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Job Dissatisfaction: A Factor in Maintaining a Highly-Qualified Family and Consumers Sciences Teacher Workforce

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JOB DISSATISFACTION: A FACTOR IN MAINTAINING A HIGHLY-QUALIFIED FAMILY AND CONSUMERS SCIENCES TEACHER WORKFORCE

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Abstract

The supply and demand mismatch in available family and consumer sciences (FACS) teachers in the State of Illinois makes it essential that attrition among highly qualified FACS teachers be decreased or eliminated. Job dissatisfaction has been a signification predictor of the decision to end employment. Therefore, the purpose of this study was to identify specific factors that contributed to the level of job satisfaction or dissatisfaction among Illinois FACS teachers. Using a descriptive research design, members of the Illinois Family and Consumer Sciences Teacher Association were asked to participate in an online survey. Results revealed the majority (95.06%) of participants (N= 81) were at least satisfied with their job. However, five extrinsic factors that were selected with the highest frequency are identified and discussed. The findings in this study are important because extrinsic factors are associated with increased levels of job dissatisfaction which could result in a teacher exiting the profession.

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A large number of United States citizens, including those in Illinois, believe that the primary focus for education should be on the development of workforce knowledge and skills (Marzono, Kendall, & Cicchinelli, 1999). Career and Technical Educators are primarily responsible for workforce education and development. The purpose for Career and Technical Education (hereafter abbreviated as CTE) is to develop student skills so that they are able to smoothly transition from high school to the workforce and/or post-high school education or training. The Bureau of Labor and Statistics (2009) indicated that employment in nutrition- and healthcare-related industries would have some of the fastest growing employment-sectors.

Nutrition and Healthcare are two of the areas studied within family and consumer science (hereafter abbreviated as FACS) programs, including those at the high school level. Highly-qualified FACS teachers were employed in 1,534 positions in Illinois High Schools, 182 of those teachers retired at the conclusion of the 2006-2007 academic year (Illinois State Board of Education, 2008). The completion of a state-accredited FACS teacher preparation was a method of preparation for highly-qualified teachers. The seven state-accredited FACS teacher preparation programs graduated 53 certificate-eligible FACS teacher candidates during the same academic period. By comparing the number of new FACS graduates to the potential employment vacancies, the State of Illinois needed 129 more teachers than were supplied.

A myriad of researchers had examined the perceived supply and demand mismatch for CTE teachers, like FACS (Arnett & Freeburg, in review; Bartley & Sneed, 2004; Berry, 2001; Headrick, 2003; Ingersoll, 2003; Mimbs, 2002; Ruhland, 2001; Tripp, 2006). Data indicated that the phenomenon was multi-faceted. A significant factor that influenced teachers to stay or leave the profession was the perceived level of job satisfaction. In fact, Berry (2001) found that job dissatisfaction was a contributing cause to why teachers left the [teaching] profession. Therefore, if factors responsible for dissatisfaction can be differentiated, attempts can be made either to change those conditions or to reduce their intensity so as to increase the holding power of the profession. Cochran-Smith (2004) suggested the only solution to reducing or eliminating the supply and demand imbalance for highly-qualified teachers was to reduce or eliminate potential sources of job dissatisfaction.

Review of Literature

A myriad of literature were reviewed to determine the existing body of knowledge, in regards to job satisfaction. Job satisfaction was defined as an individual's emotional feelings in regards to the environment and activities normally associated with completing job-related tasks (Rice, Gentile, & McFarlin, 1991; Vroom, 1964). Data had indicated that less than 20% of CTE teachers, of which FACS was a division of, were other than at least somewhat satisfied were their job (Miller & Wolosyk, 2002). Bruening and Hoover (1990) reported that there was no significant difference between content-areas, like CTE; English; and mathematics, in the perceived job satisfaction of teachers.

