



# JOB SATISFACTION OF CERTIFIED NURSE MIDWIVES: AN EXAMINATION

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*Health care providers face pressure to reduce costs and enhance patient satisfaction. One approach is to employ primary care providers such as nurse practitioners, physician assistants, and certified nurse midwives. Since there is a positive relationship between job satisfaction and patient satisfaction, positive job satisfaction on the part of providers, such as midwives, can translate into patient satisfaction. This research explores the degree of job satisfaction exhibited by certified nurse midwives. The data derives from a survey of 2000 CNM members of the American College of Nurse-Midwives. The survey captures job satisfaction factors, including interactions with physicians and nurses, job tasks, organization policies, pay, job autonomy, professional status, and job requirements and demographics. The findings reveal that the factors associated with overall job satisfaction are conditioned by midwives' places of work. While levels of job satisfaction are high, those factors associated with it vary by workplace. Therefore, strategies designed to enhance job satisfaction for certified nurse midwives should relate to the locus of work and its environment.*

*Keywords: certified nurse midwives (CNMs), overall job satisfaction, job satisfaction factors, places of work*

The objectives of this research are to identify the factors of certified nurse midwives' [CNMs] job satisfaction and then explore their association with overall job satisfaction. Once job satisfaction components are identified and relationships are established, efforts to enhance CNM job satisfaction can be implemented through human resource management practices. The results may be improved recruitment, higher retention rates, delivery of better healthcare, and increased patient satisfaction (Shipman, 2006).

Of course, health care providers should strive to reduce costs and increase patient satisfaction. The driving forces include actual and probable implementation of new government policies and regulations, cost pressures derived from both employers and insurance companies, and intensified competition. It is imperative for providers to develop strategies shielding themselves from the effects brought on by existing applications and impending alterations in health care reform.

A strategy increasingly emphasized is a work force which includes primary care providers such as nurse practitioners, physician assistants and certified nurse midwives. Research indicates that these providers are the primary agents in efforts to satisfy patients and contain costs (Ganesh, Arnold, & Reynolds, 2000). Studies reveal a direct and positive relationship between job satisfaction and patient satisfaction (Homburg & Stock, 2004). Thus, positive job satisfaction on the part of a midwife can translate into positive emotions related to patient satisfaction.

The implementation of new strategies will require that some be performed by healthcare practitioners, rather than by physicians (Hartley, 1999). The number of women in the United States giving birth with midwives has more than doubled since 1990 (Nursing, 2006). In turn, the number of CNMs has grown 38% in the past few years (Simmons & Habib 2007). As these and other events and forces evolve, the work of practitioners, such as CNMs, functioning in roles shared with physicians will certainly amend the health care work environment and may expand their professional status. Certainly, such modifications may impact on job satisfaction.

## CONCEPTUAL FRAMEWORK

### Job Satisfaction

Job satisfaction is an emotional state which results from one's appraisal of the job as meeting the expectations of one's job or values (Locke, 1969). There are numerous job satisfaction conceptual frameworks. These include applications of need fulfillment theory, social reference theory, and two-factor theory. While there is no consensus regarding which conceptual definition is most appropriate, job satisfaction research is extensive. One general conclusion from this large body of literature is that job satisfaction encompasses many factors or dimensions, including pay, job tasks, status, organization policies, and interaction with co-workers. The majority of job satisfaction studies support the notion that it is multifaceted and that jobs have the ability to meet specific individual human needs. With the changing work environment in healthcare and a growing role for practitioners, there is a need to examine job satisfaction among health care professionals such as certified nurse midwives.

Job satisfaction has been shown to be of great consequence in the recruitment, retention, and overall image of health care professionals (McCarthy, Tyrrell & Lehane, 2007). Studies demonstrate that low job satisfaction leads to high turnover among nurses and midwives (Curtis, Ball & Kirkham, 2006). Also job satisfaction affects the quality of service and the organizational commitment of employees (Bourgeault, Luce & McDonald, 2006).

### Job Satisfaction and Midwives

While there are numerous job satisfaction studies of health professionals, especially nurses and physicians, studies that explore CNM job satisfaction are limited in number, and they are dated. An early study found CNMs to be satisfied with their jobs (Collins, 1990). An Australian study found job satisfaction was associated with patient and colleague interactions (Watson, Potter & Donohue, 1999). A study of first-year CNMs found no relationship between job satisfaction and mentoring (Cuesta & Bloom, 1998).

