approval.

You agree that the information furnished by the Minnesota Academy of Physician Assistants (MAPA) will not be copied or duplicated by any means, electronic or mechanical, nor will it be reused for purposes other than the one time mailing that we have seen and authorized, nor will it be resold to any organization for their own use without prior consent of the MAPA. You will be liable for attorney's fees and court costs resulting from use that is contrary to this agreement. Please acknowledge your acceptance of these terms by signing below.

Prior to agreeing to rental of the list, the Student Relations Chairperson and the President need to review the project for which the list will be used. Please contact them via MAPA's web site www.mnacadpa.org to begin the review process.

I have read, understood, and agreed to the terms relating to the rental of the MAPA mailing list as outlined above.

SIGNATURE: Jody A Gizza DATE: 11-27-02

I wish to receive labels for consenting MAPA members in this format (check one):

Alphabetical by last name

Alphabetical by City

Zip Code order

Other _____

I realize that the labels are being provided to me "at cost"; and that requesting a special format may increase the cost.

I wish to request a second set of labels for the purpose of a follow-up mailing as outlined above. _____

The basic cost of rental / labels is \$25.00. Please enclose a check for that amount and mail to

**MAPA, 4248 Park Glen Road, Minneapolis, MN 55416
Phone 952.928.7472**

If a special request increases the cost you will be notified before the request is processed.

Contact information for requesting student:

Name Jody A Gizza
Address 8300 Golden Valley Road # 239
City Golden Valley State MN Zip 55427
Phone (763) 595-8536 E-Mail markjodygizza@msn.com

Appendix D

Rural Physician Assistant Survey

I am conducting this survey for the purpose of completing a graduate thesis. You have been selected based on non-metropolitan practice site identified through the Minnesota Academy of Physician Assistants membership. The information collected will be used to shed light on issues that directly affect physician assistants. Please take a few minutes from your busy day to complete this survey. Your responses will be held strictly confidential. The enclosed postage paid envelope is for your convenience. Thank you.

Year of birth: _____

Sex: Male Female

Ethnicity: African American/Black
 American Indian or Alaska Native
 Asian or Pacific Islander
 Hispanic/Latino origin
 White (not of Hispanic origin)
 Other

Marital status: Single Married Divorced/Widowed/Separated

Are you currently NCCPA certified? Yes No

First year of NCCPA certification _____

Practice characteristics

1. How many total years have you practiced as a PA? _____ Years

2. Are you currently practicing clinically as a PA?
 Yes, full time Yes, part time No

3. Please identify the one area that best describes your current practice (check only one)

- Family Practice
 General Internal Medicine
 Subspecialty of Internal Medicine (specify) _____
 Ob/Gyn
 General Pediatrics
 Subspecialty of Pediatrics _____
 General Surgery
 Subspecialty of Surgery _____
 Emergency Medicine
 Industrial Occupational Medicine
 Other (specify) _____

4. How many hours per week do you typically work as a PA (exclude call) _____ hours

5. How many on-call hours per week do you typically work as a PA? _____ hours

6. How many outpatient visits do you typically provide per week? _____ visits

7. How many inpatient visits do you typically provide per week? ___ visits
8. How many days per year are you allowed for the following:
___ Sick ___ Vacation ___ Continuing Medical Education ___ Maternity/Family leave
9. How many PAs per week do you typically interact with on a professional basis? ___
10. How many PAs are employed at your practice location? ___
11. How many physicians are employed at your practice location? ___
12. Does your supervising physician practice in the same town you practice in?
___ Yes, in same location
___ Yes, but different site
___ No, <10 miles away
___ No, 10-20 miles away
___ No, 20-30 miles away
___ No, >30 miles away
13. How many hours per week do you work at the same location as your supervising physician? ___ hours
14. What percent of your patient visits do you typically treat according to clinical guidelines developed with/by your supervising physician? ___%
15. What percent of your patient's visits are discussed with your supervising physician?
___ %discussed at time of visit
___ %discussed after visit
___ % not discussed
16. How many beds are in the hospital where you provide most of your care?
___ # of beds ___ N/A
17. How many hours per month of volunteer health services do you provide?
___ Hours