Studies on teacher job satisfaction have determined a number of contributing factors that have affected the differences in the reported levels of job satisfaction. Intrinsic factors are cited as a significant predictor of job satisfaction among teachers (Metropolitan Life, 2001). Intrinsic in reference to education, refers to motives that are marked by unselfish concern for others and

originate from within the teacher (Arnett & Freeburg, in review). Examples of intrinsic factors include interaction among peers, positive student relationships, feeling of positive image of professional practice, and feeling that job is related to life calling. Teachers that were satisfied with their job are reported to provide more instructional support to students, remain in their position, and have a higher level of morale than their less satisfied peers (Locke & Sirota, 1976; Opdenakker & Van Damme, 2006).

In contrast to intrinsic factors, extrinsic factors are predictors of job dissatisfaction. Extrinsic factors include inadequate compensation, increased paperwork, shifts in student characteristics, negative perception of teacher, and problematic relationships with student parents/guardians (Perie & Baker, 1997; Lee, 1972; Tye & O'Brien, 2002). Research indicated that job dissatisfaction was often cited as the primary reason teachers left their jobs (Spears, Gould, & Lee, 2000; Voke, 2002).

A common misconception is that salaries compel teachers out of the profession but according to job satisfaction research money is not a leading issue. Perie and Baker (1997) found compensation factors did not contribute a large amount to the prediction of teacher satisfaction. Also, Lee (1972) and Tye and O'Brien (2002) reported salary considerations were not a contributing factor in satisfaction.

Job satisfaction studies, particular to FACS, have generated positive results among FACS teachers. In fact, two studies indicated that more than 80% of FACS teachers were satisfied in their jobs (Mimbs, 2000; Tripp, 2006). Bartley and Sneed (2004) reported that FACS teacher were satisfied with their jobs, additionally with approximately 65% of the FACS teachers surveyed in their study indicated they had a high-level of satisfaction with the environment and activities normally associated with their job-related tasks.

Although FACS teachers are relatively satisfied, a few studies have identified sources of job dissatisfaction among FACS teachers. The tasks associated with negative perceptions of job satisfaction among FACS teachers were (a) contemporary job-related responsibilities including standardized testing, meetings, and added paperwork; (b) negative perceptions of FACS teachers/curriculum; (c) loss of program integrity; (d) student-characteristics including affiliation with special education programs; and (e) support from building-/district-level administrators and personnel (e.g., teachers, guidance counselors) (Erwin, Moran, McInnis, 1996; Fedje, 1999, Mimbs, 2000; Stout, Couch, & Fowler, 1998).

Collectively, one or a combination of dissatisfaction factors can potentially have negative consequences for FACS teachers in relation to need to retain teachers given the imbalance of supply and demand. This study sought to update existing research regarding FACS teacher satisfaction and more importantly, to identify the current dissatisfaction factors that FACS teachers are experiencing and address the identified concerns. Therefore the purpose of the study was to identify specific factors that contributed to the level of job satisfaction or dissatisfaction among Illinois FACS teachers.

Conceptual Framework

The conceptual framework that guided research related to job satisfaction primarily focused on intrinsic and extrinsic factors (Mottaz & Potts, 1986). Intrinsic factors were primarily related to achievement, advancement, and recognition; whereas, extrinsic factors were primarily related to working environment, pay, and job security (Herzberg, Mausner, Peterson, & Capwell, 1957). The same authors developed the Two-Factor theory of job satisfaction.

The contemporary name for the Two-Factor Job Satisfaction theory was Motivation-Hygiene theory. The Motivation-Hygiene theory assumed that two primary factors, motivation (intrinsic) and hygiene (extrinsic), were mutually exclusive (Herzberg et al., 1957). Mutually exclusive meant that the presence or absence of a motivation factor only influenced the perceived level of satisfaction and did not affect the perceived level of dissatisfaction and vice versa.

Herzberg et al. (1957) reported that the Motivation-Hygiene theory applied to all workplaces and jobs. The theory had been previously applied to the teaching career (Johnson, 1967; Sergiovanni, 1966; Simmons, 1970). Table 1 illustrates some of the motivation (intrinsic) and hygiene (extrinsic) factors that were reported to influence job satisfaction or dissatisfaction among teachers.