Other inquiries into CNM job satisfaction are limited in scope. Most focus on one or two aspects or primarily on overall job satisfaction. One investigation found that midwives who left and later returned to their practices did so because of previous high job satisfaction experiences (The University of Sheffield, 2006). Cattrell, Lavender, Wallymahmed, Kingdon, and Riley (2006) demonstrated that midwives gained considerable overall job satisfaction by continuity of care for patients. An examination of midwives in birth centers showed high levels of job satisfaction because the midwives felt their skills were needed and gave high satisfaction to patients (Bainbridge, 2006). Another inquiry conducted in Iran found that 49% of the midwives surveyed exhibited moderate levels of job satisfaction, 49% reported low satisfaction, and 2% conveyed high levels of job satisfaction (Mirmolaei, Dargahi, Kazemnejad, & Mohajerrahbari, 2005). Using correlation analysis, the study revealed no significant relationship between overall job satisfaction and various demographic variables, such as age, academic degree, and salary. A study of Estonian midwives found no significant association between job satisfaction and age, ethnicity, work abroad, or increased responsibility (Lazarus, Rasch & Liljestrand, 2005).

A review of the literature on factors affecting the retention and turnover of midwives indicated that job aspects associated with job satisfaction, such as working hours, workload, and appreciation of contribution, received high ratings, and, consequently, are important factors for retention of midwives (Cox & McBride, 2004). An investigation of midwives in Turkey explored levels of work-related stress, burnout, and overall job satisfaction (Oncel, Ozer, & Efe, 2007). It was found that the level of work-related stress and levels for emotional exhaustion were moderate, while general work satisfaction was high. Another job satisfaction study of health care workers in Turkey, including general practitioners, nurses, technicians, and midwives, showed that midwives had the lowest overall job satisfaction scores (Bodur, 2002).

The research reviewed leads to the conclusion that the findings are mixed and sometimes contradictory, and that more investigation of CNM job satisfaction is needed. This study examines the levels of CNM job satisfaction and the association of job satisfaction factors, demographics, and places of work, with overall job satisfaction.



## PROPOSITIONS

### Proposition 1: Certified Nurse Midwives Possess a Positive Degree of Job Satisfaction

The overall level of satisfaction experienced by employees has been found to be highly correlated with occupational status (Lopez & McMilian-Capehart, 2009). Theories of intrinsic motivation are useful in explaining much of the job satisfaction of professional people. The underlying rationale is that job satisfaction is derived from both meaning of work and meaning at work. Highly productive and satisfied employees see themselves and their work as inseparable. They find motivation in the work itself and are professionally committed to their employers (Chalofsky & Krishna, 2009). Keeping these factors in mind, it is anticipated CNMs will exhibit high and positive levels of job satisfaction.

The structuralist camp of institutional theory examines differences in job satisfaction factors by occupational status. The research indicates that professionals often display similarities regarding the job and the work that produces satisfaction (Hoffman & Ventresca, 2004). This indicates that professionals tend to adopt job satisfaction features already popular in the profession. An important hypothesis of the structuralist camp is that professionals become increasingly isomorphic over time as they collectively incorporate templates in search of legitimacy (Heugens & Lander, 2009). Therefore, it seems logical that members of the same profession will manifest and share distinct features of their work and job satisfaction.

### Proposition 2: Certified Nurse Midwives' Job Satisfaction Components Vary by Places of Work

It is possible that the place of work and its organization climate impact how CNMs perceive the relevant job satisfaction factors. The theory of organizational climate proposes that climate consists of the shared perceptions of employees concerning the practices, procedures, and kinds of behaviors that are rewarded and supported in a particular setting (Schneider, White, & Paul, 1998). This theory focuses upon how structural and dynamic aspects of culture become nested, are taken for granted, and are transmitted within the institution (Kondra & Hurst, 2009). The climate shapes employee perceptions of what is important and what behaviors are expected and rewarded in the organization (Bowen & Ostroff, 2004). Organization climate has been found to impact the job satisfaction components embraced by employees (Mathieu & Zajac, 1990). The literature suggests that organization climate is a particularly powerful social mechanism that affects individual attitudes because climate shapes how employees construe the meaning of organization practices. Essentially, organization climate shapes employee job satisfaction (Borucki & Burke, 1999); therefore, job satisfaction factors and overall job satisfaction differ by places of work.

