Analysis of adjunct faculty at Des Moines Area Community College: Use and application of Herzberg's motivation-hygiene theory to predict job satisfaction in teaching improvement and professional development

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Analysis of adjunct faculty at Des Moines Area Community College: 
Use and application of Herzberg’s motivation-hygiene theory to predict job satisfaction in teaching improvement and professional development 

by 

Margi Boord 

A dissertation submitted to the graduate faculty 
in partial fulfillment of the requirements for the degree of 

DOCTOR OF PHILOSOPHY 

Major: Education (Educational Leadership) 

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Iowa State University 

Ames, Iowa 

2010
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ABSTRACT

“During the past two decades, two-year and four-year colleges have increased their reliance on part-time faculty” (Antony & Valadez, 2002, p. 41). The hiring of part-time faculty started as a convenient way to meet the demands for instruction while remaining financially responsible during tough budgetary times. Currently “…hiring part-time faculty now has become a more permanent strategy for colleges and universities—one that has made part-time faculty a substantial group among the professoriate” (p. 41).

The purpose of this study was to examine the demographics and current level of job satisfaction of adjunct faculty at Des Moines Area Community College (DMACC), and to determine if variables can be used to predict adjunct faculty satisfaction in institutional support for teaching improvement and professional development and if variables can be used to predict overall job satisfaction. The population of adjunct faculty members included all adjunct faculty employed at DMACC during the 2008-2009 academic year. A total 930 adjunct faculty members were eligible to participate. A final sample of 325 participants was included in the data set.

The survey respondents’ ratings on how institutional support for teaching improvement and professional development was perceived were regressed on six independent variables associated with job satisfaction (i.e., gender, age, benefits, instruction, relationships, and physical environment). These accounted for 61.5% of the variance explained in the regression model and were statistically significant. Findings revealed a strong relationship between independent variables and the dependent variable, institutional support for teaching improvement and professional development.
The survey respondents’ ratings on how overall job satisfaction was perceived were also regressed on the same six independent variables associated with job satisfaction accounted for 60.1% of the variance explained in the regression model and were statistically significant at the last step. Findings revealed a strong relationship between independent variables and the dependent variable, overall job satisfaction.

The findings of this study provide valuable information to college administrators, faculty leaders, human resource directors and state leaders. Empirical data can be used to inform hiring practices, professional development practices, programming decisions to improve teaching improvement and overall job satisfaction of adjunct faculty at DMACC.
CHAPTER 1. INTRODUCTION

Community colleges across the nation have experienced significant enrollment growth over the past decade. In a 2009 survey conducted by the League for Innovation in the Community College and the Campus Computing Project, almost three fourths of community college presidents and chancellors who were surveyed reported that their enrollment had increased at least 5% over last year, with 28% reporting increases of more than 10%. (Ashburn, 2009). Nevertheless, as community colleges have experienced rapid enrollment growth, their budgets have lagged.

Iowa’s Community Colleges have experienced significant enrollment growth over the past decade. In The Iowa Department of Education’s Annual Condition of Iowa’s Community Colleges 2009 report, it was indicated that fall 2009 enrollment at Iowa’s 15 community colleges grew 14.3%, reaching more than 100,000 for the first time ever in Fiscal Year 2010. This enrollment growth accelerated at the fastest pace since 1975, and marked the highest student population in the 43-year history of Iowa’s community college system (p. 7). While enrollment has grown at Iowa’s community colleges, state resources have not increased accordingly. The report continued to illustrate that, for Fiscal Year 2009, State General Aid (SGA) was $180,316,478, which represented an increase of only 4.86% over the previous year. Upon adjusting the State General Aid amount into 2009 dollars, the report indicated that the SGA had increased only 1.82% in real dollars since Fiscal Year 2000.

Des Moines Area Community College (DMACC) is the state’s largest community college, enrolling more than 22,000 students annually. DMACC is not unfamiliar to enrollment growth on the heels of immense budget tightening. It is a publicly supported two-
year institution serving the Des Moines metropolitan area and 11 surrounding counties. As a result of their intense growth and depleting State resources, DMACC continues to assign an increasing number of class sections each year to part-time or adjunct faculty. DMACC employs approximately 341 full-time faculty each year and approximately 769 adjunct faculty each semester. At DMACC adjunct faculty delivered approximately 45% of the sections taught during the fall 2009 semester and accounted for approximately 69% of the teaching staff. As stated by President Rob Denson, “When colleges increase their offerings to serve expanded enrollment, particularly in times of reduced budgets, it is the high quality of adjunct faculty who help rise to meet the challenge” (personal communication, March, 2010).

A similar trend was reported from the national perspective. Schmidt (2008) revealed in the Chronicle of Higher Education that part-time faculty accounted for approximately 46% of the nation’s college faculty members, with part-time faculty at community colleges accounting for about 67% of their teaching staffs.

Institutions of higher education have increased their dependence of adjunct faculty members (Gappa & Leslie, 1993). Increases in instruction-related costs, administrators’ desires to be more flexible with staffing, and the growth of the community colleges which have traditionally employed large percentages of adjunct faculty member have influenced this trend. (NCES, 2000; Valdez & Antony, 2001).

With the increased use of adjunct faculty, further study is necessary to understand their personal and professional needs. In July 2003, the Iowa Legislature required all 15 community colleges to develop Quality Faculty Plans “…for hiring and developing quality faculty” (Iowa Code 260C.36.1). A Quality Faculty Plan is to contain specific minimum competencies for faculty including “…specific activities to ensure faculty attain and
demonstrate instructional competencies and knowledge in their subject area or technical areas” (Chapter 24). The Iowa Administrative Code was recently amended to mandate that, by 2011, adjuncts must be included in each institution’s Quality Faculty Plan.

With the increased use of adjunct faculty, further information is necessary to understand their personal and professional needs. In July 2003, the Iowa Legislature required all fifteen community colleges to develop Quality Faculty Plans “for hiring and developing quality faculty” (Iowa Code 260C.36.1). The Quality Faculty Plan was to contain specific minimum competencies for faculty including “specific activities to ensure faculty attain and demonstrate instructional competencies and knowledge in their subject area or technical areas” (Chapter 24). For example, Quality Faculty Plans are to include an orientation process for new faculty, continued professional development for all faculty, specific activities that ensure faculty attain and demonstrate instructional competencies and knowledge, and documentation to ensure that institutions are complying with the faculty accreditation standards of the North Central Association of Colleges and Schools (Iowa Code 260C.36.1). Iowa Code Section 260C.36.1 was recently mandated (by House File 2679) to include adjuncts, requiring that all instructors teaching college credit coursework, counselors, and media specialists be included in each colleges’ institutional quality faculty plans July 1, 2011. The Code enabled each College’s Quality Faculty Plan committee to provide flexibility in determining plan requirements for the various groups of employees (e.g., the college may have different requirements for full-time faculty, faculty employed less than full-time, adjunct instructors teaching at the secondary level, media specialists, etc.) provided these requirements are in compliance with the minimum components delineated in Iowa Code 260C.36.
With the increased usage of adjunct faculty, coupled with declining financial resources and the requirement to include adjuncts in the Quality Faculty Plan, more research is necessary to understand this faculty group. Gaining a better understanding of adjunct faculty by gathering valuable information will enable DMACC administrators to satisfy the adjuncts’ personal and professional development needs while remaining fiscally responsible.

**Statement of the Problem**

As the dependence on adjunct faculty increases, so has the realization that colleges need to do more in all areas to provide support to this faculty group. More research is needed to understand the demographics, educational experiences and teaching experiences of adjunct faculty and their overall job satisfaction. In examining more specifically the job satisfaction of adjunct faculty, more information will be available regarding what motivates them to continue to teach. Studies completed in the early 1990s revealed that part-time faculty are frequently dissatisfied. Gappa and Leslie (1993), and Fulton (2000) revealed the general dissatisfaction of adjunct faculty with working conditions. Fulton (2000) described the treatment of part-time faculty: “Part-time faculty generally earn no benefits, qualify for no development programs and get no respect. Few of them get an office, fewer still have access to such perks as faculty discounts at the bookstore, an Internet-connected computer, or a faculty locker at the gym” (p. 1). Information about the intrinsic and extrinsic factors that motivate adjunct faculty can be used to guide decision-making, particularly related to the type of professional development needs of this important faculty group.

Herzberg’s (1959, 1968/2003) theory supports the need to better understand the factors that motivate employees in their daily work environment. By understanding these
factors, employers will be able to evaluate the jobs and provide mechanisms that will produce more employee motivation and promote greater levels of employee satisfaction. Identifying these motivational factors in the workplace can produce job enrichment for employees that result in improved performance, increased longevity and increased job satisfaction.

**Purpose of the Study**

The purpose of this study was to gather information related to the demographics, educational and teaching experiences and overall job satisfaction of adjunct faculty at Des Moines Area Community College. These data can be used to determine to what extent it is possible to predict interest in professional development activities and overall job satisfaction. The unit of analysis will be adjunct faculty members who responded to the 2009 Iowa Community College Adjunct Faculty Survey identified as adjunct faculty employed at Des Moines Area Community College during the 2008-2009 Academic Year.

**Research Questions**

The following research questions were used to guide this study:

1. What are the demographic characteristics of current adjunct faculty at Des Moines Area Community College (DMACC)?
2. How do adjunct faculty at DMACC rate their overall job satisfaction?
3. How does job satisfaction of adjunct faculty members at DMACC differ according to their background characteristics of gender, age, racial/ethnic background, marital status and academic discipline?
4. To what extent do adjunct faculty at DMACC respond to questions relating to their participation in professional development?

5. How do adjunct faculty at DMACC rate their level of satisfaction as it relates to Herzberg’s Motivation Hygiene Theory?

6. To what extent do background characteristics, relationships, benefits, instruction and physical environment factors predict how DMACC adjunct rate their satisfaction in institutional support for teaching improvement and professional development?

7. To what extent do background characteristics, benefits, instruction relationships and physical environment predict overall job satisfaction?

Theoretical Framework

Fredrick Herzberg (1959) was among the first to research employee motivation and determine the factors in an employee’s work environment that caused satisfaction or dissatisfaction. More than 40 years later researchers continue to expand on Herzberg’s model to further understand employee motivation as this factor is imperative to the success of the organization.

Herzberg (1959) conducted a study to determine which factors in an employee’s work environment caused satisfaction or dissatisfaction, and published his findings in a book entitled: The Motivation to Work. Herzberg’s studies involved interviewing employees to understand what pleased or displeased employees about their work environment. Specifically, Herzberg inquired about the factors in their work environment that caused them satisfaction and what factors caused them dissatisfaction. He developed the motivation-hygiene theory to explain his results. Herzberg (1968) summarized that there are factors that
cause job satisfaction (motivators) that are different than the factors that caused job
dissatisfaction (hygiene factors). He described hygiene in the sense that there are
maintenance factors necessary to avoid employee dissatisfaction but alone do not provide
satisfaction.

Herzberg’s (1968) indentified that there are psychological needs that can be fulfilled
by money such as food and shelter. And that there is a psychological need to achieve and to
grow, and this need is thus fulfilled by ones activities that cause them to grow. Herzberg
revealed that individuals in the workplace are intrinsically motivated by interesting work,
challenge, recognition of achievement, growth and increasing responsibility. He found that
the primary cause of unhappiness can be related to extrinsic factors such as company policy,
administration, supervision, interpersonal relationships, working conditions, status and
security.

Herzberg’s findings suggest that the factors involved in producing job satisfaction
(and motivation) are separate and distinct from the factors that lead to job dissatisfaction.
Herzberg determined that management must provide hygiene factors to avoid employee
dissatisfaction, but also must provide factors intrinsic to the work itself in order for
employees to be satisfied with their jobs and perform at a high level. Herzberg (1968/2003)
found that motivators were the primary cause of satisfaction, and hygiene factors the primary
cause of unhappiness on the job or dissatisfaction. According to Herzberg, “The very nature
of motivators, as opposed to hygiene factors, is that they have a much longer-term effect on
employees’ attitudes. It is possible that the job will have to be enriched again, but this will
not occur as frequently as the need for hygiene” (p. 96).
Herzberg (1968/2003) suggested that work be enriched to bring about effective utilization of personnel. Herzberg stated, “Job enrichment provides the opportunity for the employee’s psychological growth, while job enlargement makes a job structurally bigger” (p. 93). He went on to describe job enrichment as a continuous managerial function summarized as: “If you have employees on a job, use them. If you can’t use them on the job, get rid of them, either via automation or by selecting someone with lesser ability. If you can’t use them and you can’t get rid of them, you will have a motivation problem” (p. 93).

**Hypotheses**

Research questions 1 – 4 do not require hypotheses because each is descriptive in nature. According to Creswell (2003), null hypotheses make predictions that no relationship or difference exists between groups on a variable. Therefore, the null hypothesis was employed for the purpose of this study for research questions 5, 6 and 7.

*Hypothesis for Research Question 5:* There are no significant differences between Herzberg’s findings on satisfaction and dissatisfaction and those of the Des Moines Area Community College Adjunct Faculty who responded to the Iowa Community College Adjunct Faculty Survey 2009.

*Hypothesis for Research Question 6:* There are no variables found in this study that can be used to predict adjunct satisfaction in teaching improvement and professional development.

*Hypothesis for Research Question 7:* There are no variables found in this study that can be used to predict overall job satisfaction.
**Significance of the Study**

The current research is the first formal attempt to collect data from adjunct faculty employed at Des Moines Area Community College (DMACC). The findings of this study will provide significant information for administrators and faculty leaders at DMACC to better define institutional policy and practice related to the use of adjunct faculty. This study will provide information to DMACC’s administration and faculty regarding the current perceptions of adjunct faculty and guide decisions related to their overall job satisfaction and professional development. These results may be used to identify the unmet needs of adjunct faculty within the institution and provide college leaders the data to improve working conditions for adjunct faculty. Finally, this study can provide a voice to a faculty group that is rarely represented in the policy and planning process within institutions of higher education.

**Limitations and Delimitations**

For the purposes of this study, the sample was delimited to include only adjunct faculty who were identified by Des Moines Area Community College as those who taught during the 2008-2009 academic year. The sample was further delimited to include only the adjunct faculty who completed the Iowa Community College Adjunct Faculty Survey 2009. The final delimitation to this study was that the variables used to assess job satisfaction were limited to those included in the Iowa Community College Adjunct Faculty Survey 2009 instrument.

There were several limitations that should be addressed when considering the results and findings of this study. First, the survey instrument was distributed after the conclusion of
the traditional Spring 2008 semester, which could have limited the responses received. Second, the survey instrument was administered electronically, which could have limited control of the responses received. This data-coll ecting technique does not enable the researcher to control the willingness, interest, and ability of the participants to respond accurately to all questions. Third, the study was limited to only adjunct faculty at DMACC who chose to respond to the Iowa Community College Adjunct Faculty Survey 2009. The results of this study do not provide information about the adjunct faculty members who chose not to respond and, therefore, the results are limited to the bias of those who did choose to respond. Fourth, the study relied on voluntary participation from those who received the survey via e-mail. Finally, this study was cross-sectional in nature. Respondents were asked to reflect on their satisfaction of past and current experiences which did not enable the researcher to examine changes over time.

Definition of Terms

The following terms were defined for use in this study:

*Academic Discipline (Career and Technical Programs/Arts and Sciences Programs)*: For the purpose of this study academic discipline refers to the principal field or discipline of teaching at the current institution. This is further defined by the Iowa Department of Education as Career and Technical Programs which include: Agriculture Education, Business and Information, Family and Consumer Sciences, Health Occupations Education, Industrial Education/Trades, and Marketing Education; or Arts and Sciences Programs which include the Humanities and Social Sciences for the purpose of this study.
Adjunct Faculty: Considered synonymous with the term “part-time” faculty. The definition of adjunct for the purpose of this study coincides with Freeland’s (1998) definition: “…those employed by a short contract with no guarantee of being rehired for the next academic year or term” (p. 3).

Autonomy: The authority to decide course content, make job decisions and to decide course content.

Hygiene: In this research, the term hygiene as identified by Herzberg (1968/2003) was redefined as physical environment when used outside of the discussion of Herzberg’s theory. 

Iowa Community College Adjunct Faculty Survey 2009. A statewide survey of all 15 Iowa public community colleges and a sample of 3,412 adjunct faculty members.

Job Satisfaction: Herzberg, Mausner, Peterson, and Capwell (1957) believed the very term job satisfaction lacks adequate definition. They agreed that job satisfaction is not one-dimensional. A simple breakdown would show that there can be satisfaction with the specific activities of the job, often referred to as intrinsic job satisfaction; with the place and working conditions under which the job is performed; or with specific factors such as economic reward, security or social prestige.

Professional Development: skills and knowledge attained for both personal development and career advancement

Summary

This research sought to provide administrators and faculty leaders at Des Moines Area Community College with greater insight into the perceptions of their adjunct faculty by identifying factors that contribute to their interest in professional development and overall
job satisfaction. Chapter 1 presents an overview of the study including the problem, purpose, theoretical perspective, research questions, hypotheses, significance, delimitations and limitations, and definition of terms. Chapter 2 provides an overview of the literature reviewed for this study. The first part of the literature review presents a brief historical perspective of the community college and the role instruction plays in its continued growth followed by literature relating to the role of adjunct faculty and their professional development needs.

Chapter 3 provides a brief overview of the study including the research questions to be addressed. The remaining sections in this chapter define the methodology, research design, population and sample, instrumentation and data collection results and data analysis procedures. Chapter 4 presents an overview of the results of the statistical analyses of the study including descriptive data, exploratory analyses and multiple regression analyses. The final chapter includes a summary and discussion of the findings of this study with suggestions for future research.
CHAPTER 2. LITERATURE REVIEW

The first part of the literature review provides a brief historical perspective of the community college and the role instruction plays in its continued growth. The remaining review is divided into six subsections related to job satisfaction and professional development of adjunct faculty: (1) role of instruction; (2) role of part-time faculty including the increased use of and the advantages and disadvantages of this use; (3) linkage between full and part-time faculty; (4) attitudes and perceptions of part-time faculty; (5) professional development of faculty and part-time faculty; and (6) summary of the literature reviewed for this study.

**Historical Perspective of the Community College**

The American community college has experienced rapid growth throughout the 20th century; this growth is considered by some as the most noteworthy development in the higher education system (Varner, 2006). As stated by Cohen and Brawer (1996), “…reasons for the growth of community colleges in their early years have been stated by numerous commentators, each with an argument that has some appeal” (p. 9). Cohen and Brawer (2008) attributed reasons for the development of community colleges as a result of increased growth of high school populations, businesses supporting community colleges as a location for their workers to be trained, and community leaders viewing the formation as a path toward community prestige. As community colleges continued to develop, more community needs were met regarding adult continuing education, academic transfer preparation, remedial education, and community service (Cohen & Brawer, 1996). During the last few decades community colleges have become institutions of open access, educating a more
diverse, under-represented population of students with a wide variety of needs. (Shaw, Valadez, & Rhoads, 1999) According to Cohen and Brawer (1996):

The increase in enrollments was accompanied by a major change in the composition of the student body. Colleges are now open to ethnic minorities, lower-income groups, and to those whose prior academic performance had been marginal. Of all the higher educational institutions, the community colleges contributed most to opening the system. (pp. 27-28)

With the population of the student body continually changing, community colleges have worked hard to adhere to their open access missions; while at the same time providing faculty with the necessary instructional resources to allow students from various backgrounds to learn and thrive.