Table 1
Motivation-Hygiene Theory: Examples of Influential Factors of Perceived Job Satisfaction and Dissatisfaction Among Teachers

Motivation Factors		Hygiene Factors	
achievement	advancement	job instability	negative supervision
characteristics	growth	poor collegial relationships	poor policies and/or procedures
recognition	responsibility	inadequate compensation	poor social status

Purpose and Method of the Study

A valid measure of job satisfaction was important, because it is an influential factor on an individual's level of job performance (Rosnowski & Hulin, 1995). Research had been conducted to determine the level of job satisfaction among FACS teachers (Bartley & Sneed, 2004; Mimbs, 2000; Tripp, 2006). However, few studies had identified specific factors related to classroom that contributed to FACS teachers perceived level of satisfaction or dissatisfaction.

Purpose of the Study

The purpose of this study was to identify specific factors related to the classroom that contributed to the level of job satisfaction or dissatisfaction among members of an association of Illinois FACS teachers.

Answers to the following questions, in regards to study participants, were sought in the study:

1. What is the level of job satisfaction among FACS teachers?
2. What are the contemporary perceptions, in regards to the specific factors that were reported to influence job dissatisfaction among FACS teachers?

Method

The quantitative descriptive survey research method was utilized in this study. The survey was developed by assimilating an existing survey tool that would determine the relationship between specific variables and reported level of job satisfaction or dissatisfaction and additional items, based on a thorough review of literature, were added to the survey.

Population and Procedures

The population of the study was limited to the 238 members of an association primarily focused on FACS in Illinois. Dillman (2000) suggested that surveys, when administered online, be available for about three weeks. After three weeks 81 or 34.03% of eligible participants had agreed to participate in the study and returned their electronic e-mail based survey.

The study participants were asked to identify their unique characteristics and rank their level of job satisfaction or dissatisfaction in relationship to specific statements. The following participant characteristics were collected (a) gender; (b) age; (c) ethnicity; (d) marital status; (e) nature of their completed teacher certificate program; (f) earned degree; (g) years of teaching experience; and (h) FTE, full-time equivalency, of current teaching position. Data were collected with a four-point likert-type nominal scale. The likert-type scaled included the following responses: (a) very satisfied, (b) satisfied, (c) dissatisfied, or (d) very dissatisfied.

Findings

The Statistical Package for the Social Sciences (SPSS) version 14 was utilized to analyze the likert-type nominal data and participant characteristics. The data were analyzed with non-parametric descriptive procedures; because, the data obtained in the study failed to meet the assumption of normality required by more advanced parametric statistical procedures and the complete accessible population under investigation participated in the study.

The data is shown in two sections. The first section will detail participant characteristics and the second will detail findings in relationship to factors associated with participant satisfaction or dissatisfaction.

Participant Characteristics

The majority of participants in this study were female (81 of 100%), married (62 or 76.54%), and Caucasian (65 or 80.24%). The age of participants ranged from 23 to 70 years. The average participant was 46.36 years old. The standards age deviation was 12.67; which means, a majority of participants (68.26%) of participants fell with the age range of 33.69 to 59.03 years.

The participants' range of FACS teaching experience was from 1 to 36 years. The average participant had taught for 16.57 years and 68.26% of participants' duration of experience fell within the range of 5.7 to 27.44 years. The majority of participants had completed their teacher certificate program in non-alternative degree programs (71 or 87.65%), teach full-time (67 or 82.72%), and hold a degree equivalent to a masters (43 or 53.09%).

Factors in FACS Teacher Satisfaction/Dissatisfaction

Data is displayed in relationship to the relevant research question.

Research question 1: What is the level of job satisfaction among FACS teachers?