In addition to the propositions discussed above, this study explores whether job satisfaction is conditioned by the demographics of age, education level, marital status, and salary level. These are commonly employed demographics which have been shown to be significant contributors to job satisfaction in multiple studies of employees in various occupations. Clark and his colleagues, for instance, have provided evidence of these effects (Clark, Kristensen, & Westergard-Nielsen, 2009).

## METHODS

### Measures of Job Satisfaction

In this study, job satisfaction is assessed by adopting an instrument generated by Stamps and Piedmont for use in health care (1986). The scale's conceptual basis is that job satisfaction is a multidimensional concept composed of three internally controlled variables [sometimes referred to as professionalism] and three externally controlled variables [often called organization variables]. The three external variables are a) pay, referring to workers perceptions of financial reimbursement for work accomplished; b) task requirements, defined as those activities that must be performed as an integral part of the job; and c) organizational policies, defined as administrative policies and procedures established by superiors at the workplace. The three internal components are a) professional status, seen as the importance professionals perceive regarding their work; b) autonomy, defined as the extent of job-related independence; and c) interactions with professional colleagues. Significantly, the interaction with colleague component of the job satisfaction scale consists of two parts. For midwives the two primary job satisfaction components are CNM

interaction with registered nurses and CNM interaction with physicians. Therefore, for this study, the original Stamps and Piedmont scale is modified to contain seven relevant components. While the scale was originally developed to assess nurse job satisfaction, it has been widely adopted by various researchers in the broad field of healthcare (Anderson, 1996).

Forty two items applicable to assessment of the job satisfaction of CNMs were selected from the original survey, which contained forty-four statements. In addition, an overall job satisfaction scale was added. While the particular items selected for this study were considered to be valid and reliable in previous works, they were nevertheless pre-tested in a local health care clinic staffed by CNMs. After several iterations, the scale was again pre-tested on a random sample of 150 CNMs selected from the Directory of Midwives of the American College of Nurse-Midwives. The participants were asked to provide comments relating to the clarity, relevance, and appropriateness of each item. Based on 52 returns, a number of items were reformulated before their inclusion in the final survey. Subsequently, the final survey contained 42 job satisfaction statements and one overall job satisfaction item. The questionnaire used the widely-employed Likert type measurement scale where 1=strongly agree to 7=strongly disagree.

Demographics, such as age, marital status, education level, place of employment, and salary level, often thought to impact job satisfaction were collected. The places of work or employment were categorized as governmental agencies, educational institutions, hospitals, HMOs, physician's office, private practice, and other. The "other" category included CNMs who function as private contractors and those working in family planning clinics, the armed forces, indigent care facilities, and community health clinics.

## Sample

The certified nurse midwives surveyed were members of the American College of Nurse-Midwives. A random sample of 2000 certified nurse midwife names was acquired from this association and the survey was mailed to each. Six hundred and eighty questionnaires were returned, resulting in 537 usable questionnaires. A comparison of the demographic characteristics of the sample with a membership survey indicates that the respondents were representative of ACNM members at large (Schulling, Sipe, & Fullerton, 2005).

## Job Satisfaction Factors

A factor analysis of the 537 returns, using varimax rotation with a factor loading of .40 or greater and explaining 55% of the variance, resulted in eight factors rather than seven, as found in the original job satisfaction questionnaire (see the Appendix for a listing of the factors and items in each factor). The eight factors are similar to the original scale and are labeled as *satisfaction 1) with physician interaction*, *2) with organizational policies*, *3) with midwife nurse interaction*, *4) with pay*, *5) with job autonomy*, *6) with professional status*, *7) with job requirements*, and *8) with physician respect*.

In the CNM sample, the *interaction with physicians* factor from the original survey split into two factors, adding an eighth factor labeled *satisfaction with respect of physicians*. It is possible that the eighth factor arose due to the rewording of the statements necessary for the CNM sample. It is also likely that this new factor appeared because CNMs frequently interact with physicians on a consulting basis and sometimes judge this interaction in terms of physician respect. Whatever the reason, this component split into two factors, one for CNM physician interaction and another for physician respect. This is consistent with research in other organizations (Hill & Carley, 2008). It should also be noted that 9 of the 42 job satisfaction items in the original survey were eliminated in the course of the factor analysis.

The means, loadings, and reliability coefficients of these eight factors are set forth in the Appendix. Seven of the eight job satisfaction factors exhibited acceptable reliability coefficients ranging from an alpha of 0.70 to 0.86. Only satisfaction with professional status produced an unacceptable reliability coefficient (.51), and was eliminated from the analysis. The mean scores of each job satisfaction factor are used in regression analysis as independent variables along with the selected demographics of age, marital status, education level, and salary level.