18. Approximately how many times per month do you perform or assist in the following aspects of your medical practice?

	Times per month			
	0	<4	4-10	>10
Prenatal care	1	2	3	4
Hospital rounds	1	2	3	4
Nursing home rounds	1	2	3	4
Supervising other health workers	1	2	3	4
Discussing patients with MDs	1	2	3	4
Talking with other PAs	1	2	3	4
Emergency room duty	1	2	3	4
Casting	1	2	3	4
Suturing	1	2	3	4
Surgical assisting	1	2	3	4
Labor & delivery	1	2	3	4
Practice management	1	2	3	4
Personnel management	1	2	3	4
Treating AIDS patients	1	2	3	4
Hospital committee meetings	1	2	3	4
Athletic team coverage	1	2	3	4
Coroner work	1	2	3	4
Night call	1	2	3	4

19. PA program from which you graduated _____
 Month/year you graduated _____

20. Highest degree earned prior to PA school

- High school
 Associate
 Bachelors
 Masters
 Doctorate
 Other

21. Highest degree earned since PA school

- High school
 Associate
 Bachelors
 Masters
 Doctorate
 Other

27. How important were the following factors in selecting your present location to practice medicine. (Please rate the following on a scale from 1 to 5 with 1 being not important and 5 being very important)

	Not Important			Very Important	
Close proximity to family	1	2	3	4	5
Small town environment	1	2	3	4	5
Large degree of responsibility/autonomy	1	2	3	4	5
Friendly state laws regarding prescriptive authority	1	2	3	4	5
Comprehensive hospital facilities	1	2	3	4	5
Good reputation and character of supervising physician	1	2	3	4	5
Good salary offer	1	2	3	4	5
Quality of public schools	1	2	3	4	5
Good CME opportunities	1	2	3	4	5
Comprehensive benefits plan	1	2	3	4	5
Access to quality lab/technology	1	2	3	4	5
Presence of other PAs employed in the practice	1	2	3	4	5
Need to fulfill loan obligation	1	2	3	4	5
Other (specify)	1	2	3	4	5

28. How satisfied are you with the following factors in your present community?
(Please rate the following 1 to 5 with 1 being not satisfied and 5 being very satisfied)

	Not satisfied			Very satisfied	
Size of town	1	2	3	4	5
Social/recreational activities	1	2	3	4	5
Place of worship	1	2	3	4	5
Environment for children	1	2	3	4	5
Town's acceptance of spouse	1	2	3	4	5
Quality of schools	1	2	3	4	5
Degree of safety	1	2	3	4	5
Overall community satisfaction	1	2	3	4	5

29. If married, how satisfied is your spouse with the community?

1	2	3	4	5
---	---	---	---	---

30. How satisfied are you with the following aspects of your current practice?
 (Please rate the following on a scale of 1 to 5 with 1 being not satisfied and 5 being very satisfied)

	Not satisfied			Very satisfied	
	1	2	3	4	5
<u>Relationship with supervising MD</u>	1	2	3	4	5
<u>Quality of care provided by supervising MD</u>	1	2	3	4	5
<u>Availability of supervising MD</u>	1	2	3	4	5
<u>Number of other PAs in town</u>	1	2	3	4	5
<u>Salary</u>	1	2	3	4	5
<u>Degree of responsibility/autonomy</u>	1	2	3	4	5
<u>Range of services you are allowed to provide</u>	1	2	3	4	5
<u>Level of personal stress associated with work</u>	1	2	3	4	5
<u>Professional acknowledgment and respect from:</u>					
a. <u>supervising MD</u>	1	2	3	4	5
b. <u>other physicians</u>	1	2	3	4	5
c. <u>other PAs</u>	1	2	3	4	5
d. <u>nurses</u>	1	2	3	4	5
e. <u>patients</u>	1	2	3	4	5
f. <u>community members</u>	1	2	3	4	5

Thank you for taking time out of your busy day for completing this survey!