A large majority (77 or 95.06%) of participants indicated responses that indicated that they were either very satisfied or satisfied with their job as a FACS teacher. Less than 5% (4 or 4.9%) of participants selected responses associated with being either dissatisfied or very dissatisfied with their job as a FACS teacher.

Research question 2: What are the contemporary perceptions, in regards to the specific factors that were reported to influence job dissatisfaction among FACS teachers?

The participants consistently reported favorable (very satisfied or satisfied) responses in relationship to the factors associated with being dissatisfied in their career as a FACS teacher. In other words, participants in this study indicated there were few factors that result in dissatisfaction with the job of a FACS teacher. However, the following five factors received the highest frequency of negatively associated (dissatisfied or very dissatisfied) responses (a) nature of recent education reform, No Child Left Behind; (b) role of high school counselors in FACS education; (c) image of FACS education; (d) inclusion of students with special needs; and (e) support and recognition from school administrators. The complete frequency distribution of participant responses, in regards to 16 factors associated with job dissatisfaction among FACS teachers is shown in table 2. In all cases, the most frequent response was “agree”.

Table 2
Contemporary Perceptions of FACS Teachers: Factors Associated with Job Dissatisfaction

Factor	SD	D	A	SA	Total
Nature of recent education reforms (No Child Left Behind)	13	28	36	2	79
Role of high school counselors with FACS education	11	18	47	4	80
Image of the FACS education	6	15	52	6	79
Inclusion of students with special needs	3	18	54	6	81
Support and recognition from school administrators	3	15	55	8	81
Number of preps	3	13	55	9	80
Teacher's salary	1	14	61	5	81
Physical conditions of your school	1	10	62	8	81
Daily work of teaching itself	1	8	38	34	81
Class size(s)	0	9	58	13	80
Student discipline and behavior	2	6	58	13	79
Instructional materials and resources	2	4	63	9	78
Name of the profession	2	4	53	21	80
Sense of achievement as a FACS teacher	1	3	42	34	80
Curriculum shift from cooking/sewing to workplace skills	1	1	51	27	80
Additional responsibilities	0	2	40	39	81

Note. VD = Very Dissatisfied, D = Dissatisfied, S = Satisfied, VS = Very Satisfied

Discussion and Recommendations

The study participants generally responded positively (strongly agree or agree) to the 16 factors identified in the study. The 16 factors, when present generally result in FACS teachers reporting that they are dissatisfied with the job. Because the participants in this study generally responded favorably to the statements, it could be interpreted that the 16 identified factors are generally not contributing to job dissatisfaction among the population of FACS teachers surveyed in the study. A discussion of five factors with the largest frequency of negatively associated responses (strongly disagree or disagree) are discussed in more detail, recommendations are suggested, and implications for interested stakeholders are presented.

Discussion

Historically, more than 80% of teachers reported they were satisfied with their job (Miller & Wolosyk, 2002). In this study, few ($N = 4$ or 4.9%) of study participants indicated they were dissatisfied with their job as a FACS educator. The findings in this study were similar to earlier findings in other studies of teacher job satisfaction (Bartley & Sneed, 2004; Mimbs, 200; Tripp, 2006).

The findings in this study are important because, at the conclusion of the 2006-2007 academic year 182 or 11.86% of FACS teachers in Illinois left their position (Illinois State Board of Education, 2008). The same agency reported that during the same period, 53 new highly qualified FACS teachers graduated from state accredited teacher preparation institutions. Meaning 129 FACS positions would be filled with either uncertified FACS teachers which does not meet highly qualified regulations or those who were other than new graduates from FACS teacher education programs.

The Motivation-Hygiene theory indicated that extrinsic factors influence the perceived level of job dissatisfaction among employees (Herzberg et al., 1957). The five extrinsic factors that received the highest frequency of "very dissatisfied" and "dissatisfied" responses among participants in this study were (a) nature of recent education reforms, No Child Left Behind; (b) role of high school counselors with FACS education; (c) image of the FACS education; (d) inclusion of students with special needs; and (e) support and recognition from school administrators.