**Role of instruction**

As stated by Wallin (2003), “…nothing is more important than well-prepared, high performing, intrinsically motivated faculty” (p. 224). As community colleges work to adhere to their open access missions, they do so while encountering increased public accountability with limited resources. Instruction is at the center of the community college professorate. Dickinson (1999) stated, “At the intersection of these often conflicting demands lies the work of community college faculty” (p. 23). As stated by Cohen and Brawer (2008), “the primary responsibility of community college faculty is to teach; they rarely conduct research or scholarly inquiry” (p. 84). Cohen and Brawer (1997) also revealed that community college instructors exhibit a stronger commitment to teaching than their counterparts at four-year colleges and universities. Community college professors must confront changing environments similar to the change that many workers in social institutions experience (Dickinson, 1999). In addition, Cohen (1992) noted “similar to their counterparts throughout
higher education, with rare exception, the community college faculty tend to teach in the same ways, to the same number of students, for the same number of hours as their predecessors did a generation ago” (p. 161). Hardy and Laanan (2006) expressed the importance of “…understanding the characteristics, opinions and degree of satisfaction of this employee group is pivotal to both understanding the culture of the community colleges and determining the most effective way to manage them” (p. 788). As the size and number of community colleges has increased, so has the need for proper training for instructors (Cohen & Brawer, 2006).

The literature suggests that changing technologies along with financial factors continue to affect the delivery systems of instruction and all of the operating units of academic institutions (Greive & Worden, 2000). According to Grieve and Worden, this change in technology along with other factors “…provide full-time faculty with opportunities to change the way in which instruction is delivered in order to meet the demands of the students regardless of time or place” (p. 10). Greive and Worden also suggested that, as a result, adjunct faculty “…will be called upon to develop new skills to deliver new kinds of knowledge and competencies to the students of the future” (p. 10). Cohen and Brawer (2006) support this statement “… the reasons part-timers continue to be employed in community colleges because they cost less; they may have special capabilities not available among the full-time instructors…” (p. 94).
Role of part-time faculty

Increased use

As stated by Cohen and Brawer (2006), “more so than in universities, less so than in for-profit sector, community colleges depend on a part-time workforce” (p. 94). The growth of part-time faculty has occurred throughout the years as community colleges have developed. Although the use of part-time faculty is not new, the reasons for employing them have changed. Cohen and Brawer (2006) noted:

In the early years sizable percentages of the instructors were part-timers, often from local high schools. As the colleges matured, they were more able to support a corps of full-time instructors; in the late 1960s almost two-thirds were so employed. Then the ratio of part-timers increased, and by 2003, 63% of the faculty were part-time. (p. 94)

Wallin (2005) noted:

Part-time faculty are indeed here to stay and their ranks will likely grow in the years ahead. They are absolutely necessary if community colleges are to fulfill their teaching mission. Community colleges have used part-time faculty to meet escalating demands in an environment of declining resources. (p. 217)

According to DMACC’s Annual Report (2008), the College grew by over 35% from 2003 to 2008. With this growth have come about different ways of delivering courses and, thus, varied methods of instruction which may affect the role of faculty. During the Fall Semester 2009, 769 adjunct instructors were hired, with 210 (27%) of those hired teaching half-time or more. In comparison, during the Fall Semester 2008, 748 adjunct instructors were hired, with 172 (23%) of the instructors teaching half time or more. In order to work within DMACC’s adjunct instructor load restrictions (as outlined in the 2008-2011 DMACC Collective Bargaining Agreement), departments use certain instructors more than half time in the Fall Semester and reserve other instructors to teach more than half time in the Spring
Semester. Of the adjunct faculty teaching in Fall 2009, the largest number of instructors was hired to teach Arts and Sciences and Business courses.

As stated by Green (2007), “…budget constraints, decreasing state support, retirements, and changing enrollment patterns all play a role in the need for adjuncts” (p. 30). Part-time faculty enable community colleges greater flexibility in meeting enrollment demands and the needs of the community. They provide institutions with the flexibility to meet the training and educational demands of local businesses that arise during the course of the academic year (Green).

As suggested by Cohen and Brawer (1996), a crucial development to the usage of more part-time faculty would seem to be the aging of the full-time faculty in community colleges. The Bureau of Labor Statistics (2006-07) predicted the “…employment of postsecondary teachers is expected to grow much faster than the average for all occupations through 2014. A significant proportion of these new jobs will be part-time positions” (p. 8). The literature suggests that as a result of full-time faculty retire, part-time faculty will continue to play an important role in community colleges.

**Advantages and disadvantages**

A strong case has been made in the literature to support that the use of part-time faculty will continue to be an important part of the community college instructional delivery system. Banachowski (1996) summarized that the debate over the advantages and disadvantages of employing part-time faculty is complex with no easy answers. Among the advantages are cost savings, institutional flexibility, and the infusion of real world vocational
experience into the classroom. The common disadvantages are loss of positions to full-time faculty and, of more serious concern, the loss of academic integrity.

The advantages expressed previously are not all inclusive, but little research exists to contradict the advantages of using part-time instructors. These advantages range from practitioner expertise in the vocational field to filling teaching assignments that arise near the beginning of a term. The literature search did not identify a case for eliminating the practice of using part-time instructors in specific situations, but substantial research has been conducted to explore the treatment and attitudes of part-time faculty members. Finally, research has been conducted to explore the instructional techniques used by part-time instructors, student performance in courses taught by part-time instructors and the impact of this practice on the integrity of the organization. Cohen and Brawer (1996) posited that “…studies usually find that students view part-time faculty about the same way that they do the full-time faculty and that differences in grades awarded, student retention, and student learning cannot be ascribed to their instructors’ employment status” (p. 90).

Research has indicated that adjunct faculty are committed to their positions but not as involved in the daily activities of the college as their full-time counterparts. According to the literature, the professional commitment of adjunct faculty does not typically go beyond their interest in teaching, their students or their individual assignments. (Cohen, Brawer, & Florence 1977; Garii & Peterson 2005; Valadez & Antony 2001).

Although research has suggested that adjunct faculty are not as involved in the day-to-day activities as full-time faculty, Kozeracki (2002) noted that adjunct faculty find their academic interactions with students to be more positive than do full-time faculty. When analyzing the differences in faculty, Kozeracki (2002) posited that “…part-time faculty, who
make up 35% of the respondents, are more likely to describe their students’ enthusiasm for learning as excellent and to agree that faculty promotions should be based on formal student evaluations of their teachers” (p. 52).

**Linkage of full-time to part-time faculty**

There is a vast amount of literature available that delves into the similarities and differences in the attitudes of part- and full-time faculty, their commitment, quality of instruction, instructional methods being used and amount of professional development available to part- and full-time faculty. Roueche, Roueche, and Milliron (1995) perceived there is a generalized concern that part-time faculty, no matter how competent, lack the permanent commitment required for sustained teaching effectiveness. In contrast, Banachowski (1996) found this to be far from reality, and noted that, of the studies conducted, there were virtually no differences in the type of quality of instruction delivered by part- and full-time faculty. Banachowski cited a specific study from the California Community Colleges which revealed that evidence regarding differences in the quality of instruction provided by full- and part-time faculty was inconclusive (p. 5).

Leslie and Gappa (2002) revealed that part-time faculty in community colleges look more like full-time faculty than is sometimes assumed. Their interests, attitudes and motives are relatively similar. They are experienced, stable professionals who find satisfaction in teaching, and feel that their institutions have been appropriately supportive.

A review of the various teaching techniques and instructional methods that are being used by full-time instructors in comparison to part-time faculty did not reveal that significant differences existed (Leslie & Gappa, 2002; Schuetz, 2002). Although it might be perceived
that full-time faculty hold pedagogical knowledge that sets them apart from part-time faculty, Leslie and Gappa (2002) determined that there are almost no differences between part- and full-time faculty members in the predominant instructional methods used. Research indicated that lectures, student discussions and exams account for close to two thirds of all class time regardless of whether the instructor is part- or full-time. Full-time faculty did use lab activities as an instructional method at a slightly higher rate than did part-time faculty. According to Leslie and Gappa, “…data do show that part-time community college faculty members appear to be more comfortable with conventional teaching practices and less likely to have won outstanding teaching awards” (p. 65).

Schuetz (2002) completed a study that mirrored findings of Leslie and Gappa (2002). The study indicated very similar use of class time regardless of faculty status. Both part- and full-time faculty used an average of 43% of class time for lectures, 15% for discussion and 11% for quizzes and examinations, accounting for over two thirds of class time. However, Schuetz also found “…statistically significant differences in results describing the distribution of instructional practices, faculty availability to students and connection with colleagues and the institution were identified by employment status” (p. 44).

In the area of faculty orientation, mentoring or professional development Garii and Peterson (2005) expressed concern that part-time faculty are often disengaged from the institution and rarely included in these activities:

Ultimately, the instructional delivery of the adjunct instructor rests on the beliefs and definitions of the adjunct him/herself; this delivery may inadvertently undermine official efforts of the institution. Adjuncts’ lack of connection with the institution may belie a full understanding of the values, needs and institutional expectations that underlie the interdependent nature of individual courses with programs. (p. 3)
Wallin (2004) revealed the following as it relates to adjunct faculty: “The variety of designations—temporary faculty, part-time faculty, contingent workforce, expendable academics, nontenure track faculty, adjunct faculty—speaks volumes about their ambiguous place in the workforce (p. 374).

Twombly and Townsend (2008) suggested that knowing about the faculty who instruct community college courses is important because a lack of knowledge about them often results in the reluctance of 4-year college faculty to accept community college courses. They questioned the quality of the courses and hold a general sense of arrogance about the status of 2-year college faculty (p. 3).

### Attitudes and Perceptions of Adjunct Faculty

There is a vast amount of literature that describes the working conditions of adjunct faculty, their low pay and lack of benefits, a lack of the institution’s commitment to them; all factors that have attributed to a perception that they are frequently dissatisfied. Many of the studies completed in the early 1990s revealed part-time faculty were frequently dissatisfied. (Antony & Valadez, 2002).

A general dissatisfaction with working conditions was revealed by Kelly (1991) and also supported later by Green (2007). Kelly noted that “generally, part-time faculty feel that they are being treated as second class citizens: Part-time faculty with the same qualifications as full-time faculty are paid less for teaching the same classes, they have no benefits, and they have no guarantee of employment from one semester to the next” (pp. 8-9). Green (2007) stated, “While many part-time faculty members enjoy their work, some feel disconnected and unappreciated” (p. 31). Fulton (2000) also supported this research in
relation to the treatment of adjunct faculty, and stated, “Part-time faculty generally earn no benefits, qualify for no development programs and get no respect” (p. 1).

Antony and Valadez (2002) examined the perception of adjunct faculty satisfaction or dissatisfaction further and found that “…part-time faculty seem fairly satisfied with their roles” (p. 54). Antony and Valadez (2002) went on to state that “…part-time faculty seem to be pursuing the careers they have planned for and have reached a degree of satisfaction with their decisions” (p. 54). Leslie and Gappa (2002) also determined that adjunct faculty are not as dissatisfied with their jobs as is popularly assumed. Over half of all part-timers in community colleges prefer to teach on a part-time basis and reported being less stressed than full-time faculty. Contrary to popular images, Leslie and Gappa revealed that only a small fraction of part-timers are eagerly seeking full-time positions. Most recently, Schulz (2009) found that less than half of the community college adjunct faculty in Iowa who responded to the Iowa Community College Adjunct Faculty Survey 2009, not only preferred to work full-time at their institution but also were satisfied with their current teaching position.

Rifkin (1998) researched the differences in professional attitudes between part- and full-time faculty in community colleges in particular. He found that “…there are no differences between full- and part-time faculty on Caring for Students, Autonomy from Students and Commitment to a Calling” (p. 13). Rifkin also revealed that full-time faculty were more involved in classroom activities and assessing students than part-time faculty, however, students reported that part-time faculty had greater expectations for student learning and achievement than full-time faculty.
In relation to part-time faculty and student achievement, Green (2007) found:

Students appreciate the fact that many adjuncts are practitioners who pepper their classroom lectures with real-world experiences. The connections to the community that adjuncts bring with them improve the reputation of the college and provide internships and job opportunities for students. (p. 30)

Antony and Valadez (2002) revealed that full-time faculty indicated that they would like greater opportunity to conduct research and were more concerned with job security, tenure, pay and benefits. They concluded that although part-time faculty are equally concerned, they are less willing to leave their positions in search of better pay, job security, or benefits:

Specifically, instead of being largely disenchanted with their status as part-time faculty, these individuals are in fact engaged in the kind of work they enjoy—work that brings them a degree of satisfaction. It appears that part- and full-time faculty is equally concerned with issues pay, benefits, advancement opportunities, and job security. Even though the data indicate these issues would not influence part-time faculty to leave their jobs for another position elsewhere, it can be inferred that they seem as concerned as full-time faculty that their institution provide these opportunities. (p.55).

Prior to Antony and Valadez’s research, Gappa (1984) stated:

Colleges and universities have been content, by and large, to pay them poorly, use them as needed with little concern for their long-term welfare, and keep them outside traditional academic governance. Many within the tenured cloister regard part-time faculty as academic pariahs. Administrators exploit them with impunity—and apparently with almost no sense of guilt. But their numbers do not diminish, and their role in higher education may well enlarge in coming years. In varying degrees, part-timers are resentful and frustrated (with much justification), but on balance, they are satisfied enough to continue. Less interested in money than in other rewards they associate with teaching, they rarely complain (p.1).

Rifkin (1998) noted that full-time faculty members express a significantly greater feeling of autonomy from the institution than part-time faculty. Part-timers have acknowledged and expressed concerns about their apparent inferior status and feel they have
no decision-making power within the institution, and, therefore, lack autonomy. In
comparison, Leslie and Gappa (2002) found

…little data to suggest that the popular image of part-time faculty as under-
qualified, nomadic, or inadequately attentive to their responsibilities has any
validity. In fact, findings were to the contrary, the portrait shows part-time
faculty in community college to be stable professionals with substantial
experience and commitment to their work. (p. 62)

Hagedorn (2000) recognized that “…the concept of job satisfaction is complex and
convoluted” (p.6). Hagedorn developed a conceptual model to sort and categorize factors that
compose and contribute to job satisfaction and explain the variance. Hagedorn’s model
contained triggers (significant life event could be either related or unrelated to the job) and
mediators (variable or situation that influences a relationship between other variables or
situation that influences the relationships) that interact and affect job satisfaction.

Hagedorn (2000) created a survey based on her framework and determined, on
average, job satisfaction increases with advanced life stages and can be affected by family-
related circumstances with married faculty reporting higher levels of job satisfaction than
either their single or divorced counterparts while lower levels of job satisfaction were
reported for individuals experiencing change. Schulz’s findings (2009) support Hagedorn’s,
as Schulz found that community college adjunct faculty in Iowa age 60 years old and older
reported the highest percentage of satisfaction. Finally, faculty who perceived a high level of
justice within their institution reported much higher levels of job satisfaction than those
whose perceptions of justice were low.
Professional Development of Adjunct Faculty

History and issues

Given ongoing budget contraction and an increasing demand for services, community colleges will necessarily continue to employ large numbers of adjunct faculty (Wallin, 2004). According to Wallin, “…it is not an overstatement to say that without the use of adjunct faculty, most community colleges could not come close to meeting student demand for courses” (p. 373). The literature reviewed thus far outlines the role of faculty in the community college and, in particular, the role as it compares to part-time faculty. The research is based on the theory that satisfied employees will perform at a higher level than dissatisfied employees, thus providing better instruction. As expressed in the literature, there is concern that part-time faculty are often disengaged; thus, including them in faculty orientation, mentoring or professional development activities may help engage them.

The Council for the Study of Community Colleges (CSCC) survey (Leslie & Gappa, 2002) revealed that part-time faculty members appear less committed, accomplished, and creative in their teaching than full-time faculty. Over three fourths of both full-time and part-time faculty at community colleges indicated they are motivated to pursue professional development, but the relative strength of the feelings of part-time faculty leaves room for improvement. Given that part-time faculty are also somewhat less experienced teachers and, perhaps, more conventional in their instructional methods, it would appear that their professional development needs cover a both substantive disciplinary preparation and preparation to teach. Green (2007) posited that administrators should place more value in
adjunct faculty, their attribution to the institution’s culture, and in doing so consider their integration into the institution by providing ongoing professional development.

Community colleges have used part-time faculty to meet escalating demands as their enrollments continue to increase during a time of declining resources; allowing more flexibility for assigning courses. There is a wealth of literature regarding the increasing utilization of adjunct faculty and the importance of their professional development, integrating adjunct faculty into the institution and their overall job satisfaction. However, the increased number of new adjunct faculty being hired each year and the lack of data available to track these faculty has serious implications on answering questions regarding the quality of education community colleges in particular are providing its students.

**Activities and concerns**

Faculty professional development programs debuted in the late 1960s with program efforts limited to new faculty orientation, sabbatical leaves, reduced teaching loads, and visiting professorships. During the 1970s as enrollment patterns changed and the amount of part-time instructors increased there were increased requirements for accountability with declining financial resources (Grant & Keim, 2002).

According to Murray (2001) in the past 30 years, community colleges have experienced and struggled with an increase in the diversity of its student body. This diversity in students requires different approaches to teaching and learning than most faculty members have been prepared for in their graduate training. Along with this, there is a significant trend for the hiring of new faculty as many who started in the 60s and 70s are reaching retirement age. Consequently, community colleges have found it necessary to implement faculty
development activities to assist faculty members in developing the skills and strategies necessary to provide effective instruction to all learners. The hiring of a significant number of new faculty brings both excitement and apprehension to a college because a new large cohort will significantly influence the college for the next quarter century and beyond (Welch, 2002).

With the expansion of access to higher education there has been a dramatic increase in the numbers of nontraditional and less prepared students entering college. The resulting diversification of the student body often means that faculty members who rely on traditional teaching strategies may not stimulate effective learning for students (Cross, 1990). As stated by Murray (2001), effective learning and teaching in classrooms populated by diverse students is dependent on “…the flexibility of a college instructor’s teaching repertoire, and his or her readiness to draw on a range of teaching styles for a variety of ends” (p. 488). Murray went on to state that “…the changing composition of the student body and faculty may not alone signify a greater need for faculty development, but the changing strategies associated with teaching and learning and the effect technology has on these factors should” (p. 488). The research indicates that faculty members need to be provided with more information on how to integrate the newest forms of technology in their classroom and faculty development activities could drive the delivery of this information. As stated by Wallin and Smith (2005). “…the changing demands of employers and emerging technologies place additional stress on faculty” (p. 88).

Technology may play a role in increasing demands on faculty but it also is serving a useful purpose in providing faculty development opportunities. At many colleges, workshops that faculty and staff develop and offer may only be held within faculty’s respective
departments. Faculty development is generally comprised of attending meetings of state or national discipline-area organizations, learning to use new technology, and attending conferences (Grant & Keim, 2002). Now, with the use of technology, faculty can be notified of development opportunities electronically, register electronically, and participate in various modules through the use of WebCT. Internet-based technologies provide an additional opportunity to shift toward a more learner-centered teaching (Kolbo & Tunage, 2002). Using internet-based technology for their own personal development will enable faculty the opportunity to learn the technology as they interact with the various applications available. This, in turn, will enable faculty to be far more likely to actually incorporate the new technologies into their teaching.

As the number of part-time faculty increase across the nation and the number of students increase, community colleges have also been faced with many funding challenges. The challenge to offer a quality faculty salary to recruit good instructors is accompanied with the next challenge, which is to provide faculty with the resources to make them successful. These resources may include quality faculty development activities. As stated by Nwagwu (1998), “…as community college teachers and professors struggle to improve the characteristics and quality of their teaching, most of them view college teaching as becoming more stressful because of a variety of factors including demographic changes, evolving roles and expectations of teachers, institutional demands on conducting research, ineffective reward systems, lack of resources, and support from the college administrators” (p. 12). Rouseff-Baker (2002) purported, “As faculty positions change and colleges grow and adapt with the changing times, faculty improvement is a necessity, not an option” (p. 35).
Faculty development activities in 300 publicly supported two-year colleges were investigated in a study by Grant and Keim (2002). The results of this study failed to concur with previous research that revealed community colleges did not have formal faculty development programs which were not comprehensive and were sometimes described as a smorgasbord of activities which did not include part-time faculty. According to Grant and Keim, programs were shown to be available at nearly all of the two-year colleges in the study, and the activities seemed to be well-planned, coordinated and supported, and included part-time faculty. This research is also important because it highlights ways in which organizations determine faculty development content. Grant and Keim stated, “…it appears that more institutions are making efforts to meet the needs of individual faculty by developing programs that involve different types of activities based on faculty and student needs and demographics” (p. 804).