Appendix E

Rural Physician Assistant Survey

I am conducting this survey for the purpose of completing a graduate thesis. You have been selected based on non-metropolitan practice site identified through the Minnesota Academy of Physician Assistants membership. This study has been approved by the Minnesota Academy of Physician Assistants and Augsburg College Institutional Review Board (IRB). The information collected will be used to shed light on issues that directly affect physician assistants. Please take a few minutes from your busy day to complete this survey. Your responses will be held strictly confidential. The enclosed postage paid envelope is for your convenience. Thank you.

Age: 20-24 25-29 30-34 35-39 40-44
 45-49 50-54 55-59 >59

Sex: Male Female

Are you currently NCCPA certified? Yes No
 First year of NCCPA certification _____

Practice characteristics

1. How many total years have you practiced as a PA? Years
2. Are you currently practicing clinically as a PA?
 Yes, full time Yes, part time No
3. During your PA training, about how many months did you spend at a rural location?
 Months
4. Please identify the one area that best describes your current practice (check only one)
 - Family Practice
 - General Internal Medicine
 - Subspecialty of Internal Medicine (specify) _____
 - Ob/Gyn
 - General Pediatrics
 - Subspecialty of Pediatrics _____
 - General Surgery
 - Subspecialty of Surgery _____
 - Emergency Medicine
 - Industrial Occupational Medicine
 - Other (specify) _____
5. How many hours per week do you typically work as a PA (exclude call) hours
6. How many on-call hours per week do you typically work as a PA? hours
7. How many outpatient visits do you typically provide per week? visits
8. How many inpatient visits do you typically provide per week? visits
9. How many PAs per week do you typically interact with on a professional basis?
10. How many PAs are employed at your practice location?
11. How many physicians are employed at your practice location?

12. Does your supervising physician practice in the same town as you?

- Yes, in same location
 Yes, but different site
 No, <10 miles away
 No, 10-20 miles away
 No, 20-30 miles away
 No, >30 miles away

13. Please circle the population ranges that best answer the following:

KEY 1=<2500 2=2500-5000 3=5000-10,000 4=10,000-25,000
 5=25,000-50,000 6=50,000-100,000 7=>100,000 8=unsure

Size of town you lived in when you were 12 years old 1 2 3 4 5 6 7 8
If married, size of town your spouse lived in when 12 yrs old 1 2 3 4 5 6 7 8
Size of smallest town you ever lived before becoming a PA 1 2 3 4 5 6 7 8
Size of town you are currently living in 1 2 3 4 5 6 7 8

14. How important were the following factors in selecting your present location to practice medicine.
 (Please rate the following on a scale from 1 to 5 with 1 being not important and 5 being very important)

	Not Important				Very Important			
<u>Close proximity to family</u>	1	2	3	4	5			
<u>Small town environment</u>	1	2	3	4	5			
<u>Large degree of responsibility/autonomy</u>	1	2	3	4	5			
<u>State laws regarding prescriptive authority</u>	1	2	3	4	5			
<u>Comprehensive hospital facilities</u>	1	2	3	4	5			
<u>Good reputation and character of supervising physician</u>	1	2	3	4	5			
<u>Good salary offer</u>	1	2	3	4	5			
<u>Quality of public schools</u>	1	2	3	4	5			
<u>Good CME opportunities</u>	1	2	3	4	5			
<u>Comprehensive benefits plan</u>	1	2	3	4	5			
<u>Access to quality lab/technology</u>	1	2	3	4	5			
<u>Presence of other PAs employed in the practice</u>	1	2	3	4	5			
<u>Need to fulfill loan obligation</u>	1	2	3	4	5			
<u>Other (specify)</u>	1	2	3	4	5			

15. How satisfied are you with the following factors in your present community?

(Please rate the following 1 to 5 with 1 being not satisfied and 5 being very satisfied)

	Not satisfied			Very satisfied	
<u>Size of town</u>	1	2	3	4	5
<u>Social/recreational activities</u>	1	2	3	4	5
<u>Place of worship</u>	1	2	3	4	5
<u>Environment for children</u>	1	2	3	4	5
<u>Town's acceptance of spouse</u>	1	2	3	4	5
<u>Quality of schools</u>	1	2	3	4	5
<u>Degree of safety</u>	1	2	3	4	5
<u>Overall community satisfaction</u>	1	2	3	4	5