Content validity, exploring whether the scales fit the constructs under examination, appears to be satisfied for this study. This is the case because, first, the scale items selected for study were considered valid and reliable in previous inquiries, and, second, an adoption process with thorough pre-testing was employed to ensure that the original items in the scale fit the CNM sample being surveyed.



## FINDINGS

### Level of Job Satisfaction for CNMs – Exploring Proposition 1

The mean for each job satisfaction factor and item are displayed in Table 1 and in the Appendix. The factor mean for satisfaction with nurse interaction is 2.41—a finding that is consistent with a study of social work professionals (Acquavita, Pittman, & Castellano-Brow, 2009)—hence, CNMs agree that nurses show them respect and cooperate extensively. Nurses' respect, appreciation, and understanding of the CNM professional support their willingness to follow orders issued by the CNM.

**Table 1**  
*CNM Job Satisfaction Dimensions*

	# Items	Means	Standard Deviation	N	Reliability Coefficients
<b>Work Satisfaction Dimensions</b>					
Overall Satisfaction Being a CNM	1	1.81	1.09	539	n/a
Satisfaction with Nurse Interaction	5	2.41	1.05	539	0.86
Satisfaction with Job Autonomy	3	2.44	1.11	539	0.76
Satisfaction with Physician Interaction	3	2.78	1.35	539	0.84
Satisfaction with Respect of Physicians	5	3.4	0.85	539	0.73
Satisfaction with Organization Policies	3	3.47	1.56	539	0.85
Satisfaction with Job Requirements	3	3.47	1.56	539	0.85
Satisfaction with Pay	6	4.12	1.29	539	0.86
<b>Sample Demographics</b>					
Age of CNMs	1	50.8	6.91	539	n/a
Education Level*	1	2.4	0.77	539	n/a
Marital Status**	1	n/a	n/a	539	n/a
Salary Level***	1	4.3	1.84	539	n/a

*Note.* \*Education level: scaled where 1 = very high level of education (Ph.D.), 2=high level of education (masters), 3=moderate level of education (=bachelors), and 4=lower level of education (less than bachelors).

\*\* Marital Status, dummy variable in the regression analysis is classified as married or not married [Married CNMs = 400; Not Married CNMs = 139].

\*\*\*Salary scaled for 1=high (over \$90,000) to 9=low (less than \$20,000). A 4.3 Salary Level indicates that the average salary for CNMs is between \$40,000 and \$50,000 per year.

Satisfaction with job autonomy and physician interactions is 2.44 and 2.78 respectively. In this regard, CNMs appear to see themselves as autonomous professionals making decisions in a reasonably autonomous manner and who are expected by others to operate independently. However, a number of comments in the survey suggest that managed care supervised by doctors may erode CNM independence in the future. Yet, CNMs tend to be satisfied with physician interaction. In this regard, CNMs support teamwork and cooperation with physicians. They also agree that physicians generally understand and appreciate them.

Satisfaction with respect from physicians is 3.40, signifying that CNMs are somewhat satisfied with the respect they receive

from doctors. Thus, CNMs agree that others appreciate the importance of midwives, but are neutral toward the notion that midwifery is recognized as a profession. They believe that they are not dominated by doctors and agree that physicians exhibit respect for their skills and knowledge. It appears that physicians who employ CNMs and consult with them on a regular basis respect CNMs more than other doctors. Therefore, the rating of this job satisfaction factor may be lower than it might have been if the statements referred solely to physicians who employ CNMs as part of their practice or who consult with them on a regular and ongoing basis.

CNM satisfaction with organizational policies is 3.47. This is consistent with findings on public administration employees (Franklin & Pagan, 2006). CNMs tend to agree that they have sufficient say in developing and implementing policies and procedures, opportunity to participate in decision making, and a voice in planning their workplace. The responses seem to be conditioned by the place of work, as one CNM remarked, "I am in a private OBGYN practice and we all control our policies and practices. However, if I responded as working in a hospital, the answers would have been just the opposite."

Satisfaction with job requirements is 4.02 and satisfaction with pay is 4.12. These findings are consistent with those of Kondra & Hurst (2009). Regarding job requirements, CNMs do not agree or disagree about most of the ingredients that make up the job requirement factor. Perhaps the reason for this neutral rating on most items is due to the time commitment required by the job. This sentiment is reflected by one CNM, who indicated that a large negative of the job is the time commitment required.