Nature of recent education reforms, No Child Left Behind (NCLB). The majority ($N =$ 41; 52%) of participants indicated dissatisfaction with the most recent education reform, *NCLB*. This finding is similar to Pickard (2004). The purpose of NCLB legislation was to ensure schools and teachers are being held accountable for student academic achievement. To assess for accountability, schools are required to use mandated high stakes testing and based on scores, funding from the government is distributed or withheld. FACS is considered an elective course which constitutes the major problem for FACS with the testing. The FACS subject matter is not included on the standardized tests only academics (e.g., mathematics, science, and English). Therefore schools are compelled to narrow their curriculum to emphasize instruction only in the fields being assessed and as a result, FACS courses are narrowed out (Pickard, 2004). Given the negative results for this specific factor, the value and the verification of academic integration could easily cause FACS teachers to doubt the support from administration and the government for their discipline.

The role of guidance counselors. The role of guidance counselors is important for student enrollment in FACS classes. Similar to Erwin, McInnis, and Manus (1996) and Fedje

(1999) participants in this study expressed relative (*N* = 29; 36.7%) dissatisfaction with the role of guidance counselors. Given the pressure for high test scores as a result of NCLB, guidance counselors may feel the need to enroll students in academic courses for increased chances of improving scores. Additionally, the perception of classroom practices held by guidance counselors may be a factor stifling the discipline. Based on their own experience, counselors may be unaware of the current practices in the FACS classroom which leads into the next dissatisfaction factor identified from this study, the image of FACS.

Image of FACS. The image of FACS has been and continues to be an ongoing struggle for teachers in the [FACS] profession. The image of FACS was reported as a source of relative (N = 21; 26.6%) dissatisfaction among teachers in this study. This finding is consistent with Erwin et al. (1996), Fedje (1999), Mimbs (2002), and Smith (1992). Some groups (e.g., parents, administrators, teachers from other disciplines, and community members) tend to hold the traditional view of home economics as the image of students cooking and sewing and only preparing students for roles of domestication or for child care and fast food industry work. Current practices include a shift in pedagogy, inclusion of academic principles, and a career-focused curriculum. For example, food preparation has transformed into food science or hospitality courses. In these courses, students learn the scientific principles of ingredients, nutritional value, event planning as well as possible careers and necessary workplace entry skills associated with the subject matter. Most of the responsibility will rely on the classroom FACS teacher to dispel the misconception since they are direct link to students, parents, and the school community.

Inclusion. Participants in this study indicated that inclusion was a slight (*N* = 21; 26.0%) source of dissatisfaction. Inclusion, mainstreaming students with specials needs into classroom, has been a source of dissatisfaction among teachers in other satisfaction studies (Erwin, et al., 1996; Harding & Darling, 2003; Mimbs, 2000). An inclusive classroom has several implications for a FACS teacher- safety with kitchen equipment, discipline, large class sizes, increased paperwork, and the nature of special needs students. Given the concerns FACS teacher may lack the pedagogical knowledge of working with such students and/or patience.

Support and recognition from school administrators. A small number (*N* = 18; 22.2%) of participants indicated dissatisfaction with the support and recognition from their school administrators which is a similar finding of Stout, Couch, and Fowler (1998). Administration has the responsibility to set the tone for a positive and motivating work environment. Research has shown that when people are acknowledged for doing a good job, they tend to be more motivated and productive within their work assignment (Opdenakker & Van Damme, 2006). The importance of awareness of one's work may influence a teacher's decision to leave the teaching profession.

Overall, the reported dissatisfaction factors are bestowed onto the teacher therefore they have no personal control over these aspects within the teaching profession. Conceptualizing Herzberg's theory (1966), job dissatisfaction occurs when hygiene factors are perceived to be inadequate or unfavorable to an individual's work environment, which could explain the participants' dissatisfaction.