As described by Claxton (2007), “…teaching practices have to be a central focus in the operation of an organization but many organizations put all of their focus there instead of identifying that changing practices in teaching and learning call for changes in the culture of the institution also” (p. 218). In other words, faculty development workshops should vary from institution to institution based on institutional culture because that culture supports the teaching practice and, thus, the faculty development activities. With changing enrollment patterns, increased requirements for accountability, performance standards, and student learning outcomes, faculty development must go beyond traditional practices with emphasis on teaching and find ways to increase faculty knowledge about the teaching and learning process (Grant & Keim, 2002).
Role of administration

Who is responsible for the continued faculty development at Iowa Community Colleges, and who are the individuals responsible for affecting the culture so that more attention is given to faculty development and all faculty (part time and full time) feel a sense of self-actualization or belonging? Wallin (2003) described a study which surveyed the Presidents of three state colleges to investigate the roles of administration and faculty to ensure quality faculty development activities. The purpose of the study was to outline current faculty development activities and to examine the importance of resources for faculty development as perceived by the colleges’ Presidents. According to Wallin, “Administrators can provide the setting that frees faculty to seek higher meaning and development, but they cannot force improvement, at least not lasting improvement” (p. 320). Three specific actions would motivate faculty to become more involved and satisfied with their professional role: (1) the administration must create a secure environment for faculty development; (2) the administration must embrace two-way accountability; and (3) the administration must make faculty professional development an institutional priority (Wallin, p. 328). Grant and Keim (2002) revealed that many vice-presidents and academic deans suggest that administrators in their positions are the individuals most often recognized as being responsible for faculty development.

Role of faculty

In addition to the need for administration, specifically the chief academic officer, to be involved in faculty development activities, is the need for faculty to be involved and accountable for their own programs. Research indicates that faculty development programs
are more effective when faculty members participate in their design and implementation (Murray 2001). Although faculty members need support from academic administrators, they often resent and resist development activities that are imposed on them. Therefore, faculty-driven programs are more likely to be successful.

In a study of Georgia’s technical colleges by Wallin and Smith (2005), findings indicated that faculty development programs that are offered by “…well-meaning administrators with little or no attention to faculty assessments of their own levels of competence” will not have as significant of an impact as those that are identified as important to faculty (p. 87). Faculty are confident in their contact area and believe they do a good job, and they feel that they are able to identify the activities most important to their success as instructors. This research also indicated that the faculty did believe that a faculty development process was important to their ability to provide instruction at the highest level to their students. Sprouse (2005) identified the need for community college faculty to develop ownership of goals and objectives of their program or plan: “…goals and objectives of a faculty development program or plan provide quality if they were clear, deliberate, and tied to the goals of both faculty and the institution” (p. 23).

**Summary**

The literature reviewed for this study provided many examples for the increased use of part-time faculty in higher education. It also indicated that additional research could be done to better understand the perceptions, attitudes, job satisfaction and professional development needs of this important group. The literature illustrated the importance of
administration, faculty leaders and faculty to have open conversations and work to continually understand of the needs of full and part-time faculty.
CHAPTER 3. METHODOLOGY

Overview

The purpose of this study was to develop a more accurate understanding of the perception, job satisfaction and professional development needs of adjunct faculty at Des Moines Area Community College. This chapter explains the research design of this study. A description of the research questions, population sample, instrumentation, data analysis, and anticipated ethical issues related to the study are presented.

This survey was conducted in conjunction with the Office of Community College Research and Policy (OCCRP) at Iowa State University, Ames, Iowa. The Office of Community College Research and Policy provided support for development of the survey, training on the survey, and the Qualtrics Survey Software used to create and execute the survey. At the completion of this study, all data will be kept on a secure server in the Office of Community College Research and Policy. This survey was developed together with Dr. Steven Schulz, Provost, DMACC Carroll Campus. This research builds on a recent dissertation research by Schulz (2009) regarding the job satisfaction of Iowa Community College Adjunct Faculty. The researcher did not intend to use all of the information collected in the survey for the current study, rather only those variables pertinent to exploring the research questions below pertaining to adjunct faculty at Des Moines Area Community College. The remaining data will be stored by the Office of Community College Research and Policy for future research.

Based on the objectives of this study, the following research questions guided the study:
1. What are the demographic characteristics of current adjunct faculty at Des Moines Area Community College (DMACC)?

2. How do adjunct faculty at DMACC rate their overall job satisfaction?

3. How does job satisfaction of adjunct faculty members at DMACC differ according to their background characteristics of gender, age, racial/ethnic background, marital status and academic discipline?

4. To what extent do adjunct faculty at DMACC respond to questions relating to their participation in professional development?

5. How do DMACC adjunct faculty rate their overall satisfaction/dissatisfaction as it relates to Herzberg’s Motivation Hygiene Theory?

6. To what extent do background characteristics, relationships, benefits, instruction and physical environment factors predict how DMACC adjunct rate their satisfaction in institutional support for teaching improvement and professional development?

7. To what extent do background characteristics, benefits, instruction relationships and physical environment predict overall job satisfaction?

**Research Design**

In order to address the research questions, the researcher, in conjunction with Steven Schulz, created an electronic survey that served as the instrument used to survey the target population. The purpose of conducting the survey was to examine a sample of current DMACC adjunct faculty members so inferences could be made regarding the background characteristics, academic/professional background, instructional responsibilities and
workload, current employment, scholarly activities, other activities, educational goals for students, professional development, academic disciplines, job satisfaction, and opinions.

Throughout the development of the survey the researchers also consulted with experts in the area of research design: Larry Ebbers, University Professor, Department of Educational Leadership and Policy Studies, Iowa State University; Frankie Santos Laanan, Associate Professor, Department of Educational Leadership and Policy Studies, Iowa State University; and Soko Starobin, Assistant Professor, Department of Educational Leadership and Policy Studies, Iowa State University.

After the initial survey was developed, the researchers presented their survey instrument to the Iowa Community College Presidents for their approval. Drafts of the survey instrument were externally reviewed and constructive comments received by two leading researchers with expertise in community college adjunct faculty: Desna Wallin, Associate Professor, Department of Lifelong Education, Administration and Policy, The University of Georgia; and Linda Serra Hagedorn, Director of the Research Institute for Studies in Education at Iowa State University. The survey questions were then entered into the Qualtrics Survey Database which is sponsored by the Office of Community College Research and Policy (OCCRP) at Iowa State University.

A pilot study of this survey was administered online to 20 participants of DMACC’s Adjunct Advantage Professional Development Program. The purpose of this pilot was to collect feedback regarding the format and content of the survey, to ensure an estimated time of completion, and to ensure the survey items were understood by the participants. The information was used to guide the revisions included in the final draft prior to e-mail distribution of the survey.
The pilot survey was sent via email on April 13, 2009 with a letter attached inviting participation in the survey along with specific instructions on how to complete the survey and a phone number and email to call if the participants had questions or concerns. To ensure the integrity of the survey and its results, unique codes were assigned to the individuals in the sample. Both the survey and the data were stored on a secure server with the Office of Community College Research and Policy. Twelve participants responded and submitted the survey, which resulted in a response rate of 60%. There were no changes made to the survey instrument based on the pilot study.

The principal investigators applied for and received project approval from the Iowa State University Institutional Review Board on May 21, 2009. A copy of the approval is provided in Appendix A.

Population and Sample

The population of adjunct faculty targeted for this study will include all adjunct faculty members employed at Des Moines Area Community College during the 2008-2009 Academic Year. Written permission for adjuncts to participate in the Iowa Community College Adjunct Faculty Survey 2009 was granted by the President of Des Moines Area Community College. A copy of the survey appears in Appendix B. The DMACC President was asked to appoint a local facilitator to serve as the designated institutional contact person for the survey. The designated facilitator was asked to provide the principal investigator, Steven Schulz, and the researcher with the institutional data required to distribute the survey. The principal investigator and the researcher requested first names, last names and e-mail addresses of all adjunct faculty members employed at one of Iowa’s fifteen community
colleges during the 2008-2009 Academic Year. This information was provided to the principal investigator and the researcher by the facilitator designated by the President at 14 of the 15 community colleges. One of the colleges required the survey be distributed to the designated facilitator and then he in turn forwarded the survey to the adjunct faculty members at the institution. The final population of the Iowa Community College Adjunct Faculty Survey included all of Iowa’s 15 community colleges and 3,412 adjunct faculty members were eligible to complete the survey. For the purposes of this study, the researcher used only the adjunct faculty members employed at Des Moines Area Community College during the 2008-2009 Academic Year. The final sample was comprised of 930 adjunct faculty members from DMACC eligible to complete the survey.

**Instrumentation**

Data were collected using an original survey instrument, titled The Iowa Community College Adjunct Faculty Survey 2009 (see Appendix B). The 73-item Iowa Community College Adjunct Faculty Survey 2009 was formulated as a result of a review of past survey instruments (NSOPF: 04; CCSSFE, 2008) and previous studies in the area (Hagedorn, 2000; Hardy & Laanan, 2006; Outcalt, 2002; Palmer & Zimbler, 2000; Rifkin, 1998; Valadez & Antony, 2001). The researchers intended for this study to contribute to the existing body of research regarding adjunct faculty experiences in community colleges; therefore, an original survey was created so that new data could be collected from the adjunct faculty in Iowa’s 15 community colleges. The surveys reviewed were used to study adjunct and full-time faculty, including background characteristics, academic/professional background, instructional responsibilities and workload, current employment, institutional resources, scholarly
activities, other activities, educational goals for students, professional development, job satisfaction and opinions. These survey instruments utilized dichotomous responses (i.e., “yes” and “no”) numerical scales and Likert-type rating scales (e.g., “very satisfied, somewhat satisfied, somewhat dissatisfied, very dissatisfied”).

The survey was organized into 12 sections: (1) background characteristics; (2) academic/professional background; (3) instructional responsibilities and workload; (4) current employment; (5) institutional resources; (6) scholarly activities; (7) other activities; (8) educational goals for students; (9) professional development; (10) job satisfaction; (11) opinion; and (12) open ended questions. The following is a description of each section.

1. **Background Characteristics**

This component of the survey asked to provide background information including; gender, age, racial/ethnic background, primary language, marital status and citizenship. The purpose of this section is to gain a better understanding of the demographic make-up of this faculty group and to use the information collected for comparative statistical analyses.

2. **Academic/Professional Background**

Adjunct faculty were asked to provide information regarding their academic/professional background. The rationale for these questions was to collect data that would be helpful in determining the postsecondary education experiences and preparation of the sample. Questions regarding community college student experience, most advanced degree earned and discipline of most advance degree were included in this section.
3. **Instructional Responsibilities and Workload**

In this section, adjunct faculty members were asked to provide information about their principal field or discipline of teaching at their respective institutions during the 2008-09 Academic Year. Additional questions were asked pertaining to instructional workload and instructional deliver method (i.e., Face-to-face vs. Online). Finally, a question was asked to determine if the adjunct instructor taught any remedial/developmental courses. The purpose of this section was to gain insight into the instructional responsibilities of the sample population.

4. **Current Employment**

Questions were asked related to the current employment of adjunct faculty members both inside and outside of the community college setting. The rationale for these questions was to collect data that would be useful in understanding the employment status of adjuncts employed outside of their part-time positions at the community college. In addition, this component was intended to produce data useful in determining why individuals chose to teach on an adjunct basis and if they would have preferred to have had a full-time position during the 2008-09 Academic Year.

5. **Instructional Resources**

Previous research indicates adjuncts were frequently dissatisfied with the lack of institutional resources provided to adjunct faculty members in varying degrees from institution to institution (Fulton 2000, Gappa & Leslie, 1993; Kelly, 1991). Information from this section was included in the survey to gain a better understanding of adjunct faculty satisfaction with the physical resources and support services provided to adjunct faculty members in Iowa’s community colleges.
6. Scholarly Activities

This section asked respondents to identify the amount of time spent per week on research, scholarly writing and other creative products/performances related to their discipline during the 2008-09 Academic Year. Information from this section provided insight into the scholarly commitment of the adjunct faculty in Iowa, not generally required of their instructional assignments or duties.

7. Other Activities

The other activities section asked respondents to indicate, on average, how many hours per week they spent participating in a variety of personal and professional activities. This section was designed to provide insight into the daily schedule and activities of adjunct faculty members in addition to their instructional assignments.

8. Educational Goals for Students

The educational goals for students component was designed to provide insight into the thought processes of adjunct faculty members related to the educational goals of their students. This component included questions about developing the ability to think critically, preparing students for employment after college, providing for students’ emotional development, preparing students for family living, helping students develop personal values, enhancing students’ self understanding, instilling a commitment to community service, preparing students to transfer to a four-year institution, enhancing students’ knowledge of and appreciation for other racial/ethnic groups, promoting the ability to write effectively, helping students evaluate the quality and reliability of information, engaging students in civil discourse and controversial issues, teaching students tolerance and respect for different beliefs,
encouraging students to become agents for social change and promoting lifelong learning.

9. **Professional Development**

This component of the survey was intended to produce data that will guide administrators in planning future professional development activities for adjunct faculty members. Iowa Administrative Code (Chapter 24) requires all adjunct Iowa community colleges to include adjunct instructors in their Quality Faculty Plans by 2011 (Quality Faculty Plan, 2009). Questions in this section asked respondents to identify the workshops/professional activities they have participated in and the usefulness thereof, as well as to identify areas of interest/need for future professional development training.

10. **Job Satisfaction**

This component of the survey contains the variables at the center of this study. The section was intended to produce data that would provide insight into the perception of adjunct faculty members related to job satisfaction. Twenty-four items were included in this section that seek to study and expand on the growing body of job satisfaction research by focusing on contextualizing the experiences of adjunct faculty members at Iowa’s fifteen community colleges.

11. **Opinions**

This section asked participants to respond to a variety of questions related to training, orientation, content, professional development, employment opportunities, advising, working relationships, faculty access, student behaviors, social activities, adjunct faculty rewards, adjunct faculty involvement, etc. The purpose of this section is to
collect data that will better define the thoughts and perceptions of adjunct faculty members on a wide range of topics researchers have found to affect attitudes and job satisfaction.

Open Ended Questions

The survey concludes with two open-ended questions: (1) If you were given the opportunity to provide advice to the administration at this college, what advice for improving the experiences of adjunct faculty would you provide? (2) Describe the professional development experience that would assist you most in becoming a more effective adjunct instructor at this institution. These questions were designed to allow survey respondents the opportunity to share thoughts on issues that were not specifically addressed in the survey. The professional development question was included to gather information that can be used to guide the development of adjunct faculty training and recertification programs.

Data Collection

Qualtrics Survey Software was used to create, distribute, collect and aggregate the data collected for this research. The electronic survey instruments were e-mailed to adjunct faculty members on June 25, 2009. Adjunct faculty members were given a deadline of August 1, 2009 to complete and submit the survey. The instrument was accompanied by a cover letter (see Appendix C) from the principal investigator inviting adjunct faculty members to participate in the study. The e-mail also included the instructions on how to access the survey and contact information for the principal investigator and Iowa State University supervising university faculty member, Larry Ebbers.
In an effort to facilitate a high response rate, four reminder e-mails were sent to non-respondents at intervals over the next four weeks. Contact dates are listed as follows:

- June 25, 2009          Original Survey Mailing
- July 6, 2009           E-mail reminder 1
- July 13, 2009          E-mail reminder 2
- July 20, 2009          E-mail reminder 3
- July 27, 2009          E-mail reminder 4 (Final)

Surveys were completed from June 25, 2009 through August 1, 2009. There were 1,046 surveys started and 943 completed. Survey data were then exported from the Qualtrics Survey Software to Statistical Package for Social Sciences© (SPSS) software and stored on a secure server.

**Population**

Fifteen community colleges in Iowa identified 3,412 adjunct faculty members to be included in this population. Upon arrival of the survey completion deadline, 1,045 participants logged into the survey and started to complete it. Of the 1,045 participants who started to complete the survey, only 943 completed and clicked the submission button at the end of the survey. Several participants were identified as instructors by multiple institutions. Duplicate participants were assigned to the institution where they conducted a majority of their teaching during the 2008-09 academic year.

For the purpose of this survey, respondents who did not complete any of the questions regarding job satisfaction were eliminated from the sample. A final population of 930 participants was included in the data set of the Schulz (2009) Iowa Community College
Adjunct Faculty Survey. For the purpose of this study, of the 930 participants, 605 participants representing Des Moines Area Community College adjunct faculty logged in to the survey and started to complete it. Of this population, 325 participants completed and clicked the submission button at the end of the survey. Table 3.1 illustrates the response rate.

**Data Analysis Procedures**

In an effort to address the research questions, the data analysis procedures that were used in this study included descriptive and inferential statistics to answer the research questions and hypotheses.

**Descriptive statistics**

The Statistical Package for Social Sciences© (SPSS) for Windows software was used to execute the statistical analysis for the study. SPSS is a comprehensive system for analyzing data and provides information on trends, descriptive statistics and complex statistical analyses. In order to address research questions 1-4, descriptive statistics were conducted to determine: demographic, educational background, professional preparation interest in professional development, and overall job satisfaction.

<table>
<thead>
<tr>
<th>Cases</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Eligible Sample</td>
<td>930.00</td>
</tr>
<tr>
<td>Surveys Started</td>
<td>605.00</td>
</tr>
<tr>
<td>Final Sample Size</td>
<td>325.00</td>
</tr>
</tbody>
</table>

Table 3.1. Sample and response rate for Des Moines Area Community College Adjunct Faculty Survey
**Exploratory factor analysis**

In order to address research question five, the researcher used an exploratory factor analysis (EFA). As a data reduction technique, the EFA enabled the researcher to reduce the larger number of variables (23 items selected from the Iowa Community College Adjunct Faculty Survey 2009) into a smaller number of composite variables that could be used as factors or constructs, in further analyses. According to Tabachnick and Fidell, (2007), principal component analysis can be used if scores on numerous variables are available from a group of subjects to develop a small set of components that empirically summarized the correlations among the variables. An exploratory principal-component factor analysis was performed to determine if the 23 variables related to job satisfaction could be grouped reliably into constructs. According to Comrey and Lee (1992): loadings over 0.71 are considered excellent; over 0.63 very good; 0.55 good; 0.45 fair; and 0.32 poor. Cronbach’s alpha \( \alpha \) was then be used to determine the reliability of the analyses. The constructs can be used to conduct linear regression analyses intended to examine the relationship between the constructs (independent variables) and overall job satisfaction (dependent variables). Schulz (2009) performed an exploratory factor analysis and determined constructs necessary for the research on this topic as it pertains to all Iowa Community College Adjunct who responded to the survey; however the researcher is unsure if an EFA will produce the same loadings for this study.

**Analysis of variance (ANOVA)**

Analysis of variance (ANOVA) procedures are appropriate when the independent variable has two or more categories (Mertler & Vannatta, 2002). The ANOVA procedure
will tell the researcher whether or not there is a difference among the groups; however, it will
not indicate which of the groups exhibit the difference. In order to address research questions
six and seven, ANOVA procedures were conducted to assess significant differences between
adjunct satisfaction of teaching improvement and professional development compared to
their gender, race and academic discipline.

