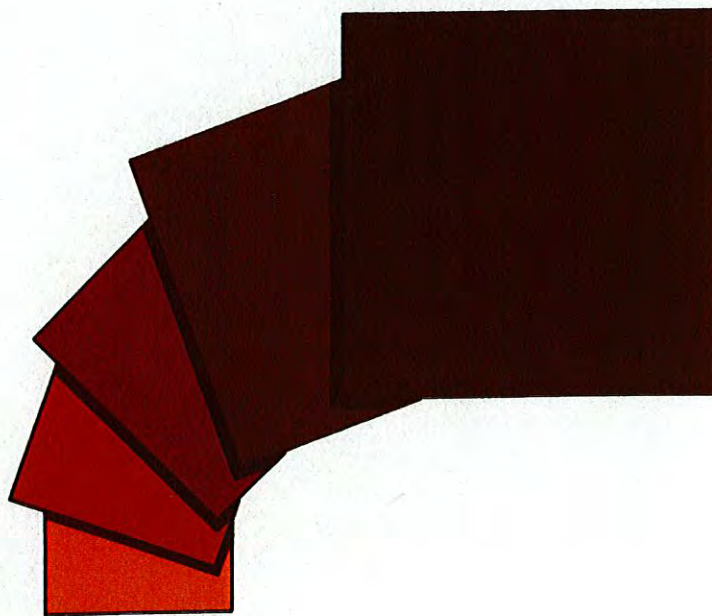


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Contributors

- Ernest W. Brewer
- James P. Greenan
- W.J. Haynie, III
- Roger B. Hill

- Robert T. Howell
- Jama McMahan-Landers
- Mingchang Wu
- Richard W. Zinser

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Job Satisfaction Among Industrial and Technical Teacher Educators

Ernest W. Brewer
Jama McMahan-Landers
University of Tennessee

In addition to financial costs associated with turnover, an organization that fails to maintain a steady, capable workforce may suffer decline in such areas as performance, customer satisfaction, and employee morale (Abbasi & Hollman, 2000). For a postsecondary educational institution, those consequences can translate into damage to its academic reputation, as well as to the well being of its students and staff. Because faculty members occupy central positions in postsecondary institutional research and educational activities, a college or university that does not attract and retain a high-caliber faculty evokes particular concern. Projected faculty shortages have compounded these concerns (Bowen & Schuster, 1986; Mangan, 2001; Wilson, 1999). As revealed in the *American Faculty Poll*, 41.3% of faculty members reported that they had considered leaving higher education for another career (Sanderson, Phua, & Herda, 2000). Moreover, faculty members in technical fields have increased incentive to leave academia because of high salaries in business and industry (Ruhland, 2000; Wilson, 1999).

A key variable associated with a faculty member's decision to leave or to remain at a higher education institution is job satisfaction (Hagedorn, 1996, 1998; Isaac, 1997; Mallam, 1994; McBride, Munday, & Tunnell, 1992; Nienhuis, 1994; Smart, 1990). Gaining a thorough understanding of job satisfaction has implications for improving the working life of faculty members via providing insights to administrators responsible for designing and implementing staff development strategies and interventions within the postsecondary education context. However, research

Brewer is Professor in the Department of Educational Administration at the University of Tennessee in Knoxville, Tennessee. Brewer can be reached at ewbrewer@utk.edu.

on postsecondary faculty job satisfaction has been fragmented and contradictory (Fiorentino, 1999). This could be due in part to the mobility of postsecondary faculty, who tend to identify more strongly with their discipline than with their institution (Nienhuis, 1994). Therefore, there has been need for national level research addressing job satisfaction among postsecondary faculty, especially research that focuses on faculty members within specific disciplines. This article reports findings from a research study that examined job satisfaction among postsecondary faculty across the nation in a specific field, industrial and technical teacher education.

Theoretical Framework

Numerous studies have been conducted on job satisfaction (Cranny, Smith, & Stone, 1992; Spector, 1997). The literature contains numerous definitions for the concept, most of which have similarities. For example, Locke (1976) specified that job satisfaction is "a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences" (p. 1300). Spector refined the definition of job satisfaction to constitute an attitudinal variable that measures how a person feels about his or her job, including different facets of the job. Warr (1994) recommended viewing job satisfaction at different levels of generality. Thus, in addition to an overall feeling toward a job, there are numerous feelings reflecting different facets of the job.