CNMs' perspective or attitudes toward satisfaction with pay is interesting. The mean factor rating is neutral, or neither agree or disagree. The respondents tended to agree with the following items: "my present pay is satisfactory"; "considering the job requirements, pay is reasonable"; and compared to other places they might work, "the compensation is fair in their present position." Conversely, they tend to disagree with the notion that their earnings should be upgraded. Finally, they are ambivalent or neutral about whether other CNMs are satisfied with their compensation.

The mean for overall job satisfaction is 1.81. As a group, certified nurse midwives seem to be highly satisfied with their jobs, providing support for Proposition 1. They are most satisfied with nurse interactions and job autonomy. In addition, they are also quite satisfied with physician interaction. However, they are less well satisfied with respect from physicians and organizational policies. Finally, they are even less satisfied with job requirements and their perceptions of pay. In summary and based on this survey, CNMs are satisfied with their job and view most of its aspects as satisfactory, again lending support for Proposition 1.

The second objective explores the relationship of job satisfaction factors and a limited number of demographics with overall job satisfaction. The results of the association between overall job satisfaction and these independent variables appear in Tables 2 through 9. There are eight regression analyses, one based on the total sample and seven conducted on the places of work or employment.

## Total Sample Analysis – Exploring Proposition 2

The analysis indicates that the demographics of age, education level, marital status, and salary level are not significantly associated with overall job satisfaction for the total sample. However, for the total sample, five of the seven job dimensions or factors are considered to be significant and positively related to overall job satisfaction (Table 2). They are satisfaction with physician interaction, pay, organizational policies, job requirements, and respect of physicians. The job satisfaction factors not significantly related to overall job satisfaction are nurse interaction and job autonomy. When CNMs are viewed as one group, satisfaction with physician interactions, pay, organizational policies, job requirements, and respect of physicians are the most important job components related to overall satisfaction. It is interesting to note that actual salary level is not significantly related to overall satisfaction with the job, while perceptions of pay are.

## Analysis by Places of Work

Tables 3 thru 9 reveal that the association between job satisfaction factors and overall job satisfaction varies across workplaces and is different from the total CNM sample. This suggests the need for an analysis of the disaggregated sample to gain a more accurate picture and understanding of CNM job satisfaction.

**Table 2***Regression of Job Satisfaction Factor Scores and Demographics on Overall Job Satisfaction of all CNMs*

Work Satisfaction Dimension	Corr. Coefficient	Sig	T	Partial Corr. Coefficient
Satisfaction with Physician Interaction	.22	.00	5.55	.24
Satisfaction with Pay	.20	.00	5.03	.21
Satisfaction with Organizational Policies	.16	.00	4.15	.18
Satisfaction with Job Requirements	.10	.01	2.57	.11
Satisfaction with Respect of Physicians	.09	.01	2.49	.11

*Note.* N = 537. Sig F = .01. R square = .15. Mean of overall job satisfaction = 1.81.

When CNMs are viewed as one group, satisfaction with physician interactions, pay, organizational policies, job requirements, and respect of physicians are the most important job components related to overall satisfaction

**Government Agencies** (Table 3) and **Educational Institutions** (Table 4). For those CNMs who are employed by government agencies, the only variable associated with overall job satisfaction is salary level. The  $R^2$  of .10 indicates that 90% of the variation in overall job satisfaction is not explained by this analysis. For those who are employed by educational organizations, the only significant association with overall job satisfaction is nurse interaction. An  $R^2$  of .09 indicates that 91% of the variation in overall job satisfaction is not explained by this analysis. In these two workplaces, the independent variables were not able to account for 90% and 91% of the variation in overall job satisfaction. For educational institutions, it should be noted that important independent variables related to teaching, service, and research were not part of the job satisfaction measure, and these may be the major sources of CNM professors' job satisfaction. Further, in government agencies, variables related to job continuity, stability, retirement and benefits, and security were not included and may have substantial impact on CNM overall job satisfaction. However some CNM educators and those working for the government may not view themselves primarily as CNMs, but more as professors and bureaucrats. Hence, a different study would be required to explore their job satisfaction.