Recommendations

In light of the small portion of the population that indicated they were "dissatisfied" or "very dissatisfied" with their job as a FACS teacher, the findings in this study are important. The findings are important because less than half (53 or 29.12%) of the positions vacated by

FACS teachers during the 2006-2007 academic year could be filled with the available supply of new FACS teacher graduates (Illinois State Board of Education, 2008). Cochran-Smith (2004) indicated that the gap between supply and demand of highly qualified teachers could only be solved by increasing the retention rate of in-service teachers.

Recommendation for practice.

The implication of this study is for the stakeholders concerned with the retention of highly-qualified FACS teachers to alleviate sources of teacher job dissatisfaction. In this study, the implication is to eliminate or reduce the following five extrinsic factors, which were perceived to be negative among FACS teachers, (a) nature of recent education reforms [No Child Left Behind] (b) role of high school counselors with FACS education; (c) image of the FACS education; (d) inclusion of students with special needs; and (e) support and recognition from school administrators. The data gathered from this study allows for school administrators and FACS professionals to initiate and develop a strategic framework for satisfaction and retention efforts.

Recommendation for further research.

The participant population in this study was members of an Illinois association of FACS teachers and represented less than 50% (238 or 15.51%) of FACS teachers in Illinois high schools. As a result, the findings cannot be generalized beyond the population surveyed. It is recommended that additional research be conducted that represents the complete population of Illinois high schools FACS teachers. Further, because the majority of in-service FACS teachers indicated they were at least "satisfied" with their role as a FACS teacher; it is recommended that data be collected from those who ended their employment in an effort to determine their perceived level of job satisfaction and the factor(s) that influenced their decision.

In this era of reported teacher accountability, identifying and addressing sources of dissatisfaction can lead to a highly satisfied teacher that *feels* highly qualified.

References

Arnett, S., & Freeburg, E. (in review). An examination of teaching intentions among family and consumer sciences teachers. *Journal of Family and Consumer Sciences Education*.

Bartley, S. J., & Sneed, T. D. (2004). A profile of family and consumer sciences teachers. *Journal of Family and Consumer Sciences Education, 96*(1), 83-88.

Berry, B. (2001). No shortcuts to preparing good teachers. *Educational Leadership, 58*(8), 32-36.

Bruening, T., & Hoover, T. (1990). *Job satisfaction and commitment of Pennsylvania vocational educators to student organizations and community involvement*. Final Report, Pennsylvania. (ERIC Documents Reproduction Service No. ED 462 624).

Bureau of Labor and Statistics (2009). *Occupational outlook handbook, 2008-09 edition*. Retrieved September 15, 2009, from http://www.bls.gov/oco/ocos069.htm#projections_data

Cocharan-Smith, M. (2004). Stayers, leavers, lovers, and dreamers. *Journal of Teacher Education, 55*(5), 387-392.

Dillman, D. A. (2007). Mail and internet surveys: The tailored design *(2nd ed).* Hoboken, NJ.: John Wiley.

Erwin, W., Moran, J., & McInnis, J. (1996). Role definition and perceptions of home economics secondary programs. *Journal of Family and Consumer Sciences Education, 88*(4), 17-24.

Fedje, C. (1999). Program misconceptions: Breaking the patterns of thinking. *Journal of Family and Consumer Sciences, 17*(2), 11-19.

Headrick, N. (2003). Innovative practices in CTE teacher preparation: A case study from Missouri. *National Association of State Directors for Career and Technical Education.* Retrieved September 12, 2009, from http://www.careertech.org/show/publications

Herzberg, F., Mausner, B., Peterson, R., & Capwell, E. (1957). *Job attitude: Review of research and opinion*. Pittsburgh, PA: Psychological Service.

Illinois State Board of Education. (2008). *Career development and preparation.* Retrieved February 4, 2008, from http://www.isbe.net/pubs/tsr_data/

Ingersoll, R. M. (2003). *Who controls teachers' work? Power and accountability in America's schools.* Cambridge, MA: Harvard University Press.