Whereas job satisfaction pertains to positive feelings that individuals have relative to their job, job dissatisfaction indicates negative feelings that individuals have regarding their job or facets of their job (Spector, 1997). Herzberg, Mausner, and Snyderman (1959) postulated a two-factor theory that categorizes factors affecting job satisfaction and dissatisfaction. They referred to factors that impact job satisfaction as motivators because these factors enrich individuals' jobs. Motivators include achievement, recognition, work itself, responsibility, and advancement. Relative to Maslow's (1954) hierarchy of needs, motivators encourage individuals to move toward self-actualization, the highest-level need. Whereas motivators tend to relate to the job itself, hygiene factors pertain to the work

environment. Although hygiene factors may affect job dissatisfaction, they have little impact on job satisfaction. Hygiene factors identified by Herzberg et al. include salary, supervision, working conditions, benefits, and organizational policies.

Motivators and hygiene factors often have been identified as facets of job satisfaction in the research literature. Spector (1997) noted that the facet approach could be very useful for organizations seeking to identify areas they can improve.

Review of Related Literature

In reviewing the literature, the researchers found several studies that addressed job satisfaction among populations serving in the postsecondary education context, including administrators (Berwick, 1992; Santos & Eddy, 1992; Singh, Robinson, & Williams-Green, 1995), librarians (Leckie & Brett, 1997), and student support services personnel (Brewer & Clippard, 2002). In addition, numerous studies explored job satisfaction among postsecondary faculty from different disciplines (Ernst, 1998; Isaac, 1997; Sanderson et al., 2000; Tang & Talpade, 1999; U.S. Department of Education, 2001; Valadez & Anthony, 2001) as well as among postsecondary faculty from single disciplines (Moody, 1996; Peterson & Provo, 1998; Robertson & Bean, 1998; Truell, Price, & Joyner, 1998). However, there were no studies that specifically addressed job satisfaction among industrial and technical teacher educators. Therefore, the researchers examined the numerous studies conducted with related populations to identify factors influencing job satisfaction in higher education. Among those factors were gender, ethnicity, academic rank, tenure status, and employment status. A review of findings regarding those factors among postsecondary faculty follows.

Gender has figured prominently in literature on job satisfaction among postsecondary faculty. Noting that female faculty members have tended to be clustered in non-tenured positions in the lower academic ranks and generally have received lower salaries than have their male counterparts, researchers have expressed concern about the status of women in higher education (Tack & Patitu, 1992). Female faculty members have reported less satisfaction than have male faculty members

in many areas (Fiorentino, 1999; Hagedorn, 1996, 1998; Tang & Talpade, 1999; U.S. Department of Education, 1998). The literature also contains examples in which women reported higher satisfaction with certain facets of job satisfaction, such as relationships with coworkers (Tang & Talpade), than men did. Nevertheless, differences between men and women relative to job satisfaction in the postsecondary education context have consistently been present.

Similar to women, minorities have found themselves in a less than enviable position in academe. Minorities have been less likely to be tenured and more likely to occupy the lower academic ranks than have their Caucasian counterparts (Olsen, Maple, & Stage, 1995; Tack & Patitu, 1994). Additionally, minorities have encountered racism and prejudice, and have experienced feelings of isolation, which have negatively affected their level of job satisfaction (Tack & Patitu). The American Faculty Poll revealed that 40.5% of Caucasian faculty members reported feeling very satisfied with their current position, in comparison with 36.2% of non-Caucasian faculty (Sanderson et al., 2000).

Regarding academic rank, level of satisfaction has differed according to whether the faculty member has been a full professor, an associate professor, or an assistant professor. In a study of faculty at research-oriented universities, 57.1% of full professors reported being very satisfied with their career, in comparison with 50.0% of associate professors, while only 12.5% of assistant professors reported being very satisfied with their career (Kalivoda, Sorrell, & Simpson, 1994). Likewise, in a study by Johnson and Gwartney (2000), 36% of full professors reported being very satisfied with their job, versus 34% of associate professors and 25% of assistant professors.

Closely related to academic rank, tenure status also has been linked to job satisfaction. In general, tenured faculty members have reported higher job satisfaction than have tenure track faculty members (Clark, 1986; Sanderson et al., 2000; U.S. Department of Education, 2001). This is in line with findings relative to academic rank, as tenured faculty members generally have been clustered in the higher academic ranks, which have had higher reported levels of job satisfaction than the lower, frequently non-tenured academic ranks. However, it is

interesting to note that both the *American Faculty Poll* (Sanderson et al.) and the *National Study of Postsecondary Faculty* (U.S. Department of Education) revealed that faculty at institutions in which no tenure system was available reported being very satisfied more often than did faculty in tenured or tenure track positions.