**Hospitals** (Table 5). CNMs employed by hospitals view satisfaction with physician interaction, job requirements, salary level, and organizational policies as positively associated with overall job satisfaction. The  $R^2$  indicates that 19% of the variation in overall job satisfaction is explained by this analysis. The order of the variables' entry into the regression appears in Table 2. The partial correlation coefficients indicate that the variable with the greatest effect is satisfaction with job requirements (.25), followed closely by salary level (.23), satisfaction with physician interaction (.22), and organizational policies (.20). These findings suggest that various aspects of the job controlled by the hospital, such as job requirements, organization policies, and salary levels related positively with CNM job satisfaction. CNMs should be encouraged and allowed to participate in establishing such policies and job requirements. Further, increases in salary and better physician cooperation and support should enhance overall job satisfaction.

**Physician's Office** (Table 6). Those employed by physicians perceive satisfaction with physician interaction and financial reimbursement to be positively associated with overall job satisfaction. It is interesting to note that CNMs working in a doctor's office have the highest overall job satisfaction rating (1.63). However, CNMs' overall job satisfaction is rated rather high across other places of work, ranging from 1.63 in physicians' offices to 1.97 in other areas of work. With an  $R^2$  of .27 the analysis explains 27% of the variation in overall job satisfaction. Partial correlation analysis indicates that the variable with the greatest effect is satisfaction with pay (.47), followed by satisfaction with physician interaction (.24). It appears that improvement in remuneration should increase and maintain high levels of job satisfaction of CNMs working in physicians' offices.

**HMOs** (Table 7). CNMs employed by HMOs see satisfaction with nurse interaction, organizational policies, and pay to be positively associated with overall job satisfaction. The  $R^2$  of .50 explains 50% of the variation in overall job

satisfaction. The partial correlation coefficients indicate that satisfaction with nurse interaction has the largest effect (.61), followed by satisfaction with organizational policies (.39) and pay (.36).

**Private Practice** (Table 8). CNMs in private practice regard satisfaction with job autonomy and pay as the only independent variables significantly associated with overall job satisfaction. In this case, the  $R^2$  is .29, indicating that 29% of the variation in overall job satisfaction is explained. Partial correlation analysis indicates that the variable satisfaction with job autonomy has the most potent effect (.46), followed by satisfaction with pay. It appears that CNMs who establish their own practice do so to ensure job autonomy and control over their income, which enhances overall job satisfaction. Since only two variables enter the analysis, and the  $R^2$  was only .29, there are probably other variables, such as the satisfaction of being an independent health supplier and managing your own clinic, that are related to job satisfaction.

**Other Areas of Work** (Table 9). Comments by CNMs in this group indicate they work in a variety of places such as indigent care clinics, family planning centers, and community health clinics that are sponsored by a host of private, public, and religious organizations. This category includes CNMs that function as part-time or full-time contractors. These CNMs believe that physician interaction and job autonomy are associated with overall job satisfaction. The regression analysis by CNMs who are employed in other places of work indicates an  $R^2$  equal to .16. The partial correlations indicate that both of the two independent variables have an almost equal impact on overall job satisfaction.

**Table 3**

*Regression of Job Satisfaction Factor Scores and Demographics on Overall Job Satisfaction of CNMs Employed by the Government*

Work Satisfaction Dimension	Corr. Coefficient	Sig	T	Partial Corr. Coefficient
Satisfaction with salary level	.31	.05	2.04	.31

*Note.* N = 41. Sig F = .05. R square = .10. Mean of overall job satisfaction = 1.66.

**Table 4**

*Regression of Job Satisfaction Factor Scores and Demographics on Overall Job Satisfaction of CNMs Employed by Educational Organizations*

Work Satisfaction Dimension	Corr. Coefficient	Sig	T	Partial Corr. Coefficient
Satisfaction with Nurse Interaction	.29	.04	2.13	.29

*Note.* N = 50. Sig F = .04. R square = .09. Mean of overall job satisfaction = 1.74.



**Table 5***Regression of Job Satisfaction Factor Scores and Demographics on Overall Job Satisfaction of CNMs Employed in Hospitals*

Work Satisfaction Dimensions	Corr. Coefficient	Sig	T	Partial Corr. Coefficient
Satisfaction with Physician Interaction	.20	.00	2.73	.22
Satisfaction with Job Requirements	.23	.00	3.19	.25
Satisfaction with Salary Level	.12	.00	2.87	.23
Satisfaction with Organizational Policies	.18	.022	2.50	.20

*Note.* N = 159. Sig F = .02. R square = .19. Mean of overall job satisfaction = 1.95**Table 6***Regression of Job Satisfaction Factor Scores and Demographics on Overall Job Satisfaction of CNMs Employed in Physician Offices*