Additionally, post hoc Scheffe’ testing were conducted to identify significant
differences between the specific groups. Post hoc tests are additional hypothesis tests that are
done after an ANOVA to determine exactly which mean differences are significant and
which are not and where the differences occur (Gravetter & Wallnau, 2007)

**Ethical Issues**

Participation in the survey was voluntary, and willingness to participate did not have
an effect on the current status of any adjunct faculty member at the community college. E-
mail addresses were retained for any follow-up communication that might be necessary. To
ensure the integrity of the survey and its results, both the survey and the data were stored on
a secure server in the Office of Community College Research and Policy at Iowa State
University for future research.
CHAPTER 4. RESULTS

This chapter provides an overview of the findings from the statistical analyses of the study. It should be noted that on May 21, 2009, the Iowa State University Institutional Review Board required respondents to have the option of not answering questions, thus sample sizes differ on the variables reported in this study. Results containing less than 10 cases/respondents were suppressed to protect any indirect identification of participants.

Demographic Characteristics of DMACC Adjunct Faculty

To better understand the general demographics of adjunct faculty at Des Moines Area Community College (DMACC) who responded to the survey, a profile of age, gender, race/ethnic background, marital status, and educational background was compiled from frequency analysis. Table 4.1 presents a detailed description of the results. The majority of Des Moines Area Community College (DMACC) adjunct faculty in the study sample were female, 54.8% \(n=178\) with males representing 45.2% \(n=147\). The mean age of those participants who responded \(n=325\) to the survey question regarding age was 47.2 years old.

Of the 325 DMACC adjunct faculty responding to the question regarding race/ethnic background, 91.4% \(n=297\) were White/Non Hispanic. Among the 323 DMACC adjunct faculty members responding to the question regarding primary language, 98.5% \(n=318\) selected English. Of the 322 participants responding to the question regarding citizenship, 99.4% \(n=320\) reported being a United States Citizen.

Of the 321 participants responding to the question regarding marital status, 76% \(n=244\) reported being married/living with partner or significant other while 13.1% \(n=42\)
Table 4.1. Demographics

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>N = 325</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>147</td>
<td>45.2</td>
</tr>
<tr>
<td>Female</td>
<td>178</td>
<td>54.8</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>N = 323</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24-29</td>
<td>33</td>
<td>10.2</td>
</tr>
<tr>
<td>30-39</td>
<td>60</td>
<td>18.6</td>
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<tr>
<td>40-49</td>
<td>88</td>
<td>27.3</td>
</tr>
<tr>
<td>50-59</td>
<td>76</td>
<td>23.5</td>
</tr>
<tr>
<td>60 and Older</td>
<td>66</td>
<td>20.4</td>
</tr>
<tr>
<td>Mean Age</td>
<td></td>
<td>47.2</td>
</tr>
<tr>
<td><strong>Race/Ethnic Background</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>N = 325</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alaska Native</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Asian</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Black or African American</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Latino, Hispanic</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Native Hawaiian or Other Pacific islander</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>White, Not Hispanic</td>
<td>297</td>
<td>91.4</td>
</tr>
<tr>
<td>Other</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td><strong>Primary Language</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>N = 323</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>318</td>
<td>98.5</td>
</tr>
<tr>
<td>Spanish</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Other</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>N = 321</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>42</td>
<td>13.1</td>
</tr>
<tr>
<td>Married/Living With Partner or Significant</td>
<td>244</td>
<td>76.0</td>
</tr>
<tr>
<td>Separated, Divorced or Widowed</td>
<td>35</td>
<td>10.9</td>
</tr>
<tr>
<td><strong>U.S. Citizenship</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>N = 322</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>320</td>
<td>99.4</td>
</tr>
<tr>
<td>No</td>
<td>*</td>
<td>*</td>
</tr>
</tbody>
</table>

*Indicates less than 10 respondents were represented.
reported being single. The remaining participants reported being separated, divorced or widowed 10.9% (n=35).

Results shown in Table 4.2 reveal that, of the 325 participants who responded to the question of highest degree completed, 60% (n=195) had reported a Master’s Degree (M.A., M.S., M.Ed., etc.) as their highest degree completed, while only 13.8% (n=45) reported earning a Doctorate (Ph.D., M.D., Ed.D., J.D., etc.). Respondents reporting completing a Bachelor’s degree as their highest degree completed were 19.4% (n=63) of the sample, while 3.4% (n=11) reported an Associate’s degree as their highest degree completed. Respondents were asked to indicate if they had ever enrolled in a community college as a student, 45.7% reported attending a community college as student.

A question was asked to determine the category/area of study that best describes the most advanced degree earned by each respondent. A total of 324 participants responded to this survey question with 51.9% (n=168) reported completing their highest degree in the Arts and Sciences (including postsecondary education degrees), Health Occupations representing 10.5% (n=34), Business and Office, 9% (n=29), and other 23.8% (n=77).

In order to better understand the professional backgrounds of DMACC adjunct faculty, respondents were asked to identify the number of years of teaching experience in a variety of educational settings. When asked to report the number of years respondents had been teaching at DMACC, 54.2% (n=168) reported working 4 years or less, 19.7% (n=61) reported working between 5 and 8 years, with the remaining 26.1% (n=81) reported teaching 9 years or more at DMACC.
Table 4.2. Educational background

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ever Enrolled in Community College as a Student</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>N = 324</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>148</td>
<td>45.7</td>
</tr>
<tr>
<td>No</td>
<td>176</td>
<td>54.3</td>
</tr>
<tr>
<td><strong>Highest Degree Completed</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>N = 325</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doctorate (Ph.D., M.D., Ed.D., J.D., etc.)</td>
<td>45</td>
<td>13.8</td>
</tr>
<tr>
<td>Education Specialist (Ed.S.)</td>
<td>*</td>
<td>1.2</td>
</tr>
<tr>
<td>Master's Degree (M.A., M.S., M.Ed., etc.)</td>
<td>195</td>
<td>60.0</td>
</tr>
<tr>
<td>Bachelor's Degree</td>
<td>63</td>
<td>19.4</td>
</tr>
<tr>
<td>Associate's Degree</td>
<td>11</td>
<td>3.4</td>
</tr>
<tr>
<td>Diploma</td>
<td>*</td>
<td>0.3</td>
</tr>
<tr>
<td>Certificate</td>
<td>*</td>
<td>1.5</td>
</tr>
<tr>
<td>High School Diploma/GED</td>
<td>*</td>
<td>0.3</td>
</tr>
<tr>
<td>Not Applicable</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td><strong>Field/Discipline of Most advanced Degree</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>N = 324</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arts and Science (Includes education degrees)</td>
<td>168</td>
<td>51.9</td>
</tr>
<tr>
<td>Agriculture</td>
<td>*</td>
<td>0.6</td>
</tr>
<tr>
<td>Business and Office</td>
<td>29</td>
<td>9.0</td>
</tr>
<tr>
<td>Family and Consumer Science</td>
<td>*</td>
<td>2.2</td>
</tr>
<tr>
<td>Marketing Education</td>
<td>*</td>
<td>0.9</td>
</tr>
<tr>
<td>Health Occupations</td>
<td>34</td>
<td>10.5</td>
</tr>
<tr>
<td>Trade and Industry</td>
<td>*</td>
<td>1.2</td>
</tr>
<tr>
<td>Other</td>
<td>77</td>
<td>23.8</td>
</tr>
<tr>
<td><strong>Number of Years Teaching at DMACC</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>N = 310</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-4</td>
<td>168</td>
<td>54.2</td>
</tr>
<tr>
<td>5-8</td>
<td>61</td>
<td>19.7</td>
</tr>
<tr>
<td>8 or more</td>
<td>81</td>
<td>26.1</td>
</tr>
</tbody>
</table>

*Indicates less than 10 respondents represented.
To gain a better understanding of the primary teaching assignments of adjunct faculty at DMACC, a majority of the adjunct faculty (n=233) who responded revealed that they teach general education courses. Table 4.3 illustrates the findings.

In an effort to understand the teaching load of the adjunct faculty member in the sample, participants were asked how many courses they taught in each of the areas/disciplines included in the survey. Table 4.4 illustrates the number of adjunct faculty members at DMACC who reported the number of sections taught in each area/discipline.

Table 4.3. Area of primary teaching assignments

<table>
<thead>
<tr>
<th>Area of Teaching</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Education Courses</td>
<td>233</td>
</tr>
<tr>
<td>Developmental /Remedial Courses</td>
<td>120</td>
</tr>
<tr>
<td>Vocational Courses</td>
<td>130</td>
</tr>
<tr>
<td>Non-credit Courses</td>
<td>109</td>
</tr>
<tr>
<td>Other Undergraduate Courses</td>
<td>155</td>
</tr>
<tr>
<td>Other</td>
<td>76</td>
</tr>
</tbody>
</table>

Table 4.4. Adjunct teaching load by area

<table>
<thead>
<tr>
<th>Area of Teaching</th>
<th>Number of Sections Taught by an Adjunct</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
</tr>
<tr>
<td>General Education Courses</td>
<td>59</td>
</tr>
<tr>
<td>Developmental /Remedial Courses</td>
<td>93</td>
</tr>
<tr>
<td>Vocational Courses</td>
<td>85</td>
</tr>
<tr>
<td>Non-credit Courses</td>
<td>95</td>
</tr>
<tr>
<td>Other Undergraduate Courses</td>
<td>65</td>
</tr>
<tr>
<td>Other</td>
<td>61</td>
</tr>
</tbody>
</table>

*Indicates less than 10 respondents represented.
during the 2008-09 Academic Year. For example, 38 adjunct faculty members reported teaching two sections of General Education Courses (see Table 4.4).

Respondents were asked to identify the primary reason they choose to work at their respective community colleges. Of the 84 respondents, 35.7% \( (n=30) \) reported they enjoy the experience followed by 25% \( (n=21) \) they need the extra money, 19.1% \( (n=16) \) reported that they enjoyed the students, 13.1% \( (n=11) \) reported plans to use this experience as a career ladder.

To gain a better understanding of the employment goals of DMACC adjunct faculty, respondents were asked if they would have preferred a full-time position for the 2008-09 Academic Year. A little over half (52%) preferred not to be in a full-time position while 48% would have preferred a full-time position (see Table 4.5).

Table 4.5. Teaching preference

<table>
<thead>
<tr>
<th>Variable</th>
<th>( N )</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primary Reason Teaching as an Adjunct</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( N = 84 )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enjoy the Experience</td>
<td>30</td>
<td>35.7</td>
</tr>
<tr>
<td>Need the Extra Money</td>
<td>21</td>
<td>25.0</td>
</tr>
<tr>
<td>Enjoy the Students</td>
<td>16</td>
<td>19.1</td>
</tr>
<tr>
<td>Plan to use This Experience as a Career Ladder</td>
<td>11</td>
<td>13.1</td>
</tr>
<tr>
<td>Other</td>
<td>*</td>
<td>7.1</td>
</tr>
<tr>
<td><strong>Would you have preferred Full-time Work</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( N = 198 )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>95</td>
<td>48.0</td>
</tr>
<tr>
<td>No</td>
<td>103</td>
<td>52.0</td>
</tr>
</tbody>
</table>
Job Satisfaction

The focus of this study was to expand on previous research related to adjunct faculty job satisfaction by describing more accurately the current job satisfaction of adjunct faculty at DMACC. A section of the Iowa Community College Adjunct Faculty Survey 2009 was devoted to exploring overall job satisfaction more thoroughly. Participants rated 24 job satisfaction items in this section of the survey. Table 4.6 shows the results of the frequency analysis of DMACC adjunct faculty member job satisfaction on the 24 items, including overall job satisfaction. To examine the central tendency of the job satisfaction measured by 23 job satisfaction variables, each items mean was computed to generate an overall mean score for 23 job satisfaction variables. The intent was to compare the overall mean score of the 23 variables with the single question of overall job satisfaction. Values that were assigned to the responses were: (4) very satisfied; (3) satisfied; (2) marginally satisfied; and (1) not satisfied. The overall mean score of the 23 variables was M=2.78. On the single question of overall job satisfaction, the mean score was M=3.05.

Adjunct faculty were most satisfied with the autonomy and independence of their job M=3.50 followed by freedom to determine course content M=3.39, equipment and facilities M=3.15, course assignments M=3.14, and competency of colleagues M=3.13. Adjunct faculty were least satisfied with benefits available M=1.77, institutional funding for professional development M=2.10, prospects for career advancement M=2.20, office/lab space M=2.28 and availability of child care at this institution M=2.40.

In an effort to better understand how levels of job satisfaction of DMACC adjunct faculty members differ according to the background characteristics of gender, age,
Table 4.6. Job satisfaction

<table>
<thead>
<tr>
<th>Variable</th>
<th>Very Satisfied</th>
<th>Satisfied</th>
<th>Marginally Satisfied</th>
<th>Not Satisfied</th>
<th>Responses</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autonomy and Independence</td>
<td>184</td>
<td>121</td>
<td>12</td>
<td>*</td>
<td>323</td>
<td>3.50</td>
</tr>
<tr>
<td>Freedom to Determine Course Content</td>
<td>159</td>
<td>136</td>
<td>24</td>
<td>*</td>
<td>324</td>
<td>3.39</td>
</tr>
<tr>
<td>Course Assignments</td>
<td>101</td>
<td>173</td>
<td>39</td>
<td>*</td>
<td>322</td>
<td>3.14</td>
</tr>
<tr>
<td>Competency of Colleagues</td>
<td>90</td>
<td>184</td>
<td>36</td>
<td>*</td>
<td>316</td>
<td>3.13</td>
</tr>
<tr>
<td>Equipment and Facilities</td>
<td>101</td>
<td>175</td>
<td>36</td>
<td>*</td>
<td>321</td>
<td>3.15</td>
</tr>
<tr>
<td>Relationship With Administrators</td>
<td>115</td>
<td>147</td>
<td>39</td>
<td>23</td>
<td>324</td>
<td>3.09</td>
</tr>
<tr>
<td>Departmental Leadership</td>
<td>122</td>
<td>133</td>
<td>45</td>
<td>23</td>
<td>323</td>
<td>3.10</td>
</tr>
<tr>
<td>Professional Relationship With Other Faculty</td>
<td>104</td>
<td>130</td>
<td>65</td>
<td>22</td>
<td>321</td>
<td>2.98</td>
</tr>
<tr>
<td>Clerical/Administrative Support</td>
<td>71</td>
<td>149</td>
<td>55</td>
<td>36</td>
<td>311</td>
<td>2.82</td>
</tr>
<tr>
<td>Professional Relationship With Other Adjunct Faculty</td>
<td>88</td>
<td>124</td>
<td>78</td>
<td>27</td>
<td>317</td>
<td>2.86</td>
</tr>
<tr>
<td>Support for Teaching Improvement and Professional Development</td>
<td>77</td>
<td>150</td>
<td>64</td>
<td>28</td>
<td>319</td>
<td>2.87</td>
</tr>
<tr>
<td>Teaching Load</td>
<td>48</td>
<td>184</td>
<td>64</td>
<td>27</td>
<td>323</td>
<td>2.78</td>
</tr>
<tr>
<td>Quality of Student</td>
<td>42</td>
<td>192</td>
<td>78</td>
<td>12</td>
<td>324</td>
<td>2.81</td>
</tr>
<tr>
<td>Institutional Support for Implementing Technology-based Instruction</td>
<td>66</td>
<td>154</td>
<td>60</td>
<td>34</td>
<td>314</td>
<td>2.80</td>
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<tr>
<td>Social Relationships With Other Faculty</td>
<td>60</td>
<td>125</td>
<td>92</td>
<td>36</td>
<td>313</td>
<td>2.67</td>
</tr>
<tr>
<td>Social Relationships With Other Adjunct Faculty</td>
<td>58</td>
<td>134</td>
<td>88</td>
<td>36</td>
<td>316</td>
<td>2.68</td>
</tr>
<tr>
<td>Job Security</td>
<td>45</td>
<td>150</td>
<td>68</td>
<td>58</td>
<td>321</td>
<td>2.57</td>
</tr>
<tr>
<td>Salary</td>
<td>37</td>
<td>150</td>
<td>104</td>
<td>32</td>
<td>323</td>
<td>2.59</td>
</tr>
<tr>
<td>Office/Lab Space</td>
<td>29</td>
<td>117</td>
<td>83</td>
<td>86</td>
<td>315</td>
<td>2.28</td>
</tr>
<tr>
<td>Availability of Child Care at this Institution</td>
<td>34</td>
<td>117</td>
<td>59</td>
<td>72</td>
<td>282</td>
<td>2.40</td>
</tr>
<tr>
<td>Prospects for Career Advancement</td>
<td>12</td>
<td>119</td>
<td>96</td>
<td>82</td>
<td>309</td>
<td>2.20</td>
</tr>
<tr>
<td>Institutional Funding of Travel for Professional Development</td>
<td>12</td>
<td>112</td>
<td>73</td>
<td>105</td>
<td>302</td>
<td>2.10</td>
</tr>
<tr>
<td>Benefits Available</td>
<td>12</td>
<td>74</td>
<td>58</td>
<td>169</td>
<td>313</td>
<td>1.77</td>
</tr>
<tr>
<td>Overall Job Satisfaction</td>
<td>84</td>
<td>182</td>
<td>45</td>
<td>11</td>
<td>322</td>
<td>3.05</td>
</tr>
</tbody>
</table>

Note: All items were rated using a 4-point Likert scale: 4=very satisfied; 3=somewhat satisfied; 2=somewhat dissatisfied; 1=very dissatisfied.
racial/ethnic background and marital status, cross tabulations were conducted for the purpose of examining the frequency distributions disaggregated gender, age, race/ethnic background and marital status and overall job satisfaction (see Table 4.7).

When considering gender, 87.5% of the male adjunct faculty subgroup reported an overall job satisfaction rating of satisfied or very satisfied while only 78.6% of the female subgroup reported being satisfied or very satisfied. Sixty-year olds and older reported the highest percentage of responses as satisfied or very satisfied at 86%, followed by 40-49 year-olds at 85%, 50-49 at 84%, 30-39 at 80%, and the lowest percentage reported as satisfied or very satisfied was the 24-29 year-olds at 72%.

When race/ethnic background was examined, 83% of the White, not Hispanic subgroup rated their overall job satisfaction as satisfied or very satisfied. This was slightly higher than the 79% of all other race/ethnic groups combined that reported an overall job satisfaction rating of satisfied or very satisfied.

Marital status was explored, 86% of the subgroup married/living with partner or significant other reported satisfactory or very satisfactory ratings, while 78% of singles reported satisfied or very satisfied, followed by 69% of the separated, divorced or widowed subgroup reported either being satisfied or very satisfied with their adjunct status.