16. If married, how satisfied is your spouse with the community?

1 2 3 4 5

17. How satisfied are you with the following aspects of your current practice?
 (Please rate the following on a scale of 1 to 5 with 1 being not satisfied and 5 being very satisfied)

	Not satisfied		Very satisfied		
Relationship with supervising MD	1	2	3	4	5
Quality of care provided by supervising MD	1	2	3	4	5
Availability of supervising MD	1	2	3	4	5
Number of other PAs in town	1	2	3	4	5
Salary	1	2	3	4	5
Degree of responsibility/autonomy	1	2	3	4	5
Range of services you are allowed to provide	1	2	3	4	5
Level of personal stress associated with work	1	2	3	4	5
Access to quality lab/technology	1	2	3	4	5
Number and quality of CME opportunities	1	2	3	4	5
Professional acknowledgment and respect from:					
a. supervising MD	1	2	3	4	5
b. other physicians	1	2	3	4	5
c. other PAs	1	2	3	4	5
d. nurses	1	2	3	4	5
e. patients	1	2	3	4	5
f. community members	1	2	3	4	5
Overall practice satisfaction	1	2	3	4	5

Thank you for taking time out of your busy day to complete this survey!

CONSENT FORM
Rural Physician Assistant Job Satisfaction

You are invited to be in a research study of rural Physician Assistant (PA) job satisfaction and factors that lead to satisfaction. You were selected as a possible participant because you are a member of the Minnesota Academy of Physician Assistants (MAPA). I ask that you read this form and ask any questions you may have before agreeing to be in the study.

This study is being conducted by Jody Giza as part of my master's thesis in Physician Assistant Studies at Augsburg College.

Background Information:

The purpose of this study is to determine rural PA job satisfaction and what practice and community factors lead to satisfaction.

Procedures:

If you agree to be in this study, I would ask you to do the following things. Fill out the enclosed survey with pen or pencil. Please do not skip any questions in the survey. If questions are skipped the survey cannot be included in the data. The survey will take approximately fifteen minutes to complete. When the survey is completed, place the survey in the enclosed self-addressed, postage paid envelope and place the survey in a U.S. mail receptacle to return the survey to the researcher.

Risks and Benefits of Being in the Study:

The risks of participating in this study are possible invasion of privacy, disclosure of personal information, and risk of being identified by postmark on the return envelope. An assistant will remove the survey from the postage paid envelope then deliver the survey to the researcher in an attempt to minimize the likelihood of the researcher identifying the participant by postmark.

There are no direct benefits for participating in this study.

An indirect benefit to participation is contributing to knowledge in the subject area of rural PA job satisfaction and factors that lead to satisfaction.

In the event that this research activity results in extreme emotional distress, you are advised to call your local crisis center or the Hennepin County Crisis Intervention Center at (612) 347-3161.

Confidentiality:

The records of this study will be kept private. In any sort of report I might publish, I will not include any information that will make it possible to identify you. Research records will be kept in a locked file; only the researcher, thesis advisor, and committee members will have access to the records.

Raw data will be destroyed by June 1, 2004.

Voluntary Nature of the Study:

Your decision whether or not to participate will not affect your current or future relations with Augsburg College or the Minnesota Academy of Physician Assistants. If you decide to participate, you are free to withdraw at any time without affecting those relationships.

Contacts and Questions:

The researcher conducting this study is Jody Giza. You may ask questions at any time by contacting the researcher by e-mail at giza@augsborg.edu or telephone number (612) 330-1399. You may also contact the thesis advisor, Dawn Ludwig, PhD, PA-C via e-mail at ludwig@augsborg.edu or telephone number (612) 330-1331. This consent form is for you to keep for your records.

Statement of Consent:

I have read the above information. I have received answers to questions asked. I consent to participate in the study.
Return of the survey is my consent to participate. IRB Approval Number 2003-2-2

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