Variable Entered	Corr. Coefficient	T	Sig(T)	Partial Corr. Coefficient
Satisfaction with Pay	.45	.00	5.89	.47
Satisfaction with Physician Interaction	.21	.01	2.70	.24
Satisfaction with Salary Level	.12	.00	2.87	.23
Satisfaction with Organizational Policies	.18	.02	2.50	.20

*Note.* N = 128. Sig F = .01. R square = .27. Mean of overall job satisfaction = 1.63.**Table 7***Regression of Job Satisfaction Factor Scores and Demographics on Overall Job Satisfaction of CNMs Employed by HMOs*

Work Satisfaction Dimension	Corr. Coefficient	Sig	T	Partial Corr. Coefficient
Satisfaction with Nurse Interaction	.55	.00	4.66	.61
Satisfaction with Organizational Policies	.30	.02	2.54	.39
Satisfaction with Pay	.27	.03	2.30	.36

*Note.* N = 40. Sig F = .03. R square = .50. Mean of overall job satisfaction = 1.75.

**Table 8**

*Regression of Job Satisfaction Factor Scores and Demographics on Overall Job Satisfaction of CNMs in Private Practice*

Work Satisfaction Dimension	Corr. Coefficient	Sig	T	Partial Corr. Coefficient
Satisfaction with Job Autonomy	.47	.00	3.97	.46
Satisfaction with Pay	.29	.02	2.43	.26

*Note.* N = 54. Sig F = .02. R square = .29. Mean of overall job satisfaction = 1.87.

**Table 9**

*Regression of Job Satisfaction Factor Scores and Demographics on Overall Job Satisfaction of CNMs Employed in Other Area*

Work Satisfaction Dimension	Corr. Correlation	Sig	T	Partial Corr. Coefficient
Satisfaction with Physician Interaction	.35	.00	2.91	.35
Satisfaction with Job Autonomy	.30	.02	2.51	.30

*Note.* N = 65. Sig F = .02. R square = .16. Mean of overall job satisfaction = 1.97.

Overall, the preceding analysis provides support for Proposition 2 that certified nurse midwives' job satisfaction components vary by places of work.

## DISCUSSION AND IMPLICATIONS

This study provides insights into some of the factors that have an important effect in explaining the variation in overall job satisfaction of certified nurse midwives. One noteworthy finding is that the factors related to CNM overall job satisfaction are conditioned by their place of work or employment. An important implication is that healthcare managers and administrators need to realize that job satisfaction for CNMs is workplace specific and not generic. While levels of overall job satisfaction are high for CNMs, the factors associated with it vary by workplace. Therefore, strategies designed to enhance job satisfaction for CNMs must be related to the locus of work and its environment. Consistent with other research, a number of demographics, such as education level, marital status, and age, are not linked to overall job satisfaction (Collins, 1990). Also, and most interesting, is the notion that job autonomy, which is often viewed as defining the basis for work and enhancing the professional worth for nurse practitioners like the CNM, is not strongly supported by the findings of this study (Bruch & Capezuit, 1997). Only CNMs who are employed in a private practice view job autonomy as related to overall job satisfaction.

Another meaningful finding is that CNMs are highly satisfied with their jobs regardless of their place of work. However, those factors that affect overall satisfaction depend on the place of employment. CNMs working for a government agency view salary level as the only significant variable (of those examined in this study), while those employed by educational institutions view only nurse interaction as significant. Organization policies are important job features related to overall satisfaction when considering the total CNM sample. However, organization policies are only important for those who are employed by hospitals and HMOs. Physician respect is significantly associated with overall job satisfaction when one considers the total sample, but is not so associated when the analysis is conducted on the disaggregated sample by place of work. Items on the satisfaction with organizational policies are common features or concerns in large organization like hospitals and HMOs and are likely to impact job satisfaction of those who work there. However, they are of minor concern in smaller organizations, such as a doctor's office.



It was disclosed that satisfaction with pay is significantly associated with overall job satisfaction for those CNMs working in private practice, physicians' offices, and HMOs, while actual salary level is related to overall job satisfaction for CNMs working for the government and in hospitals. Since pay and salary level are positively related to overall job satisfaction to those working in government agencies, hospitals, HMOs, physicians' offices and private practices, a salary increase could increase job satisfaction.