Finally, overall job satisfaction was explored based on the participant’s academic discipline or field of teaching. All of the participants (100%) responding from the family and consumer science and marketing education disciplines reported overall job satisfaction as satisfied or very satisfied, with 94% of participants in the business and office field, 92% of participants in health occupations, 85% of participants in the trade and industry field, and
Table 4.7. Overall job satisfaction by demographic

<table>
<thead>
<tr>
<th>Variable</th>
<th>Very Satisfied</th>
<th>Satisfied</th>
<th>Marginally Satisfied</th>
<th>Not Satisfied</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Job Satisfaction Ratings by Gender ($N = 322$)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>42</td>
<td>84</td>
<td>13</td>
<td>*</td>
<td>139</td>
</tr>
<tr>
<td>Female</td>
<td>42</td>
<td>98</td>
<td>32</td>
<td>*</td>
<td>172</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>311</td>
</tr>
<tr>
<td>Overall Job Satisfaction Ratings by Age ($N = 320$)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24 -29</td>
<td>*</td>
<td>19</td>
<td>*</td>
<td>*</td>
<td>19</td>
</tr>
<tr>
<td>30 -39</td>
<td>16</td>
<td>31</td>
<td>*</td>
<td>*</td>
<td>47</td>
</tr>
<tr>
<td>40 -49</td>
<td>20</td>
<td>55</td>
<td>11</td>
<td>*</td>
<td>86</td>
</tr>
<tr>
<td>50-59</td>
<td>22</td>
<td>42</td>
<td>*</td>
<td>*</td>
<td>64</td>
</tr>
<tr>
<td>60 and Older</td>
<td>22</td>
<td>34</td>
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<td>*</td>
<td>56</td>
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<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>272</td>
</tr>
<tr>
<td>Overall Job Satisfaction Ratings by Race/Ethnic Background ($N = 322$)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Asian</td>
<td>*</td>
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<tr>
<td>Black or African American</td>
<td>*</td>
<td>*</td>
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<td>*</td>
</tr>
<tr>
<td>Latino, Hispanic</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Native Hawaiian or other Pacific islander</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>White, Not Hispanic</td>
<td>80</td>
<td>164</td>
<td>40</td>
<td>10</td>
<td>294</td>
</tr>
<tr>
<td>Other</td>
<td>*</td>
<td>*</td>
<td>*</td>
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<td>*</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>294</td>
</tr>
<tr>
<td>Overall Job Satisfaction Ratings by Marital Status ($N = 318$)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>12</td>
<td>20</td>
<td>*</td>
<td>*</td>
<td>32</td>
</tr>
<tr>
<td>Married/Living with partner or significant other</td>
<td>62</td>
<td>145</td>
<td>28</td>
<td>*</td>
<td>235</td>
</tr>
<tr>
<td>Separated, divorced or widowed</td>
<td>*</td>
<td>14</td>
<td>*</td>
<td>*</td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>281</td>
</tr>
<tr>
<td>Overall Job Satisfaction Ratings Principal Field or Discipline of Teaching ($N = 319$)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arts &amp; Sciences</td>
<td>48</td>
<td>122</td>
<td>37</td>
<td>11</td>
<td>218</td>
</tr>
<tr>
<td>Agriculture</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Business &amp; Office</td>
<td>21</td>
<td>24</td>
<td>*</td>
<td>*</td>
<td>45</td>
</tr>
<tr>
<td>Family &amp; Consumer Science</td>
<td>*</td>
<td>*</td>
<td>0</td>
<td>0</td>
<td>*</td>
</tr>
<tr>
<td>Marketing Education</td>
<td>*</td>
<td>*</td>
<td>0</td>
<td>0</td>
<td>*</td>
</tr>
<tr>
<td>Health Occupations</td>
<td>*</td>
<td>18</td>
<td>2</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Trade &amp; Industry</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>13</td>
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<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>296</td>
</tr>
</tbody>
</table>

*Indicates less than 10 respondents represented.
78% in the arts and sciences field reporting overall job satisfaction as satisfied or very satisfied.

**Professional Development**

In addition to focusing on overall job satisfaction, the purpose of this study was to also focus more specifically on Des Moines Area Community College adjunct faculty interest in professional development activities. A section of the Iowa Community College Adjunct Faculty Survey 2009 was devoted to exploring interest in professional development activities more thoroughly. Participants responded to “yes” or “no” questions relating to their participation in professional development activities that pertained to the following activities: (1) teaching strategies in the classroom; (2) classroom technology; (3) distance education; (4) assessment and test construction; (5) classroom policies and procedures; (6) promoting diversity; and (7) developing administrative skills. Participants were asked if they had participated in each specific professional development activity, if they participated they were then asked if this enhanced their teaching. If they did not participate in the activity, the respondent was asked if they would be interested in participating (see Table 4.8). A description of the professional development programs can be found in Appendix D.

The professional development activities that respondents indicated that they would be interested in participating in are classroom technology (62%), teaching strategies (61%), and distance learning (60%). Fifty-seven percent of respondents indicated that they have participated in a professional development activity for classroom technology, with 89% of those who responded indicated that participation in this activity enhanced their teaching. A similar response was received for the professional development activity dealing with
Table 4.8. Professional development

<table>
<thead>
<tr>
<th>Variable</th>
<th>Have Participated</th>
<th>Did Participation Enhance Teaching</th>
<th>Interested in Participating</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Teaching Strategies</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>179</td>
<td>155</td>
<td>89</td>
<td></td>
</tr>
<tr>
<td>145</td>
<td>24</td>
<td>58</td>
<td></td>
</tr>
<tr>
<td>324</td>
<td>179</td>
<td>147</td>
<td></td>
</tr>
<tr>
<td><strong>Classroom Technology</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>186</td>
<td>163</td>
<td>84</td>
<td></td>
</tr>
<tr>
<td>139</td>
<td>21</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td>325</td>
<td>184</td>
<td>136</td>
<td></td>
</tr>
<tr>
<td><strong>Distance Learning</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>117</td>
<td>105</td>
<td>129</td>
<td></td>
</tr>
<tr>
<td>206</td>
<td>13</td>
<td>89</td>
<td></td>
</tr>
<tr>
<td>323</td>
<td>118</td>
<td>218</td>
<td></td>
</tr>
<tr>
<td><strong>Assessment and Test Construction</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>27</td>
<td>91</td>
<td></td>
</tr>
<tr>
<td>185</td>
<td>8</td>
<td>95</td>
<td></td>
</tr>
<tr>
<td>220</td>
<td>35</td>
<td>186</td>
<td></td>
</tr>
<tr>
<td><strong>Classroom Policies &amp; Procedures</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>144</td>
<td>121</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td>181</td>
<td>19</td>
<td>110</td>
<td></td>
</tr>
<tr>
<td>325</td>
<td>140</td>
<td>180</td>
<td></td>
</tr>
<tr>
<td><strong>Promoting Diversity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>75</td>
<td>65</td>
<td>112</td>
<td></td>
</tr>
<tr>
<td>249</td>
<td>10</td>
<td>134</td>
<td></td>
</tr>
<tr>
<td>324</td>
<td>75</td>
<td>246</td>
<td></td>
</tr>
<tr>
<td><strong>Administrative Leadership</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>9</td>
<td>99</td>
<td></td>
</tr>
<tr>
<td>312</td>
<td>4</td>
<td>211</td>
<td></td>
</tr>
<tr>
<td>324</td>
<td>13</td>
<td>310</td>
<td></td>
</tr>
</tbody>
</table>
teaching strategies with 55% of respondents indicating that they have participated in the professional development activity and 87% of respondents indicating participation in this activity enhanced their teaching. Only 36% of respondents indicated that they have participated in a professional development activity on distance learning, however, of those who did participate 89% indicated that participation in this activity enhanced their teaching.

The percentages were much lower in regard to how participants responded to their interest in participating in professional development activities relating to assessment and test construction (50%), promoting diversity (46%), classroom policies and procedures (39%), and administrative leadership (32%). However, respondents who did participate in these activities felt that participation enhanced their teaching, resulting in the following percentages respectively; test construction (77%), promoting diversity (87%), classroom policies and procedures (86%), and administrative leadership (70%).

**Psychometrics of Iowa Community College Adjunct Faculty Survey**

In order to understand how Des Moines Area Community College adjunct faculty rate their job satisfaction/dissatisfaction as it relates to Herzberg’s Motivation Hygiene Theory, and to answer *Research Question 5: How do adjunct faculty at DMACC rate their level of satisfaction as it relates to Herzberg’s Motivation Hygiene Theory?* an exploratory factor analysis was conducted on the 23 survey items using a principal component extraction and varimax rotation methods from the sample of 325 respondents. The purpose of the exploratory factor analysis was to determine how the job satisfaction variables loaded. Using data extraction techniques, four constructs were identified as a result of using the exploratory factor analysis as a data reduction technique. For this study, factor loadings more than .608
were used to conduct a robust statistical analysis. Cromrey and Lee’s work (as cited in Tabachnick & Fidell, 2007) suggested that loadings in excess of .71 are considered excellent, .63 very good, .55 good, .45 fair, and .32 and below poor. Only one loading fell below the .63 level in this research, indicating that the variables are a pure measure of the factor. The results of the loadings of variable on factors are shown in Table 4.9.

Cronbach’s alpha (α) was used to determine the reliability of the analyses. Ten factors were extracted from the data set due to the low loading values of these variables, thus leaving 12 variables within the constructs with the lowest α resulting from the Cronbach reliability analysis of .617.

Once the exploratory factor analysis was completed, 12 questions remained which were used to create four constructs: (a) relationships, (b) benefits, (c) instruction, and (d) physical environment. The constructs were used to conduct linear regression analyses intended to examine the relationship between the constructs (independent variables) and overall job satisfaction (dependent variables). The researcher concluded that based on the results of the exploratory factor analysis (see Table 4.9), the null hypothesis for Research Question 5 was rejected due to the relationships discovered between both motivator and hygiene factors present, indicated that both types of factors contribute to overall job satisfaction.

Regression Analysis

In order to address Research Question 6: To what extent do background characteristics, relationships, benefits, instruction and physical environment factors predict how DMACC adjunct rate their satisfaction in institutional support for teaching
Table 4.9. Summary of factor loadings

<table>
<thead>
<tr>
<th>Variables</th>
<th>Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Relationships</strong> (a = .933)</td>
<td></td>
</tr>
<tr>
<td>How satisfied are you with the following aspect of your job? How satisfied are you with the following aspect of your job?</td>
<td></td>
</tr>
<tr>
<td>- Social relationships with other adjunct faculty</td>
<td>0.886</td>
</tr>
<tr>
<td>- Social relationships with other faculty</td>
<td>0.870</td>
</tr>
<tr>
<td>- Professional relationships with other adjunct faculty</td>
<td>0.844</td>
</tr>
<tr>
<td>- Professional relationships with other faculty</td>
<td>0.791</td>
</tr>
<tr>
<td><strong>Benefits</strong> (a = .795)</td>
<td></td>
</tr>
<tr>
<td>How satisfied are you with the following aspect of your job? How satisfied are you with the following aspect of your job?</td>
<td></td>
</tr>
<tr>
<td>- Prospects for Career Advancement</td>
<td>0.757</td>
</tr>
<tr>
<td>- Benefits</td>
<td>0.755</td>
</tr>
<tr>
<td>- Job Security</td>
<td>0.704</td>
</tr>
<tr>
<td>- Institutional Funding for travel for professional development</td>
<td>0.608</td>
</tr>
<tr>
<td><strong>Instruction</strong> (a = .694)</td>
<td></td>
</tr>
<tr>
<td>How satisfied are you with the following aspect of your job? How satisfied are you with the following aspect of your job?</td>
<td></td>
</tr>
<tr>
<td>- Autonomy and Independence</td>
<td>0.792</td>
</tr>
<tr>
<td>- Freedom to determine course content</td>
<td>0.774</td>
</tr>
<tr>
<td><strong>Hygiene</strong> (a = .617)</td>
<td></td>
</tr>
<tr>
<td>How satisfied are you with the following aspect of your job? How satisfied are you with the following aspect of your job?</td>
<td></td>
</tr>
<tr>
<td>- Institutional support for implementing technology-based instructional activities</td>
<td>0.744</td>
</tr>
<tr>
<td>- Equipment and facilities available for classroom instruction</td>
<td>0.737</td>
</tr>
</tbody>
</table>

N=325
improvement and professional development? and Research Question 7: To what extent do background characteristics, benefits, instruction relationships and physical environment predict overall job satisfaction? a hierarchical multiple regression analysis was performed for each question. The multiple regressions were run based on DMACC Adjuncts’ self-ratings on the questions related to job satisfaction. Respondents who did not answer any of the job satisfaction questions were excluded resulting in a final sample of 325 adjunct faculty members.

Teaching improvement and professional development

The dependent variable for Research Question 6 multiple regression was institutional support for teaching improvement and professional development. Based on the results of the exploratory factor analysis, four composite variables (relationships, benefits, instruction and physical environment) were computed. A correlation matrix among the independent variables is illustrated in Appendix E-1. The independent variables were gender, age, relationships, benefits, instruction and physical environment. A p-value of <.05 was established for statistical significance. Before each independent variable’s affect can be evaluated on the dependent variable of adjunct satisfaction with institutional support for teaching improvement and professional development, each block’s contribution is first determined in the ANOVA as shown in Table 4.10.

The results of Block 1 (gender and age predicting satisfaction with institutional support for teaching improvement and professional development) are as follows: adjusted $R^2=.006$; sum of squares (SS)=2.860; degrees of freedom (df)=2; mean square (MS)=1.430; $f$-ratio ($F$)=1.881; and statistical significant difference ($p$) .154. Because the $p$-value is
Table 4.10. ANOVA of dependent blocks by institutional support for teaching improvement and professional development

<table>
<thead>
<tr>
<th>Blocks Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>p</th>
<th>r2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Gender, Age</td>
<td>1</td>
<td>2.860</td>
<td>1.430</td>
<td>1.881</td>
<td>0.154</td>
<td>0.006</td>
</tr>
<tr>
<td></td>
<td>279</td>
<td>212.179</td>
<td>0.760</td>
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</tr>
<tr>
<td></td>
<td>281</td>
<td>215.039</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Gender, Age &amp; Benefits</td>
<td>3</td>
<td>44.798</td>
<td>14.933</td>
<td>24.384</td>
<td>0.000*</td>
<td>0.200</td>
</tr>
<tr>
<td></td>
<td>278</td>
<td>170.242</td>
<td>0.612</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>281</td>
<td>215.039</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Gender, Age, Benefits &amp; Instruction</td>
<td>4</td>
<td>58.227</td>
<td>14.557</td>
<td>25.714</td>
<td>0.000*</td>
<td>0.260</td>
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<td></td>
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<td>156.812</td>
<td>0.566</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>281</td>
<td>215.039</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Gender, Age, Benefits &amp; Instruction, Relationships</td>
<td>5</td>
<td>68.371</td>
<td>13.674</td>
<td>25.732</td>
<td>0.000*</td>
<td>0.306</td>
</tr>
<tr>
<td></td>
<td>276</td>
<td>146.668</td>
<td>0.531</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>281</td>
<td>215.039</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Gender, Age, Benefits &amp; Instruction, Relationships, Physical Environment</td>
<td>6</td>
<td>132.276</td>
<td>22.046</td>
<td>73.253</td>
<td>0.000*</td>
<td>0.607</td>
</tr>
<tr>
<td></td>
<td>275</td>
<td>82.763</td>
<td>0.301</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>281</td>
<td>215.039</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N=281; *p<.001

greater than .05, there is not a statistically significant difference in how DMACC adjunct faculty who responded to the survey rate their level of satisfaction with institutional support for teaching improvement and professional development when gender and age are considered.

The results of Block 2 (gender, age and benefits predicting satisfaction with institutional support for teaching improvement and professional development) are as follows: adjusted R² =.200; sum of squares (SS)=44.798; degrees of freedom (df)=3; mean square (MS)=14.933; f-ratio (F)=24.384; and statistical significant difference (p)=.000. Because the p-value is less than .05, a significant amount of the variability in satisfaction with
institutional support and teaching improvement can be explained by the main effects of gender, age, and benefits.

The results of Block 3 (gender, age, benefits and instruction predicting satisfaction with institutional support for teaching improvement and professional development) are as follows: adjusted $R^2=.260$; sum of squares (SS)=58.227; degrees of freedom ($df$)=4; the mean square ($MS$)=14.557; $f$-ratio ($F$)=25.714; and statistical significant difference ($p$)=.000. Because the $p$-value is less than .05, a significant amount of the variability in satisfaction with institutional support and teaching improvement can be explained by the main effects of gender, age, benefits and instruction.

The results of Block 4 (gender, age, benefits, instruction and relationships predicting satisfaction with institutional support for teaching improvement and professional development) are as follows: the adjusted $R^2=.306$; sum of squares (SS)=68.371; degrees of freedom ($df$)=5; the mean square ($MS$)=13.674; $f$-ratio ($F$)=25.732; and statistical significant difference ($p$)=.000. Because the $p$-value is less than .05, a significant amount of the variability in satisfaction with institutional support and teaching improvement can be explained by the main effects of gender, age, benefits, instruction and relationship.

The results of Block 5 (gender, age, benefits, instruction, relationships and physical environment predicting satisfaction with institutional support for teaching improvement and professional development) are as follows: the adjusted $R^2=.607$; sum of squares (SS)=132.276; degrees of freedom ($df$)= 6; mean square ($MS$)=22.046; $f$-ratio ($F$)=73.253; and statistical significant difference ($p$)=.000. Because the $p$-value is less than .05, a significant amount of the variability in satisfaction with institutional support and teaching
improvement can be explained by the main effects of gender, age, benefits, instruction, relationship and physical environment.

The variables that were considered in Block 1 included age and gender; Block 2 added benefits; Block 3 added benefits and instruction; Block 4 added benefits, instruction and relationship variables; and Block 5 added benefits, instruction, relationships, and physical environment variables. The coefficient of determination and adjusted $R^2$ are included in Table 4.10 to indicate how well each block contributes to the variability of adjunct satisfaction with institutional support and teaching improvement. The standardized regression coefficients ($\beta$) are indicated in Table 4.11 to illustrate the relative strength and relationship between the variables included in each block.

Table 4.11 presents the results of the hierarchical analysis complete table unstandardized ($B$) coefficients, standardized ($\beta$) coefficients and standard error ($SE$), and probabilities ($p$). In Block 5, only one composite variable (physical environment) yielded a significant coefficient. This can be interpreted to suggest that DMACC adjunct faculty members who feel satisfied with their physical environment ($\beta=.687, p<.001$) are more likely to feel satisfied with the institutional support for teaching improvement and professional development.