The literature also revealed a focus on employment status in regard to job satisfaction among postsecondary faculty. For example, Truell et al. (1998) studied job satisfaction among full-time and part-time community college occupational-technical faculty in Virginia. They found that although both full-time and part-time faculty enjoyed a relative high level of job satisfaction, part-time faculty reported higher job satisfaction than full-time faculty. Findings from the *National Study of Postsecondary Faculty* (U.S. Department of Education, 2001) echoed the findings of Truell et al. regarding job satisfaction and employment status. Other studies also noted employment status as a possible moderator of job satisfaction (Ernst, 1998; Townsend & LaPaglia, 2000; Valadez & Anthony, 2001).

The literature review indicated that several demographic characteristics have impacted job satisfaction among postsecondary faculty. Among these characteristics have been gender, ethnicity, academic rank, tenure status, and employment status. Thus, when designing a study to explore job satisfaction among industrial and technical teacher educators, it was important to take these characteristics into consideration.

Purpose of Study

The profusion of research conducted on job satisfaction among postsecondary faculty from other fields as well as among populations in different professions manifests the importance of research on job satisfaction. The purpose of this study was to explore job satisfaction among industrial and technical teacher educators. Specifically, the study addressed three research questions.

1. What is the level of job satisfaction among industrial and technical teacher educators?
2. How does this level compare with normative levels of job satisfaction?

3. What demographic characteristics predict differences in levels of job satisfaction among industrial and technical teacher educators?

Methodology

Population and Sample

The population for the study consisted of industrial and technical teacher educators in the United States. The *Industrial Teacher Education Directory* (Bell, 2000-2001) provided the sampling frame. Using purely random procedures, the researchers drew a sample of 347 from the 1,752 industrial and technical teacher educators (excluding department heads, coordinators, and other administrators) identified in the *Directory*. Krejcie and Morgan (1970) recommended a sample size of at least 317 for a population of 1,800. Thus, the sample size exceeded the number recommended for the size of the chosen population.

Instrumentation and Demographic Questionnaire

The researchers chose the Job Satisfaction Survey (JSS) (Spector, 1997) to measure job satisfaction. The JSS utilizes a six-point Likert-type scale with 1 representing *disagree very much* and 6 representing *agree very much* to measure job satisfaction within nine facets: (a) pay, (b) promotion, (c) supervision, (d) fringe benefits, (e) contingent rewards, (f) operating conditions, (g) coworkers, (h) nature of work, and (i) communication. Four items that can be computed to provide a score for each facet represent each facet, and an overall measure of job satisfaction can be obtained by calculating the total from all 36 items. Thus, scores for each facet could range from 4 to 24, with 24 representing the highest degree of satisfaction; scores for the overall measure of job satisfaction could range from 36 to 216, with 216 representing the highest degree of overall job satisfaction.

In regard to reliability, Spector (1997) reported coefficient alphas for the JSS ranging from $r = .60$ for the coworker facet to $r = .91$ for the overall measure. As evidence of the instrument's validity, Spector pointed to high correlations among job

satisfaction scales on the JSS and those of other job satisfaction instruments.

The researchers created a questionnaire to gather data on the demographic characteristics of respondents. Characteristics, based upon a review of related literature, addressed by the questionnaire were (a) age, (b) gender, (c) marital status, (d) ethnicity, (e) years in current position, (f) years working in industrial/technical teacher education, (g) institutional affiliation, (h) tenure status, (i) academic rank, (j) employment status, and (k) typical workload during last year.

Data Collection Procedures

The researchers mailed the JSS, the demographic questionnaire, a cover letter, and a self-addressed, stamped return envelope to the study's sample. The cover letter explained the purpose of the study and included a description of procedures used to facilitate tracking of feedback. In accordance with procedures recommended by Dillman (2000), questionnaires were numerically coded to limit follow-up notifications. Survey responses were kept confidential. Three weeks after the initial mailing, members of the sample population who had not returned instruments received an e-mail requesting completion and return of survey instruments; follow-up letters were mailed in cases in which a working e-mail address could not be found. No further attempts were made to contact non-respondents.