Physician interaction is significantly related to overall job satisfaction for CNMs employed in hospitals, their offices, and other places of work. Nurse interaction is significantly correlated with CNM job satisfaction for those in the work forces of educational organizations and HMOs. In turn, pay and salary levels are associated with job satisfaction for CNMs in government agencies and hospitals. Further, organizational policies are associated with overall job satisfaction for CNMs in hospitals and HMOs. This suggests, at least for a majority of certified nurse midwives, that as long as they can function in a collaborative fashion with physicians and nurses at reasonable rates of financial remuneration in an environment of supportive organizational policies, they are likely to be satisfied overall with their jobs. These findings may reflect the realities of the new health care environment in which CNMs find themselves.

While this study employed a large random sample, it was limited to CNMs in the USA. Another limitation or area of concern is the amount of dependent variable variation not explained. In this study, the independent variables were not able to account for 50% to 91% of the variation across places of employment. The survey was adapted from one designed to measure nurse job satisfaction and was thoroughly pretested. However, several potentially relevant variables were excluded from the present analysis. These variables are related to professionalism, rewards other than money, and selected workplace variables. In future studies, there is a need to develop and include measures of job satisfaction which include these and other workplace-specific variables.

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**APPENDIX**  
**FACTOR ANALYSIS RESULTS—JOB SATISFACTION DIMENSIONS**

	Mean	Factor Loading	Reliability Coefficient
Dimension 1 -Satisfaction with Physician Interaction			.84
1. There is a lot of team work between midwives and physicians in my unit.	2.79	.82	
2. Physicians in general cooperate with midwives where I work.	2.48	.74	
3. Physicians where I work generally understand and appreciate what midwives do.	3.07	.62	
Mean: Physician Interaction	2.78		
Dimension 2 - Satisfaction with Organizational Policies			.85
1. I have sufficient say in policies and procedures that impact my work.	3.28	.68	
2. Where I work, there is ample opportunity for midwives to participate in administrative decision making.	3.74	.74	
3. I have all the voice in planning and procedures where I work that I want.	3.41	.70	
Mean: Organization Policies	3.47		
Dimension 3 - Satisfaction with Midwife-Nurse Interaction			.86
1. Nurses show a great deal of respect for midwives.	2.81	.78	
2. Nurses understand and appreciate what midwives do.	2.40	.77	
3. There is a good deal of teamwork and cooperation between nurses and midwives where I practice.	2.39	.72	
4. There is a lot of cooperation with nurses.	2.29	.67	
5. Nurses in my organization do not hesitate to follow my orders.	2.16	.72	
Mean: Nurse-Midwife Interaction	2.41		
Dimension 4 - Satisfaction with Pay			.86
1. My present pay is satisfactory.	3.28	.87	
2. Considering what is expected of me, the pay is fair.	3.63	.85	
3. Compared to others, the pay is fair where I work.	3.32	.76	
4. My impression is many midwives are satisfied with their pay.	4.47	.47	
5. An upgrading of midwife pay schedules is needed.	5.35	.58	
6. The rate of increase in pay for midwives is satisfactory.	4.66	.62	
Mean: Pay	4.12		



Dimension 5 - Satisfaction with Respect of Physicians			.73
1. I feel dominated by doctors	2.95	.48	
2. Midwifery is recognized as a profession.	4.02	.48	
3. Most doctors respect midwives.	3.83	.51	
4. Most people appreciate the importance of midwives.	2.76	.41	
5. Physicians show respect for skill & knowledge of midwives.	3.44	.41	
Mean: Physician Respect	3.40		
Dimension 6 - Job Autonomy			.76
1. We do not have close supervision.	2.74	.70	
2. I make most of my own decisions regarding work.	2.34	.48	
3. Independence is permitted if not required where I work.	2.23	.60	
Mean: Job Autonomy	2.44		
Dimension 7 - Satisfaction with the Job Requirements			.70
1. I have sufficient time to be with each patient.	2.61	.62	
2. I have time to do a good job with each patient.	4.18	.61	
3. Administrative decisions support patient care.	4.40	.41	
4. Paper work does not interfere with patient care.	3.81	.45	
5. My activities are of my own making.	5.09	.40	
6. I have time for each patient to deliver excellent care.	4.00	.78	
Mean: Job Requirements	4.02		
Dimension 8 - Satisfaction with Professional Status			.51
1. It makes me proud to tell other about my job as a CNM.	1.44	.74	
2. There is no doubt what I do is really important.	1.45	.46	
3. If I had to do it over, I would become a midwife.	1.87	.53	
Mean: Professional Status	1.59		
Overall Job Satisfaction	1.81		

*Note.* All job satisfaction statements and the overall job satisfaction item were measured on a scale where 1 = strongly agree to 7 = strongly disagree.