**Overall job satisfaction**

The dependent variable for Research Question 7 multiple regression was overall job satisfaction. Based on the results of the exploratory factor analysis, four composite variables (relationships, benefits, instruction and physical environment) were computed. A correlation matrix among the independent variables is illustrated in Appendix E-2. The independent
Table 4.11. Complete summary of regression analysis for variables predicting satisfaction with institutional support for teaching improvement and professional development

<table>
<thead>
<tr>
<th>Independent Variable Blocks</th>
<th>$B$</th>
<th>$SE$</th>
<th>$β$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Block 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>-0.167</td>
<td>0.105</td>
<td>-0.095</td>
<td>0.114</td>
</tr>
<tr>
<td>Age</td>
<td>0.004</td>
<td>0.004</td>
<td>0.057</td>
<td>0.344</td>
</tr>
<tr>
<td><strong>Block 2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>0.009</td>
<td>0.097</td>
<td>0.005</td>
<td>0.922</td>
</tr>
<tr>
<td>Age</td>
<td>0.004</td>
<td>0.004</td>
<td>0.052</td>
<td>0.333</td>
</tr>
<tr>
<td>Benefits</td>
<td>0.121</td>
<td>0.015</td>
<td>0.453*</td>
<td>0.000</td>
</tr>
<tr>
<td><strong>Block 3</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>-0.002</td>
<td>0.093</td>
<td>-0.001</td>
<td>0.981</td>
</tr>
<tr>
<td>Age</td>
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<td>0.004</td>
<td>0.044</td>
<td>0.390</td>
</tr>
<tr>
<td>Benefits</td>
<td>0.091</td>
<td>0.015</td>
<td>0.338*</td>
<td>0.000</td>
</tr>
<tr>
<td>Instruction</td>
<td>0.145</td>
<td>0.030</td>
<td>0.275*</td>
<td>0.000</td>
</tr>
<tr>
<td><strong>Block 4</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>-0.013</td>
<td>0.090</td>
<td>-0.008</td>
<td>0.882</td>
</tr>
<tr>
<td>Age</td>
<td>0.003</td>
<td>0.004</td>
<td>0.038</td>
<td>0.448</td>
</tr>
<tr>
<td>Benefits</td>
<td>0.068</td>
<td>0.016</td>
<td>0.253*</td>
<td>0.000</td>
</tr>
<tr>
<td>Instruction</td>
<td>0.102</td>
<td>0.030</td>
<td>0.193*</td>
<td>0.001</td>
</tr>
<tr>
<td>Relationships</td>
<td>0.068</td>
<td>0.016</td>
<td>0.258*</td>
<td>0.000</td>
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<tr>
<td><strong>Block 5</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>0.010</td>
<td>0.068</td>
<td>0.006</td>
<td>0.886</td>
</tr>
<tr>
<td>Age</td>
<td>0.002</td>
<td>0.003</td>
<td>0.033</td>
<td>0.378</td>
</tr>
<tr>
<td>Benefits</td>
<td>0.021</td>
<td>0.012</td>
<td>0.078</td>
<td>0.091</td>
</tr>
<tr>
<td>Instruction</td>
<td>0.026</td>
<td>0.023</td>
<td>0.050</td>
<td>0.267</td>
</tr>
<tr>
<td>Relationships</td>
<td>0.014</td>
<td>0.012</td>
<td>0.054</td>
<td>0.243</td>
</tr>
<tr>
<td>Physical Environment</td>
<td>0.232</td>
<td>0.016</td>
<td>0.687*</td>
<td>0.000</td>
</tr>
</tbody>
</table>

$N = 281$; *$p<.001$

variables were gender, age, relationships, benefits, instruction and physical environment. A

$p$-value of <.05 was established for statistical significance. Before each independent

variable’s effect can be evaluated on the dependent variable, an overall block contribution is

first determined in the ANOVA (see Table 4.12).
Table 4.12. ANOVA of dependent blocks for overall job satisfaction

<table>
<thead>
<tr>
<th>Block</th>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>p</th>
<th>r²</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Gender, Age</td>
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<td>4.934</td>
<td>2.467</td>
<td>4.719</td>
<td>.010</td>
<td>.026</td>
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<tr>
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<td></td>
<td>277</td>
<td>144.834</td>
<td>.523</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>279</td>
<td>149.771</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Gender, Age &amp; Benefits</td>
<td>3</td>
<td>71.646</td>
<td>23.882</td>
<td>84.370</td>
<td>.000</td>
<td>.473</td>
</tr>
<tr>
<td></td>
<td></td>
<td>276</td>
<td>78.125</td>
<td>.283</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td>279</td>
<td>149.771</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Gender, Age, Benefits &amp; Instruction</td>
<td>4</td>
<td>86.055</td>
<td>21.514</td>
<td>92.854</td>
<td>.000</td>
<td>.568</td>
</tr>
<tr>
<td></td>
<td></td>
<td>275</td>
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<td>.232</td>
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<td></td>
<td>279</td>
<td>149.771</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Gender, Age, Benefits &amp; Instruction,</td>
<td>5</td>
<td>87.810</td>
<td>17.562</td>
<td>77.660</td>
<td>.000</td>
<td>.579</td>
</tr>
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<td>Relationships</td>
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<td>.226</td>
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<td></td>
<td></td>
<td>279</td>
<td>149.771</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Gender, Age, Benefits &amp; Instruction,</td>
<td>6</td>
<td>91.370</td>
<td>15.228</td>
<td>71.186</td>
<td>.000</td>
<td>.601</td>
</tr>
<tr>
<td></td>
<td>Relationships, Physical Environment</td>
<td>273</td>
<td>58.401</td>
<td>.214</td>
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<tr>
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<td>279</td>
<td>149.771</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N=279

The results of Block 1 (gender and age predicting overall job satisfaction) are as follows: adjusted R²=.026; sum of squares (SS)=4.934; degrees of freedom (df)=2; mean square (MS)=2.467; f-ratio (F)=4.719; and statistical significant difference (p) .010. Because the p-value is less than .05, there is a statistically significant difference on how DMACC adjunct faculty who responded to the survey rated their overall job satisfaction when gender and age are considered.

The results of Block 2 (gender, age and benefits predicting overall job satisfaction) are as follows: adjusted R²=.473; sum of squares (SS)=71.646; degrees of freedom (df)=3; mean square (MS)=23.882; f-ratio (F)=84.370; and statistical significant difference (p)=.000. Because the p-value is less than .05, a significant amount of the variability in overall job satisfaction can be explained regarding the effects of gender, age, and benefits.
The results of Block 3 (gender, age, benefits and instruction predicting overall job satisfaction) are as follows: adjusted $R^2=.568$; sum of squares (SS)=86.055; degrees of freedom (df)=4; mean square (MS)=21.514; $f$-ratio ($F$)=92.854; and statistical significant difference ($p$)=.000. Because the $p$-value is less than .05, a significant amount of the variability in overall job satisfaction can be explained regarding the effects of gender, age, benefits, and instruction.

The results of Block 4 (gender, age, benefits, instruction and relationships) predicting overall job satisfaction: adjusted $R^2=.579$; sum of squares (SS)=87.810; degrees of freedom (df)=5; mean square (MS)=17.562; $f$-ratio ($F$)=77.660; and statistical significant difference ($p$)=.000. Because the $p$-value is less than .05, a significant amount of the variability in overall job satisfaction can be explained regarding the effects of gender, age, benefits, instruction, and relationship.

The results of Block 5 (gender, age, benefits, instruction, relationships and physical environment predicting overall job satisfaction) are as follows: adjusted $R^2=.601$; sum of squares (SS)=91.370; degrees of freedom (df)=6; mean square (MS)=15.228; $f$-ratio ($F$)=71.186; and statistical significant difference ($p$)=.000. Because the $p$-value is less than .05, a significant amount of the variability in overall job satisfaction can be explained regarding the effects of gender, age, benefits, instruction, relationships, and physical environment.

The variables that were considered were: Block 1 (age and gender); Block 2 (added benefits); Block 3 (added benefits and instruction); Block 4 (added benefits, instruction, and relationship variables); and Block 5 (added benefits, instruction, relationships, and physical environment variables). The coefficient of determination, adjusted $R^2$ are included in Table
4.12 to indicate how well each block contributed to the variability of overall adjunct satisfaction. The standardized regression coefficients ($\beta$) are indicated in Table 4.13 to illustrate the relative strength and relationship between the variables included in each block.

Table 4.13 presents the results of the hierarchical analysis complete table unstandardized ($B$) coefficients, standardized ($\beta$) coefficients and standard error ($SE$), and probabilities ($p$). In Block 5, four significant composite variables (age, benefits, instruction, and physical environment) revealed the highest coefficients wherein all others revealed lower coefficients. This can be interpreted to suggest that factors affecting overall job satisfaction of DMACC adjunct faculty members include: age ($\beta=.091, p<.018$); satisfaction with benefits ($\beta=.448, p<.001$); instruction ($\beta=.260, p<.001$); and physical environment ($\beta=.194, p<.001$).

**Summary**

Based on the results of the exploratory factor analysis, four composite variables (relationships, benefits, instruction and physical environment) were computed. The independent variables were gender, age, relationships, benefits, instruction and physical environment. The survey respondents’ ratings on satisfaction with institutional support for teaching improvement and professional development and how job satisfaction was perceived overall were regressed on six independent variables associated with job satisfaction. The six independent variables accounted for 61.5% of the variance explained in the regression model pertaining to institutional support for teaching improvement and professional development; and 50% of the variance explained in the regression model pertaining to overall job satisfaction and both were statistically significant at the last step. Based on the results of the
Table 4.13. Summary of regression analysis for variables predicting overall job satisfaction

<table>
<thead>
<tr>
<th>Independent Variable Blocks</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$B$</td>
<td>$SE$</td>
<td>$\beta$</td>
<td>$p$</td>
</tr>
<tr>
<td><strong>Block 1</strong></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Gender</td>
<td>-0.190</td>
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<td>0.031</td>
</tr>
<tr>
<td>Age</td>
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<td>0.004</td>
<td>0.114</td>
<td>0.057</td>
</tr>
<tr>
<td><strong>Block 2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td>0.027</td>
<td>0.066</td>
<td>0.018</td>
<td>0.687</td>
</tr>
<tr>
<td>Age</td>
<td>0.006</td>
<td>0.003</td>
<td>0.102*</td>
<td>0.020</td>
</tr>
<tr>
<td>Benefits</td>
<td>0.153</td>
<td>0.010</td>
<td>0.684***</td>
<td>0.000</td>
</tr>
<tr>
<td><strong>Block 3</strong></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Gender</td>
<td>0.018</td>
<td>0.060</td>
<td>0.012</td>
<td>0.761</td>
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<tr>
<td>Age</td>
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<td>0.002</td>
<td>0.096*</td>
<td>0.016</td>
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<tr>
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<td>0.121</td>
<td>0.010</td>
<td>0.540***</td>
<td>0.000</td>
</tr>
<tr>
<td>Instruction</td>
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<td>0.342***</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td>0.821</td>
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<td>Age</td>
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<td>0.002</td>
<td>0.093*</td>
<td>0.019</td>
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<td>0.497***</td>
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<td>Instruction</td>
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<td>0.000</td>
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<tr>
<td>Relationships</td>
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<td>0.010</td>
<td>0.129**</td>
<td>0.006</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td>0.751</td>
</tr>
<tr>
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<td>0.006</td>
<td>0.002</td>
<td>0.091*</td>
<td>0.018</td>
</tr>
<tr>
<td>Benefits</td>
<td>0.101</td>
<td>0.010</td>
<td>0.448***</td>
<td>0.000</td>
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<tr>
<td>Instruction</td>
<td>0.114</td>
<td>0.020</td>
<td>0.260***</td>
<td>0.000</td>
</tr>
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</tr>
<tr>
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<td>0.055</td>
<td>0.013</td>
<td>0.194***</td>
<td>0.000</td>
</tr>
</tbody>
</table>

$N = 279; *p <.05, **p<.01, ***p<.001$

regression models, the researcher concluded the following. The null hypothesis for Research Question 6 (*There are no variables found in this study that can be used to predict adjunct satisfaction in teaching improvement and professional development*) was rejected. The findings revealed a relationship between independent variables and the dependent variable teaching improvement and professional development. The null hypothesis for Research
Question 7 (There are no variables found in this study that can be used to predict overall job satisfaction) was rejected. The findings revealed a strong relationship between independent variables and dependent variable, overall job satisfaction.
CHAPTER 5. SUMMARY AND DISCUSSION

This chapter presents a summary of the major findings, relationships to existing studies, limitations of the study, implications for future research, and overall significance of the study. The Iowa Community College Adjunct Faculty Survey 2009 was used to examine the current level of adjunct faculty job satisfaction of Iowa’s 15 community colleges. This study used the survey instrument to better understand not only job satisfaction but also gain insight into the demographics and interests in professional development of the 325 adjunct faculty at Des Moines Area Community College who responded to the survey. This survey was the first formal attempt to collect data regarding DMACC’s adjunct faculty.

For purposes of the survey, respondents who did not complete questions regarding job satisfaction were eliminated from the sample. Three hundred twenty-five participants representing Des Moines Area Community College remained in the sample, for a 35% return rate.

After the data were cleaned, descriptive statistics, exploratory factor analyses, and multiple regression analyses were conducted in an effort to gain new insight into the variables affecting job satisfaction. Participants were asked to respond to 24 questions relating to job satisfaction, including overall satisfaction.

Results from this study provide a more accurate understanding of the job satisfaction; perception and professional development needs of adjunct faculty at Des Moines Area Community College and builds upon the work of Steven Schulz to compare DMACC adjunct faculty job satisfaction to adjunct faculty from all of Iowa’s Community Colleges. This
research sought to identify the relationship between the job satisfaction variables identified in the Iowa Community College Adjunct Faculty Survey 2009.

Results from this study are intended to provide useful information to inform administrators, policymakers and individuals who work directly with adjunct faculty at DMACC. For example, with the increasing usage of adjunct faculty at DMACC and across the State of Iowa, administrators at DMACC and representatives from the Department of Education may use this information to better understand professional development needs of adjunct faculty.

**Demographic Characteristics**

To establish a general demographic profile of current adjunct faculty at Des Moines Area Community College, the first research question was designed to differentiate adjunct faculty by age, gender, race/ethnic background and marital status and academic discipline. The second and third research questions respectfully were designed to indicate how adjunct faculty at DMACC rate their overall job satisfaction and how job satisfaction differs according to their background characteristics.

**Age**

The average age of the participants in the sample was 47.2 years old. The average age of part-time instructors nationally in 2004 was 49.2 (NSOPF: 04) and the average age of the participants in the Iowa Community College Adjunct Faculty Survey 2009 was 47.4 years old (Schulz, 2009, p. 59). Ages ranged from 22-74 years old, with a little over half (50.8%) of those responding to the survey reported being between the ages of 40 and 59 years old, and 20.4% of the respondents being over 60 years old.
Gender

Results from the DMACC sample indicated in terms of gender, 54.8% of the adjunct faculty members at DMACC were female. National data (NSOPF: 04) indicates 52.3% of adjunct instructors in public associate degree institutions are female while Schulz (2009) reports that nearly 60% of the adjunct faculty members in Iowa during the 2008-09 Academic Year were female (p. 59).

Race/Ethnic Background

As revealed by Schulz (2009), the sample of all Iowa Community College Adjunct Faculty reported as white, not-Hispanic was 95%, similar to 91.4% of the sample of DMACC adjunct faculty. According to the U.S. Census Bureau (2009), 10.7% of Iowa’s population were non-white, while 11% of the community college population were non-white (Fall Enrollment Report, 2008). As illustrated by Shaw, Valadez, and Rhoads (1999), over the last few decades community colleges have become institutions of open access, educating a more diverse, under-represented population of students with a wide variety of needs. These results indicate that community colleges need to increase the number of adjunct faculty members representing minority status to more accurately reflect Iowa’s general population. As stated by Rendon (1999), the true multicultural community college fosters an environment in which a diverse body of students is encouraged to build social and emotional capital, and its faculty and staff are representation of different cultures. Increasing the number of adjunct faculty from minority groups would serve as a positive step in providing an environment welcoming to diverse students.
**Marital Status**

Married/living with a partner accounted for 76% of the participants responding to the question regarding marital status followed by 13.1% reporting as single and 10.9% reporting being separated, divorced or widowed. When reporting on marital status, Schulz (2009) noted very similar percentages, with 77% as married/living with a partner, 12.6% reporting as single and 10.2% reporting separated, divorced or widowed. When comparing job satisfaction and marital status, the research indicated that 86% married/living with a partner were satisfied or very satisfied, followed by single 78% and divorced or widowed 69%. This supports research findings by Schulz (2009) and Hagedorn (2000) that married faculty reported higher levels of job satisfaction than either single or divorced counterparts. Schulz (2009) found 86.9% of married/living with a partner were as satisfied or very satisfied, single 78.3%, and divorced and widowed 77.7%, respectively.

**Academic Discipline**

When examining job satisfaction related to the adjuncts’ principal field or discipline of teaching the research from this study indicated that 100% of the respondents from the family and consumer science and marketing education disciplines reported overall job satisfaction as satisfied or very satisfied, with 94% of participants in the business and office field, 92% of participants in health occupations, 85% trade and industry, and 78% arts and sciences field reporting overall job satisfaction as satisfied or very satisfied. Looking at the satisfaction of adjunct faculty in arts and sciences, the study revealed that 17% of the respondents reported being marginally satisfied. This information should inform college administrators to examine more closely the job satisfaction of adjuncts in the arts and sciences fields.
Overall Job Satisfaction

As stated previously, the first and second research questions in this study addressed how DMACC adjunct faculty responded to questions related to their job satisfaction and how these responses differentiated based on their demographic characteristics. However, demographic characteristics alone do not explain the variability in how adjuncts reported their job satisfaction. A key piece to this research study was to further examine the adjunct faculty’s responses to specific job satisfaction questions and overall job satisfaction.

Respondents were asked to rate their overall job satisfaction on a Likert scale: (4) very satisfied; (3) satisfied; (2) marginally satisfied; and (1) not satisfied. DMACC adjunct faculty reported an overall mean score of M=3.05, which suggests that adjunct faculty responding to this study were either satisfied or very satisfied overall. Schulz (2009) received a strikingly similar response with a survey response from all of Iowa’s community college adjuncts, with an overall mean score of M=3.06. Further breakdown of the results indicated that adjuncts responding to the survey were most satisfied with autonomy and independence of their job (M=3.50), followed by freedom to determine course content (M=3.39), equipment and facilities (M=3.15), course assignments (M=3.14), and competency of colleagues (M=3.13). Adjuncts were least satisfied with benefits available (M=1.77), institutional funding for professional development (M=2.10), prospects for career advancement (M=2.20), office/lab space (M=2.28), and availability of child care (M=2.40).

Herzberg (1959/1968) stated the need for people to be intrinsically motivated by interesting work, challenge, recognition of achievement, growth, and increased responsibility. Wallin (2003) also advocated the need for “…well-prepared, high performing, intrinsically motivated faculty (p. 224). The results of the current research support that
DMACC adjuncts are satisfied with what Herzberg would consider motivational factors: autonomy, freedom to determine course content, equipment and facilities, and course assignments. Findings from this research also revealed variables causing the least amount of satisfaction of DMACC’s adjunct faculty, which could be defined as hygiene factors by Herzberg (1959/1968). Adjuncts were least satisfied with benefits, institutional funding for professional development, prospects for career advancement, office/lab space, and availability of child care. Herzberg (1968/2003) explained that improving hygiene factors alone does not necessarily improve overall job satisfaction but, when blocked with motivational factors, these factors do positively affect overall job satisfaction. If Herzberg is correct, the research from this study illustrates that college leaders should place greater emphasis in strengthening the motivational factors mentioned previously while, at the same time, do more for adjuncts to improve their hygiene factors such as benefits, funding for professional development, funding supporting professional development, as well as provide adjuncts with prospects for career advancement.

A vast majority of the research in this study focused on sorting job satisfaction variables to align with Herzberg’s Motivation Hygiene theory. An exploratory factor analysis was conducted to determine how the 23 job satisfaction variables loaded. The four constructs created from this analysis were: relationships, benefits, instruction, and physical environment. These constructs contained 12 of the 23 variables related to job satisfaction. These four constructs were compressed into four blocks with two demographic variables (gender and age) defining the fifth block. These blocks served as the independent variables and teaching improvement and professional development and overall job satisfaction were used as the dependent variables respectively in the regression model. The purpose of the
blocks was to build a more comprehensive analysis by applying Herzberg’s Motivation Hygiene for the purposes of this study.

In predicting satisfaction in institutional support for teaching improvement and professional development, the variables that were added in each step of the model increased the significance. The second step increased the variance explained in the regression model, by adding benefits and instruction variables, the adjusted $R^2$ increased from .006 in step one to .200 in step two. These variables can be used to predict 20.0% of the variability in institutional support for teaching improvement and professional development. Step three and step four continued to explain more variability with the final adjusted $R^2$ at step five being .615.

In predicting overall job satisfaction, the variables that were added in each step of the model also increased the significance. The second step increased the variance explained in the regression model, by adding benefits and instruction, the adjusted $R^2$ increased from .026 in step one to .473 in step two. These variables can be used to predict 47.3% of the variability in overall job satisfaction. Step three and four continued to explain more variability with the final adjusted $R^2$ at step five at .601.

Results from both regressions indicate that each model constructed is statistically significant at the $p<.001$ level. Adjusted $R^2$ provides the most robust measure of how variance is explained. As mentioned heretofore, both regression models increased as each step was added. The final adjusted $R^2$ represents all 12 variables and explains 61.5% of the variability related to institutional support for teaching improvement and professional development. Similarly, the final adjusted $R^2$ represents all 12 variables and explains 60.1% of the variability related to overall job satisfaction. Considering the vast amount of variables
included in each regression model and the ability to explain 61.5% and 60.1% of the variability, respectively, this indicates relative strength of the relationships between variables and the predictive power of both models.