Johnson, E. D. (1967). An analysis of factors related to teacher satisfaction dissatisfaction (Doctoral dissertation, Auburn University, 1967). *Dissertation Abstracts International*, 27, 4076A.

Lee, R. (1972). Relationship of selected demographic characteristics and the job satisfaction of industrial art teachers (Doctoral dissertation, Missouri University, 1972). *Dissertation Abstracts International*, VT020117.

Locke, E. A., & Sirota, D. (1976). An experimental case study of the successes and failures of job enrichment in a government agency. *Journal of Applied Psychology, 61*(6), 701-745.

Marzano, R. J., Kendall, J. S., & Cicchinelli, L. F. (1999). *What Americans believe students should know. A survey of U. S. adults* (Contract Number RJ96006101). Washington, DC: Office of Educational Research and Improvement, U. S. Department of Education.

Metropolitan Life [MetLife]. (2001). *The MetLife survey of the American teacher, 2001: Key elements of quality schools*. New York: Author.

Miller, P., & Wolosyk, C. (2002, December). *Where do CTE teacher education graduates go? Career and technical teacher education five-year graduate follow-up study*. Paper presented at the Annual Conference of the Association for Career and Technical Education, Las Vegas, NV.

Mimbs, C. A. (2000). Retention of certified family and consumer sciences teachers: Implications for teacher supply and demand. *Journal of Family and Consumer Sciences Education, 18*(1), 38-49.

Mottaz, C., & Potts, G. (1986, June). An empirical evaluation of models of work satisfaction. *Social Science Research*, 15 (2), 153-174.

Opdenakker, M. C., & Van Damme, J. (2006). Teacher characteristics and teaching styles as effectiveness enhancing factors of classroom practice. *Teaching and Teacher Education, 22*(1), 1-21.

Perie, M., & Baker, D. (1997). *Job satisfaction among America's teachers: Effects of workplace conditions, background characteristics and teacher compensation*. Washington, D.C.: National Center for Education Statistics.

Pickard, M. (2004). Action research: Holding up the mirror to examine FACS teacher preparation. *Journal of Family and Consumer Sciences, 22*(2), 12-24.

Rice, R. W., Gentile, D., & McFarlin, A. (1991). Facet importance and job satisfaction. *Journal of Applied Psychology, 76*, 31-39.

Ruhland, S. K. (2001). Factors that influence the turnover and retention of Minnesota's technical college teachers. *Journal of Vocational Education Research,26*(1), 56-76.

Rosnowski, M., & Hulin, C. (1992). The scientific merit of valid measures of general constructs with special reference to job satisfaction and job withdrawal. In Ferris et al. (eds). *Handbook of Human Resource Management.* Massachusetts: Blackwell Publishers Ltd.

Sergiovanni, T. J. (1966). Investigation of factors which affect job satisfaction and job dissatisfaction of teachers. *Dissertation Abstracts International, 28*, 2966A.

Simmons, R. M. (1970). The measurement of factors of teacher satisfaction and dissatisfaction in teaching (Doctoral dissertation, University of Tennessee, 1970). *Dissertation Abstracts International, 31,* 3239A.

Spears, M., Gould, K., & Lee, B. (2000). Who would be a teacher? A review of factors teacher retention unit: Teacher retention facts and statistics. *CPS Human Resources*.

Stout, B., Couch, S., & Fowler, D. (1998). The demand for family and consumer sciences educators: Call to action. *Journal of Family and Consumer Sciences, 90*(2), 7-11.

Tripp, P. (2006). A profile of California's secondary family and consumer sciences teachers. *Journal of Family and Consumer Sciences, 98*(1), 60-64.

Tye, B. B., & O'Brien, L. (2002). Why are experienced teachers leaving the profession. *Phi Delta Kappan, 84*(1), 24-32.

Voke, H. (2002). Understanding the teacher shortage. *ASCD InfroBrief, 29*, 1-17.

Vroom, V. H. (1964). *Work and motivation*. New York: Wiley.