Schulz (2009) indicated the opportunity for colleges to address the motivator factors that were not rated as highly, such as prospects for career advancement, teaching load and support of teaching improvement and professional development of all Iowa community college adjunct faculty and that, by focusing efforts to improve job satisfaction on motivational factors, long-term satisfaction is more likely to occur. Results of this study support Schulz’s statement—motivator factors such as prospects for career advancement, institutional support for teaching improvement and professional development were not rated as highly. Schulz (2009) also found that Iowa’s community college adjunct faculty rated a majority of hygiene factors below the satisfied level, specifically, benefits available, institutional funding for professional development and equipment, and facilities. Results from this study revealed that DMACC adjunct faculty members who felt satisfied with hygiene factors (physical environment) would be more likely to feel satisfied with the institutional support for teaching improvement and professional development. Findings also suggested that DMACC adjunct faculty who felt satisfied with these same hygiene factors (physical environment) are also more likely to feel satisfied overall. Results from this study support Schulz’s (2009) recommendation that improving these hygiene factors would result in DMACC’s adjunct faculty to experience less job dissatisfaction.
Limitations

Several limitations should be addressed when considering the results and findings of this study. First, the survey instrument was distributed after the conclusion of the traditional Spring 2008 semester which could have limited the responses received. Second, the survey instrument was administered electronically which could have limited control of the responses received. This data collecting technique does not enable the researcher to control the willingness, interest, and ability of the participants to respond accurately to all questions. Third, the study was limited to only adjunct faculty at DMACC who chose to respond to the Iowa Community College Adjunct Faculty Survey 2009. The results of this study do not provide information about the adjunct faculty members who chose not to respond; and, therefore, they are limited to the bias of those who did choose to respond. Fourth, the study relied on voluntary participation from those who received the survey via e-mail. Finally, this study was cross-sectional in nature. Respondents were asked to reflect on their satisfaction of past and current experiences which does not allow the researcher the opportunity to examine changes over time.

Implications

Federal and state policy

The increased use of adjunct faculty at Des Moines Area Community College and challenges about how to support this growing population continue to be a topic of concern for administrators at DMACC and across the entire state and nation. Results from this study raised questions for the researcher, specifically about the necessity and type of support necessary for adjuncts, and should raise numerous questions that will deserve the attention of
researchers in the future as well. Findings from this study have implications at the state/federal policy and institutional levels, and for practice.

As enrollment has grown at Des Moines Area Community College while financial resources have decreased, the college (like many in the state and nation) will continue to hire more adjunct faculty. Therefore, administration and faculty leadership must be aware of the basic demographic characteristics of this population. Administration and faculty leaders need to understand the amount of sections being taught by adjunct faculty compared to their full-time counterparts, and understand more about the professional preparedness and teaching experience that adjunct faculty possess; and, with these factors, the amount of support that is provided to adjunct faculty in comparison to full-time faculty.

At the state and federal level, college administrators need to do more to make policy leaders aware of their actions; more specifically, the consistent lack of funding that has forced the institution to hire more and more adjunct faculty. Administrators and faculty leaders should provide policy leaders information each year about the demographic breakdown of adjunct faculty, the amount of pay per credit load hour as compared to their full-time counterparts, and the staffing patterns exhibited. Local, state and federal leaders should evaluate this information and consider offering benefits to adjunct faculty and rewarding long-time adjunct faculty for their experience.

The hiring of adjunct faculty at Des Moines Area Community College and across the State of Iowa and nation is often done at the last minute as a result of increased enrollment in a specific section or sections right before the semester starts. Often, this last minute hiring need does not require enough hours to seek a full-time faculty member and, due to the lack of timing, the College’s typical hiring process is avoided. Considering community colleges need
to increase the number of adjunct faculty members representing minority status to more accurately reflect not only Iowa’s general population but also the community college’s student population, local, state and federal leaders need to keep in mind policy language that would require institutions to adhere to the same hiring regulations as when hiring full-time faculty.

Recently, the Iowa Legislature made a significant move forward in acknowledging the importance of adjunct faculty when mandating that adjuncts be included in each institution’s Quality Faculty Plan by 2011. Challenges surrounding the types of professional development needs of adjunct faculty continue to be a concern for State, Federal and Local institutions and the Department of Education. Results from this study indicate that adjunct faculty members are interested in professional development and these types of professional development activities will have a positive effect on their job satisfaction (Herzberg 1968/2003).

**Institution**

The findings expressed previously have touched upon what Des Moines Area Community College administrators and faculty leaders could do to meet the needs of adjunct faculty members. In addition to what has already been mentioned, the researcher recommends that the institution provide this survey on an annual basis in order to benchmark current job satisfaction and track changes over time. Similar to findings by Schulz (2009), this study also suggests that the institution explore more closely policies and working conditions that lead to dissatisfaction. Based on the results of this research, salary, office/lab
space, availability of child care, prospects for career advancement, funding for professional development, and benefits available represent hygiene factors that deserve consideration.

Des Moines Area Community College continues to provide more professional development support for their adjuncts each year. It is the only community college in the State to provide a professional development certificate program each year. Findings from this study suggest that DMACC improve access of and institutional funding for professional development activities for all adjunct faculty. It is recommended that the College use the Iowa Community College Adjunct Faculty Survey 2009 to track responses annually of the professional development questions in particular to understand the types of professional development activities requested.

**Practice**

The findings of this research not only supported the findings of Herzberg, but also the findings of Schulz (2009). Wallin (2005) also supported Herzberg’s findings, that part-time faculty are more likely to be motivated internally than externally. It is these findings that suggest that college leaders must do more to understand the professional development needs and job satisfaction of their adjunct faculty. In researching these areas each year, the college would be able to provide benchmarks for future studies. The results from this survey can help drive decisions made by administrators and faculty leaders at DMACC along with the decisions driving the actions of DMACC’s newly created District-wide Adjunct Faculty Committee. In addition to examining professional development needs, college leaders should evaluate adjunct orientation and evaluation practices to provide more resources and actions to support adjunct achievement, recognition, and growth.
The results from this study revealed dissatisfaction with the benefits, salary and institutional funding for professional development received by adjuncts at DMACC. Kelly (1991) and Fulton (2000) exclaimed the frustrations that adjunct faculty experience and feel about their low salaries, lack of benefits, lack of development programs, and some even lack of office/lab space. It is recommended that college leaders do more to address these areas causing dissatisfaction.

Findings from this study indicate that adjunct faculty members at DMACC were satisfied overall but were least satisfied with the institutional support for teaching improvement, and professional development and the institutional funding for professional development. By surveying DMACC adjunct faculty on an annual basis, administration can collect feedback that represent the most current adjunct faculty members’ perceptions and needs related to the overall environment and in regard to professional development. The institution may use future studies that are more longitudinal in nature to measure the change of adjunct faculty satisfaction in professional development over time. This information can be used to inform those responsible for developing professional development programs at the institution each year.

**Recommendations for Future Research**

The number of adjunct faculty members employed at Des Moines Area Community College, and throughout the state and nation will continue to continue to increase. The literature included in this study addressed the declining resources of community colleges, the need to manage their resources more efficiently, and how these factors have been attributed to an increase in the number of adjunct faculty hired. Results from this study raise numerous issues that warrant future research.
Additional research is necessary to look more closely at how the adjuncts’ principal field or discipline of teaching affects their job satisfaction and why. It would also be significant to determine how professional development needs vary based upon the adjuncts’ principal field or discipline of teaching. In my role as Associate Executive Director of Human Resources at DMACC it would be beneficial to acquire more information about adjunct professional development needs, in particular, to ensure that the programs that I develop are appropriate for all faculty members. The questions in this survey instrument would need to be revised to look at this information more effectively as the current survey instrument does not provide effective data in regard to examining professional development needs more specifically.

The study did not address the actual cost of hiring an adjunct faculty member, the amount of time and money spent in hiring a part-time faculty member as compared to a full-time faculty or the cost of making the wrong hire. Human Resource Directors must work with those who hire and evaluate adjunct faculty to ensure that adjuncts are treated fairly and equitably. As federal, state and local leaders continue to evaluate the treatment of adjunct faculty and consider providing not only more opportunities for professional development but also improving salaries and providing benefits, the cost should be compared to that of hiring a full-time faculty member.

Additional research might also be beneficial in comparing full-time faculty job satisfaction and interest in professional development to their part-time counterparts. It would be cost effective for the institution to provide professional development programs that fit the needs of both full-time and part-time faculty. DMACC adjunct faculty were reasonably satisfied with their professional relationships with other faculty and other adjunct faculty,
providing professional development programs together may only increase adjunct faculty satisfaction.

Finally, incorporating a qualitative component would serve as benefit in future research of job satisfaction and professional development needs of adjunct faculty. This process would enable the researcher to collect additional data that were not accessible through the electronic survey method. This process may provide more substantial information, especially as it relates to adjuncts’ professional development needs by allowing them to elaborate on not only the types of professional development topics but also the methods of delivery that work best.

**Final Thoughts**

Over the past few decades institutions of higher education have increased their dependence on part-time faculty members (Gappa & Leslie, 1993). The dependence on part-time faculty is going to continue at Des Moines Area Community College as the state’s budget resources continue to decline. DMACC’s budget suffered a 1.5% cut in November 2008, a 10% cut in October 2009, and is anticipating another 10% cut in October 2010. At the conclusion of the 2010 legislative session, DMACC’s funding level was $24,375,295 which was $3,445,451 below the 2010 budget level. One of many initiatives being used by the College to free up financial resources has been to continue offering early retirement incentives to eligible employees. As a result, DMACC anticipates the retirements of nine full-time faculty by December 2010. In addition to the full-time positions that will be opened due to early retirements, DMACC currently has 15 faculty positions on hold due to
resignations and/or retirements received in the past year. The college will continue to backfill this ever increasing number of vacant full-time faculty positions with adjunct faculty.

The research provided in this study illustrates the importance of DMACC providing more support to their adjunct faculty. Although adjunct faculty at DMACC were satisfied overall, 16 of the 24 satisfaction variables measured in the study provided results indicating a lesser amount of satisfaction. The College will continue to be challenged to improve satisfaction and support for adjunct faculty while trying to remain fiscally responsible at the same time. It is my intention that college leaders can use this data to first understand adjuncts’ needs, prioritize the needs, and determine processes that are not as costly which can contribute to adjunct satisfaction. It is my intention that the information provided in this research study can also be the foundation for informing administrators of the types of professional development to include in the Quality Faculty Plan for adjunct faculty.
APPENDIX A. HUMAN SUBJECTS APPROVAL

IOWA STATE UNIVERSITY

DATE: 22 May 2009
TO: Steven Dwight Schulz
    906 N. Grant Road, Carroll, IA 51401

CC: Larry Ebbers
    N225A Lagomarcino

FROM: Jan Canny, IRB Administrator
      Office of Research Assurances

TITLE: Iowa Community College Adjunct Faculty Survey

IRB ID: 09-200

Approval Date: 21 May 2009
Date for Continuing Review: 20 May 2010

The Chair of Institutional Review Board of Iowa State University has reviewed and approved the modification of this project. Please refer to the IRB ID number shown above in all correspondence regarding this study.

Your study has been approved according to the dates shown above. To ensure compliance with federal regulations (45 CFR 46 & 21 CFR 56), please be sure to:

- **Use the documents with the IRB approval stamp** in your research.
- **Obtain IRB approval prior to implementing any changes** to the study by completing the “Continuing Review and/or Modification” form.
- **Immediately inform the IRB of (1) all serious and/or unexpected adverse experiences involving risks to subjects or others; and (2) any other unanticipated problems involving risks to subjects or others.**
- **Stop all research activity if IRB approval lapses**, unless continuation is necessary to prevent harm to research participants. Research activity can resume once IRB approval is reestablished.
- **Complete a new continuing review form** at least three to four weeks prior to the **date for continuing review** as noted above to provide sufficient time for the IRB to review and approve continuation of the study. We will send a courtesy reminder as this date approaches.

Research investigators are expected to comply with the principles of the Belmont Report, and state and federal regulations regarding the involvement of humans in research. These documents are located on the Office of Research Assurances website [www.compliance.iastate.edu] or available by calling (515) 294-4566.

Upon completion of the project, please submit a Project Closure Form to the Office of Research Assurances, 1138 Pearson Hall, to officially close the project.
APPENDIX B. IOWA COMMUNITY COLLEGE

ADJUNCT FACULTY SURVEY 2009

Background Characteristics

1. Please select your gender.
   a. Male
   b. Female
2. Please indicate your age as of September 1, 2008?
3. Please select one or more of the following choices to best describe your racial/ethnic background.
   a. Alaska Native
   b. Asian
   c. Black or African American
   d. Hispanic, Latino or Spanish
   e. Native Hawaiian or Other Pacific Islander
   f. White, not Hispanic
   g. Other BOX
4. What is your primary language?
   a. English
   b. Spanish
   c. French
   d. Other (Please Indicate Below)
5. During the 2008-09 Academic Year were you
   a. Single
   b. Married/Living with partner or significant other
   c. Separated, divorced or widowed
6. Are you a United States citizen?
   a. Yes
   b. No

Academic/Professional Background

7. Were you ever enrolled in a community college as a student?
   a. Yes
   b. No
8. Indicate if you have completed any of the following degrees (AA, AS, AAS or AGS).
   a. Associate of Arts (AA)
   b. Associate of Sciences (AS)
   c. Associate of Applied Sciences (AAS)
   d. Associate of General Studies (AGS)
9. What is the highest degree you have completed? Do not include honorary degrees. (If you have none of the degrees or awards, select “Not applicable.”)
   1=Doctorate
   2=Education Specialist
   3=Master’s Degree
   4=Bachelor’s Degree
   5=Associate’s Degree
   6=Diploma
   7=Certificate
8=High School Diploma/GED
9=Less than High School Diploma/GED
10=Not applicable

10. In what field or discipline was your most advanced degree?
   a. Arts and Sciences (includes postsecondary education degrees)
   b. Agriculture
   c. Business and Office
   d. Family and Consumer Science
   e. Marketing Education
   f. Health Occupations
   g. Trade and Industry
   h. Other

11. Which of the following Arts and Sciences categories best describes your most advanced degree?
   a. Accounting
   b. Advertising
   c. Agriculture
   d. Alcohol/Drug Abuse Specialty
   e. American Government
   f. American History
   g. American Literature
   h. Anthropology
   i. Art
   j. Astronomy
   k. Biological Science
   l. Biology
   m. Business Administration/Management
   n. Business Law
   o. Career Prep
   p. Chemistry
   q. Communication Skills,
   r. Related Computer Science
   s. Dramatic Art
   t. Earth Science
   u. Economics
   v. Education
   w. English
   x. English Literature
   y. English-as-a-Second Language (ESL)
   z. French
   aa. General Business Subjects
   bb. General Science
   cc. Geography
   dd. German
   ee. Health
   ff. Health Care Administration
   gg. International Business/Relations
   hh. Japanese
   ii. Journalism
   jj. Latin
   kk. Law Enforcement
   ll. Legal Assistant
   mm. Mathematics
   nn. Music
   oo. Philosophy
12. Which of the following Agriculture categories best describes your most advanced degree?
   a. Agricultural Bio-Technology
   b. Agricultural Business Management
   c. Agricultural Economics
   d. Agricultural Mechanics
   e. Agricultural Production
   f. Agricultural Products/Processing
   g. Animal Grooming
   h. Animal Science
   i. Aquaculture
   j. Crop Science
   k. Enology
   l. Game management
   m. Horticulture
   n. International Agriculture
   o. Parks Management
   p. Plant Science
   q. Renewable Natural Resources
   r. Turf management
   s. Viticulture

13. Which of the following Business and office categories best describes your most advanced degree?
   a. Accounting/Computing
   b. Banking
   c. Related Financial
   d. Bookkeeping
   e. Business Data
   f. Entry Equipment
   g. Business Data Processing
   h. Court Reporting
   i. Executive Secretarial
   j. Legal Secretarial
   k. Medical Secretarial
   l. Micro Computer
   m. Operation/Management
   n. Multi-Occupations Preparatory
   o. Office Supervisor/Management
   p. Person/Training Programs
q. Shipping/Receiving/Stock
r. Clerk
s. Typing
t. General Office/Related Programs

14. Which of the following Family and Consumer Science categories best describes your most advanced degree?
a. Child Care and Guidance Mgmt
b. Consumer/Homemaking Home Economics
c. Clothing Apparel/Textiles Management
d. Dietetic Aide/Assisting
e. Food Production/Management/Services
f. Home Furnishing/Equipment Management
g. Institutional, Home Management

15. Which of the following Marketing Education categories best describes your most advanced degree?
a. Auctioneering
b. Equipment Rental
c. Farm and Garden Supplies Marketing
d. Financial Services Marketing
e. Food Marketing
f. Freight Transportation Marketing
g. General Merchandise
h. Hotel/Motel Management
i. Industrial Marketing
j. Insurance Marketing, General
k. International Marketing
l. Marketing/Distribution
m. Parts Clerk
n. Petroleum Marketing
o. Real Estate Sales
p. Small Business Management
q. Tourism
r. Wholesaling

16. Which of the following Health Occupation categories best describes your most advanced degree?
a. Alcohol/Drug Abuse Specialty
b. Allied Health-Core Curriculum
c. Animal Technology
d. Central Supply Technology
e. Community Health
f. Dental Assisting
g. Dental Hygiene
h. Dental Laboratory Technology
i. Electroencephalograph Technology
j. Emergency Medical Technology - 1
k. Paramedic Emergency Medical Technology – 1
l. Exercise Physiology Health Care Administration
m. Interpretation and Translation
n. Medical Assisting
o. Medical Lab Technology
p. Medical Records Technology
q. Medical Records Transcription
r. Medical Technology
s. Mental Health/Human Services Technology
t. Nursing Assisting Nursing, Associate Degree
u. Occupational Therapy Assisting
v. Ophthalmic Medical Assisting
w. Pharmacy Assisting
x. Physical Therapy Assisting
y. Physician Assisting-Specialty
z. Radiograph Medical Technology
aa. Respiratory Therapy Surgical Technology
bb. Training Interpreter (Deaf)
c. Ultrasound Technology
dd. Veterinarian Assisting
e. Ward Clerk

17. Which of the following Trade and Industry categories best describes your most advanced degree?
a. Aeronautical Technology
b. Agricultural Equipment Technology
c. Air Traffic Control
d. Air Transportation
e. Aircraft Mechanics
f. Airplane Piloting/Navigation
g. Architectural Design and Construction
h. Architectural Drafting Technology
i. Architectural Engineering
j. Audio Recording Technology/Music
k. Auto Mechanics
l. Automotive Body Repair
m. Automotive Component Assembler
n. Aviation Computer Technology
o. Aviation Management
p. Band Instrument Repair Technology
q. Barbing
r. Basic Housekeeping/Health Care Facilities
s. Bioengineering/Biomedical Engineering
t. Biomedical Equipment Technology Biotechnology
u. Blue Print Reading
v. Brick/Stone Masonry/Tile
w. Building Maintenance
x. Cable Installer - Television
y. Career Option Carpentry
z. Chemical Manufacturing Technology
aa. Chemical Technology
bb. Civil Technology Civil Technology-Structural
c. Civil/Structural Drafting
dd. Climate Control Technology
e. Coal Mining Technology
ff. Commercial Art
g. Commercial Photography
hh. Communication Skills-Related
ii. Communication Technology
jj. Composition/Make-up/Typesetting
kk. Computer Aided Design/Drafting
ll. Computer Aided-Numerical Control
mm. Computer Integrated Manufacturing Computer Technology
nn. Concrete Placing/Finishing
oo. Construction Inspection
pp. Construction Technology
qq. Conventional Electric Power Generation
rr. Cosmetology  Criminal Justice Technology  
ss. Diesel Engine Mechanic Technology  
tt. Drafting and Design Technology - Mechanical  
uu. Drafting/Design Technology  
vv. Dry Cleaning/Laundry Services  
ww. Drywall Installation  
xx. Educational Media Technology  
yy. Electrical Technology  
zz. Electrical/Electronics Drafting  
aaa. Electronic Components Assembler  
bbb. Electronic Technology  
ccc. Electronic Technology-Communication  
ddd. Electronic Technology-Diagnostic  
eee. Electronic Technology-Telecommunications  

18. Indicate the number of years of teaching experience you have in each of the following educational environments.
   a. K-12 Public and/or Private  
   b. 2-Year Public Community College  
   c. 2-Year Private Community College  
   d. 4-Year Public College/University  
   e. 4-Year Private College/University  
   f. Indicate the number of years you have been teaching at this institution. BOX  

19. Indicate the number of years you have been teaching at this institution. _____

**Instructional Responsibilities and Workload**

20. What is your principal field or discipline of teaching at this institution?
   a. Arts and Sciences (includes postsecondary education degrees)  
   b. Agriculture  
   c. Business and Office  
   d. Family and Consumer Science  
   e. Marketing Education  
   f. Health Occupations  
   g. Trade and Industry  
   h. Other  

21. Which of the following Arts and Sciences categories best describes your primary field or discipline of teaching at this institution?
   a. Accounting  
   b. Advertising  
   c. Agriculture  
   d. Alcohol/Drug Abuse Specialty  
   e. American Government  
   f. American History  
   g. American Literature  
   h. Anthropology  
   i. Art  
   j. Astronomy  
   k. Biological Science  
   l. Biology  
   m. Business Administration/Management  
   n. Business Law  
   o. Career Prep  
   p. Chemistry  
   q. Communication Skills,  
   r. Related Computer Science  
   s. Dramatic Art
22. Which of the following Agriculture categories best describes your primary field or discipline of teaching at this institution?

a. Agricultural Bio-Technology
b. Agricultural Business Management
c. Agricultural Economics
d. Agricultural Mechanics
e. Agricultural Production
f. Agricultural Products/Processing
g. Animal Grooming
h. Animal Science
i. Aquaculture
j. Crop Science
k. Enology
l. Game management
m. Horticulture
23. Which of the following Business and Office categories best describes your primary field or discipline of teaching at this institution?
   a. Accounting/Computing
   b. Banking
   c. Related Financial
   d. Bookkeeping
   e. Business Data
   f. Entry Equipment
   g. Business Data Processing
   h. Court Reporting
   i. Executive Secretarial
   j. Legal Secretarial
   k. Medical Secretarial
   l. Micro Computer
   m. Operation/Management
   n. Multi-Occupations Preparatory
   o. Office Supervisor/Management
   p. Person/Training Programs
   q. Shipping/Receiving/Stock
   r. Clerk
   s. Typing
   t. General Office/Related Programs

24. Which of the following Family and Consumer Science categories best describes your primary field or discipline of teaching at this institution?
   a. Child Care and Guidance Mgmt
   b. Consumer/Homemaking Home Economics
   c. Clothing Apparel/Textiles Management
   d. Dietetic Aide/Assisting
   e. Food Production/Management/Services
   f. Home Furnishing/Equipment Management
   g. Institutional, Home Management

25. Which of the following Health Occupation categories best describes your primary field or discipline of teaching at this institution?
   a. Alcohol/Drug Abuse Specialty
   b. Allied Health-Core Curriculum
   c. Animal Technology
   d. Central Supply Technology
   e. Community Health
   f. Dental Assisting
   g. Dental Hygiene
   h. Dental Laboratory Technology
   i. Electroencephalograph Technology
   j. Emergency Medical Technology - 1
   k. Paramedic Emergency Medical Technology – 1
   l. Exercise Physiology Health Care Administration
   m. Interpretation and Translation
   n. Medical Assisting
   o. Medical Lab Technology
p. Medical Records Technology
q. Medical Records Transcription
r. Medical Technology
s. Mental Health/Human Services Technology
t. Nursing Assisting, Nursing, Associate Degree
u. Occupational Therapy Assisting
v. Ophthalmic Medical Assisting
w. Pharmacy Assisting
x. Physical Therapy Assisting
y. Physician Assisting-Specialty
z. Radiograph Medical Technology
aa. Respiratory Therapy, Surgical Technology
bb. Training Interpreter (Deaf)
c. Ultrasound Technology
d. Veterinarian Assisting
e. Ward Clerk

26. Which of the following Trade and Industry categories best describes your primary field or discipline of teaching at this institution?

a. Aeronautical Technology
b. Agricultural Equipment Technology
c. Air Traffic Control
d. Air Transportation
e. Aircraft Mechanics
f. Airplane Piloting/Navigation
g. Architectural Design and Construction
h. Architectural Drafting Technology
i. Architectural Engineering
j. Audio Recording Technology/Music
k. Auto Mechanics
l. Automotive Body Repair
m. Automotive Component Assembler
n. Aviation Computer Technology
o. Aviation Management
p. Band Instrument Repair Technology
q. Barbering
r. Basic Housekeeping/Health Care Facilities
s. Bioengineering/Biomedical Engineering
t. Biomedical Equipment Technology, Biotechnology
u. Blue Print Reading
v. Brick/Stone Masonry/Tile
w. Building Maintenance
x. Cable Installer - Television
y. Career Option, Carpentry
z. Chemical Manufacturing Technology
aa. Chemical Technology
bb. Civil Technology, Civil Technology-Structural
cc. Civil/Structural Drafting
dd. Climate Control Technology
e. Coal Mining Technology
ff. Commercial Art
gg. Commercial Photography
hh. Communication Skills-Related
ii. Communication Technology
jj. Composition/Make-up/Typesetting
kk. Computer Aided Design/Drafting
ll. Computer Aided-Numerical Control
mm. Computer Integrated Manufacturing Computer Technology
nn. Concrete Placing/Finishing
oo. Construction Inspection
pp. Construction Technology
qq. Conventional Electric Power Generation
rr. Cosmetology Criminal Justice Technology
ss. Diesel Engine Mechanic Technology
tt. Drafting and Design Technology - Mechanical
uu. Drafting/Design Technology
vv. Dry Cleaning/Laundry Services

27. Drywall Installation
   a. Educational Media Technology
   b. Electrical Technology
   c. Electrical/Electronics Drafting
   d. Electronic Components Assembler
   e. Electronic Technology
   f. Electronic Technology-Communications
   g. Electronic Technology-Diagnostic
   h. Electronic Technology-Telecommunications

28. How many of the following courses are you teaching during the 2008-09 Academic Year at this institution? Mark one for each activity. Responses: 1,2,3,4,5+
   a. General education courses
   b. Developmental/remedial courses
   c. Other undergraduate credit courses
   d. Vocational or technical courses
   e. Non-credit courses (other than above)
   f. Other BOX

29. Of the courses indicated in question 14, how many of these courses were courses offered to joint/concurrent enrollees (students taking courses for both high school and college credit)? BOX

30. Of the courses indicated in question 14, how many of these courses were delivered
   a. Face to face
   b. Online via an Internet platform
   c. Via the Iowa Communications Network (ICN)
   d. Correspondence
   e. Other

Current Employment

31. While employed at this institution, during the 2008-09 Academic Year, how many other jobs did/do you hold? Responses: 1,2,3,4,5+
32. Were you employed full-time at any of these other jobs during the 2008-09 Academic Year?
   a. Yes
   b. No
33. In which of the career clusters were you employed? Please match to the cluster that most closely describes your “other job”.
   a. Arts and Communication (Arts, A/V Technology and Communications)
   b. Agriculture, Food and Natural Resources (Agriculture, Food and Natural Resources)
   c. Business, Information Management and Marketing (Business, Management, Administration, Information Technology, Finance, Marketing, Sales and Services)
   d. Engineering, Industrial and Technology Services (Transportation, Distribution, Logistics, Architecture, Construction, Science, Technology, Engineering and Mathematics)
   f. Health Sciences
34. Would you have preferred a full-time position for the 2008-09 Academic Year at this institution?
   a. Yes
   b. No

35. During the 2008-09 Academic Year did you do any adjunct teaching at any other community college?
   If yes, how many other colleges?
   a. Yes ______
   b. No

36. What is the primary reason you choose to work at this community college?
   a. Need the extra money
   b. Enjoy the students
   c. Enjoy the experience
   d. Plan to use this experience as a career ladder
   e. Other

Institutional Resources
37. Mark all institutional resources available to you during the 2008-09 Academic Year as an adjunct faculty member at this institution. If yes, please indicate your level of satisfaction with the resource.
   a. Use of private office
   b. Shared office space
   c. A personal computer
   d. An email account
   e. A phone/voicemail
   f. Clerical support
   g. Faculty mentor
   h. Paid office hours

Scholarly Activities
38. During the 2008-09 Academic Year, on average how many hours per week do you actually spend on each of the following activities? Mark one response for each activity. Responses: None, 1-4, 5-8, 9-12, 13-16, 17-20, 21-34, 34-44, 45+
   a. Research and scholarly writing
   b. Other creative products/performances

Other Activities
39. During the 2008-09 Academic Year, on average how many hours per week do you actually spend on each of the following activities? Mark one response for each activity. Responses: None, 1-4, 5-8, 9-12, 13-16, 17-20, 21-34, 34-44, 45+
   a. Scheduled teaching (give actual, not credit hours)
   b. Preparing for teaching (including reading student papers and grading)
   c. Advising and counseling of students
   d. Committee work and meetings
   e. Other administration
   f. Consultation with clients/patients
   g. Community or public service
   h. Outside consulting/freelance work
   i. Household/childcare duties
   j. Communicating via email
   k. Commuting to campus
   l. Other employment, outside of academia

40. Please indicate the extent to which you accomplish the following. Mark one response for each item.
   Responses: To a Great Extent, To Some Extent, Not at All
   a. Engage in academic work that spans multiple disciplines
   b. Achieve a healthy balance between your personal life and your professional life
   c. Experience close alignment between your work and your personal values
Educational Goals for Students

41. Indicate the importance to you of each of the following education goals for undergraduate students. Mark one response for each item. Responses: Essential, Very Important, Somewhat Important, Not Important

a. Develop ability to think critically
b. Prepare students for employment after college
c. Prepare students for graduate or advanced education
d. Develop moral character
e. Provide for students’ emotional development
f. Prepare students for family living
g. Help students develop personal values
h. Enhance students’ self-understanding
i. Instill in students a commitment to community service
j. Enhance students’ knowledge of and appreciation for other racial/ethnic groups
k. Promote ability to write effectively
l. Help students evaluate the quality and reliability of information
m. Engage students in civil discourse around controversial issues
n. Teach students tolerance and respect for different beliefs
o. Encourage students to become agents of social change
p. Lifelong learning

Professional Development

26. Have you participated in the following professional development opportunities while employed as an adjunct faculty at this institution?

Workshops focused on teaching strategies in the classroom.

a. Yes
b. No

Did participation in this activity enhance your teaching?

a. Yes
b. No

Would you be interested in participating in this professional development activity?

a. Yes
b. No

Have you participated in the following professional development opportunities while employed as an adjunct faculty at this institution?

Workshops focused on classroom technology

a. Yes
b. No

Did participation in this activity enhance your teaching?

a. Yes
b. No

Would you be interested in participating in this professional development activity?

a. Yes
b. No

Have you participated in the following professional development opportunities while employed as an adjunct faculty at this institution?

Workshops focused on distance education such as online, Web Blended, ICN and other Electronic Delivery Systems

a. Yes
b. No

Did participation in this activity enhance your teaching?

a. Yes
b. No
Would you be interested in participating in this professional development activity?
   a. Yes
   b. No

Have you participated in the following professional development opportunities while employed as an adjunct faculty at this institution?

Workshops on assessment and test construction
   a. Yes
   b. No

Did participation in this activity enhance your teaching?
   a. Yes
   b. No

Would you be interested in participating in this professional development activity?
   a. Yes
   b. No

Have you participated in the following professional development opportunities while employed as an adjunct faculty at this institution?

Workshops focused on classroom policies and procedures, including student disciplinary procedures
   a. Yes
   b. No

Did participation in this activity enhance your teaching?
   a. Yes
   b. No

Would you be interested in participating in this professional development activity?
   a. Yes
   b. No

Have you participated in the following professional development opportunities while employed as an adjunct faculty at this institution?

Workshops focused on promoting diversity among students (cultural, learning, socioeconomic, disability)
   a. Yes
   b. No

Did participation in this activity enhance your teaching?
   a. Yes
   b. No

Would you be interested in participating in this professional development activity?
   c. Yes
d. No

Have you participated in the following professional development opportunities while employed as an adjunct faculty at this institution?

Workshops for developing administrative leadership
   a. Yes
   b. No

Did participation in this activity enhance your teaching?
   a. Yes
   b. No

Would you be interested in participating in this professional development activity?
   a. Yes
   b. No
Job Satisfaction

27. How satisfied are you with the following aspects of your job? Mark one response for each item.
   Responses: Very Satisfied, Satisfied, Marginally Satisfied, Not Satisfied, Not Applicable
   a. Salary
   b. Benefits available
   c. Teaching load
   d. Quality of students
   e. Office/lab space
   f. Equipment and facilities available for classroom instruction
   g. Institutional support for teaching improvement and professional development
   h. Institutional funding of travel for professional development
   i. Institutional support for implementing technology-based instructional activities
   j. Autonomy and independence
   k. Professional relationships with other faculty
   l. Professional relationships with other adjunct faculty
   m. Social relationships with other faculty
   n. Social relationships with other adjunct faculty
   o. Competency of colleagues
   p. Job security
   q. Relationship with administrators
   r. Departmental leadership
   s. Course assignments
   t. Freedom to determine course content
   u. Availability for childcare at this institution
   v. Prospects for career advancement
   w. Clerical/administrative support
   x. Overall job satisfaction

Opinion

28. Please indicate your agreement with the following statements. Responses: Agree Strongly, Somewhat Agree, Somewhat Disagree, Strongly Disagree
   a. Adjunct instructors at this institution:
      i. Are given specific training before teaching
      ii. Are required to attend orientation
      iii. Are provided course competencies/content standards
      iv. Are given opportunities to participate in professional development activities
      v. Rarely get hired into full-time positions
      vi. Receive respect from students
      vii. Are primarily responsible for introductory classes
      viii. Have no guarantee of employment security
      ix. Are compensated for advising/counseling students
      x. Are required to attend meetings
      xi. Have good working relationship with administration
      xii. Are respected by full-time faculty

29. Below are some statements about your adjunct experience at this community college. Indicate the extent to which you agree or disagree with each of the following statements. Mark one response for each item. Responses: Strongly Agree, Somewhat Agree, Somewhat Disagree, Strongly Disagree, Not applicable
   a. Faculty are interested in students’ personal problems
   b. Racial and ethnic diversity should be more strongly reflected in the curriculum
   c. Faculty feel that most students are well-prepared academically
   d. This institution should hire more faculty of color
   e. Student Affairs staff have the support and respect of faculty
   f. Faculty are committed to the welfare of this institution
   g. Faculty here are strongly interested in the academic problems of undergraduates
h. Most students are strongly committed to community service
i. My teaching is valued by faculty in my department
j. Many courses involve students in community service
k. Gay and lesbian faculty are treated fairly here
l. My department does a good job of mentoring new faculty
m. Faculty are sufficiently involved in campus decision making
n. My values are congruent with the dominant institutional values
o. There is adequate support for integrating technology in my teaching
p. This institution takes responsibility for educating under prepared students
q. Most of the students I teach lack the basic skills for college level work
r. This institution rewards good teaching
s. Adjunct Faculty are treated fairly

30. Indicate how well each of the following statements describes your adjunct experience at this community college. Mark one response for each item. Responses: Very Descriptive, Somewhat Descriptive, Not Descriptive

   a. It is easy for students to see adjunct faculty outside of regular office hours
   b. There is a great deal of conformity among the students
   c. Adjunct faculty and administration work together to achieve common goals
   d. Students are provided individual attention and support
   e. Social activities are overemphasized
   f. Adjunct faculty are regarded as good teachers
   g. There is respect for the expression of diverse values and beliefs
   h. Adjunct faculty are rewarded for their efforts to use instructional technology
   i. Adjunct faculty are rewarded for their efforts to work with under prepared students
   j. Administrators consider adjunct faculty concerns when making policy
   k. The administration is open about its policies

Open Ended Questions

If you were given the opportunity to provide advice to the administration at this college, what advice for improving the experiences of adjunct faculty would you provide?
Describe the professional development experience that would assist you most in becoming a more effective adjunct instructor at this institution.
APPENDIX C. PARTICIPANT LETTER

June 25, 2009

Dear Participant,

We are conducting a study that focuses on the experiences of adjunct faculty members working in Iowa Community Colleges. The purpose of this study is to gain a better understanding of the demographics, beliefs, needs and behaviors of Iowa’s adjunct community college faculty members. This research includes a brief web survey that asks about the academic and social experiences of adjunct faculty members at the institution where you were working during the 2008-09 Academic Year. The main objective is to learn more about the demographics, experiences and needs of adjunct faculty.

As an adjunct faculty member, you have been selected to participate in this study. I know this is a busy time of year, but please take approximately 15-20 minutes to answer the questions on this web survey. This is your opportunity to help us develop a better understanding of the experiences and needs of adjunct faculty members working in Iowa’s Community College system.

Your participation in this study is voluntary, and your willingness to participate will have no effect on your current status as an adjunct faculty member at your respective community college. Summary data will be provided to the college at the conclusion of this study. Results containing less than 10 cases/respondents will be suppressed to protect any indirect identification of participants. Your e-mail address will be retained for follow-up communication only and will then be removed from the data set.

Your responses to this survey will remain completely confidential and secured and your name will never be associated with the answers you provide. In addition, you may skip any question(s) you do not wish to answer.

If you would like more information about this research project, or experience difficulty accessing the web survey, please contact me at sdschulz@dmacc.edu or via telephone at (712) 792-1755. To contact the Iowa State University supervising faculty member for this research project, please call Dr. Larry Ebbers, at (515) 294-7292 or by e-mail at lebbers@iastate.edu.

If you have any questions about the rights of research subjects or related injury, please contact the IRB Administrator, (515) 294-4566, IRB@iastate.edu, or Director, Office of Research Assurances, (515) 294-3115, 1138 Pearson Hall, Ames, IA 50011.

Thank you for your time and attention and for supporting our efforts to gain a better understanding of the demographics, beliefs, needs and behaviors of Iowa’s adjunct community college faculty members.

Sincerely,

Steven D. Schulz, Ed.S.
Graduate Student, Educational Leadership and Policy Studies
APPENDIX D. PROFESSIONAL DEVELOPMENT PROGRAMS

Teaching Strategies in the Classroom – Adjunct faculty explore the various learning styles that students bring to the classroom and the challenges that they may encounter. The session also allows faculty to discuss and discover with their colleagues ways to motivate and engage today’s students.

Classroom Technology – This interactive training session will help adjunct faculty learn some of the many technology tools available at the College. The training will include basics about using webmail to e-mail your class, using WebCT to locate resources related to your field, basic use of the Smartboard, and other items vital to being a faculty member. This session will assume only basic technology proficiency, so come and enjoy learning on your own computer at your own pace.

Distance Education – WebCT is the learning management system used by the College for online instruction as well as an enhancement tool for traditional courses. This workshop will be an introduction of the features and tools available in WebCT and the second part of the workshop will be a hands-on experience where participants will begin to design an actual WebCT course.

Assessment and Test Construction – This session will inform participants about the different types of assessment and grading techniques used at the College. Discussion will also include effective grading strategies.

Classroom Policies and Procedures – This interactive training session will help adjunct faculty learn about effective strategies for classroom management. Instructors will receive assistance on developing proper policies for syllabi and where to find policies and procedures on the College website to assist with instruction.

Promoting Diversity – This session will address the breadth of student individual differences and the impact they may have on student performance. The session will help adjunct faculty explore who their students are and what challenges they bring to the classroom. Faculty will have the opportunity to have their own teaching/learning styles assessed.

Developing Administrative Skills – This session will provide adjunct faculty with campus-wide training that will address issues that can be applicable to employees across more than one division and include training on college policies and procedures, the College budget, the College’s assessment process, Academic Quality Improvement Process (AQIP) and an introduction to supervisory training skills.
### APPENDIX E. CORRELATION MATRIX

#### E-1. Teaching Improvement and Job Satisfaction

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REFERENCES


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