Data Analysis

Data from the completed JSS were scored according to the directions of the instrument's developer (Spector, 1997). Analysis procedures included descriptive statistics to identify the level of job satisfaction experienced by industrial and technical teacher educators and independent sample *t*-tests to examine if significant differences existed between the sample of industrial and technical teacher educators and Spector's normative sample. The researchers used stepwise multiple regression to determine variables that predicted differences in levels of job satisfaction and the amount of difference they predicted.

Findings

Of the 347 questionnaires sent to the sample, 133 were returned, for a response rate of 38.3%. In cases where respondents had not filled out the demographic questionnaire completely, data were entered as missing values.

Data from the demographic questionnaires yielded information about respondents' demographic characteristics. The majority of respondents were male (84.5%). The most common ethnicity of respondents was Caucasian (83.5%), followed by African American (4.7%), Hispanic (3.1%), Asian-Pacific Islander (3.1%), Native American (2.4%); 3.1% of respondents marked "other" for ethnicity. Regarding academic rank, most respondents were associate professors (44.6%), followed by full professors (37.7%), assistant professors (15.4%), other (1.5%), and instructors (0.8%). Most respondents worked at public universities (66.2%), followed by public four-year colleges (28.6%), private universities (2.3%), and private four-year colleges (0.8%). No respondent reported being affiliated with a two-year institution; 2.3% of respondents did not indicate institutional affiliation. Although most respondents were either tenured (77.7%) or on tenure track (18.5%), 3.8% were in non-tenure track positions. Most respondents were employed on a full-time basis (98.5%). Respondents reported that the average amount of time they devoted to teaching was 58.6%, to service was 13.8%, to research was 12.2%, to administration was 11.5%, and to other activities was 3.9%. Table 1 contains other demographic characteristics of respondents.

To determine the level of job satisfaction among industrial and technical teacher educators, responses from the JSS were analyzed using descriptive statistics. The nature of work facet had the highest mean ($M = 20.2$), indicating that respondents were most satisfied with the type of work they do. The lowest mean ($M = 11.7$) was obtained for operating conditions, which signified that respondents were the least satisfied with the rules and procedures under which they operate. In addition, means and standard deviations for Spector's (1997) norm sample were included to serve as a point of comparison; and results from t -tests were included to display areas of significant difference. Although Spector's norm sample was not comprised solely of

Table 1
Respondents' Demographic Characteristics

Category	<i>n</i>	Percentage
Age		
31-40 years of age	8	6.0
41-50 years of age	36	27.1
51-60 years of age	58	43.6
60+ years of age	27	20.3
Missing values	4	3.0
Years in current position		
2 years or less	6	4.5
2-5 years	16	12.0
6-10 years	25	18.8
11-15 years	28	21.1
16-20 years	16	12.0
21-25 years	15	11.3
26 years or more	23	17.3
Missing values	4	3.0
Years in industrial/technical teacher education		
2 years or less	1	0.8
2-5 years	7	5.3
6-10 years	17	12.8
11-15 years	22	16.5
16-20 years	16	12.0
21-25 years	22	16.5
26 years or more	41	30.8
Missing values	7	5.3

postsecondary faculty, inclusion of findings from this sample permits comparison of industrial and technical teacher educators with other occupational groups. Spector provided normative levels for the JSS, based on 8,113 individuals from 52 samples. Whereas most of the samples originated in a single organization, several of the samples came from multiple organizations. Results from the *t*-tests indicated that the sample from this study

reported significantly more satisfaction ($p < .001$) with promotion and nature of work and significantly less satisfaction ($p < .001$) with operating conditions than did the norm sample. Table 2 contains the means and standard deviations for each facet of the JSS, as well as for overall job satisfaction.

Table 2
Differences in JSS Scores Between the Study Sample and Spector's (1997) Norm Sample

Facet of job satisfaction	Study sample (<i>N</i> = 133)		<i>M</i>	Norm sample (<i>N</i> = 8,113)		<i>t</i>	<i>df</i>	<i>p</i>
	<i>M</i>	<i>SD</i>		<i>SD</i>				
Pay	13.0	5.1	11.8	2.6	2.71	133	.007	
Promotion	14.2	5.0	12.0	1.9	5.07	133	<.001	
Supervision	17.8	5.5	19.2	1.5	-2.93	132	.004	
Fringe benefits	14.1	5.1	14.2	2.2	-0.23	133	.822	
Cont. rewards	13.9	4.9	13.7	2.0	0.47	133	.639	
Op. conditions	11.7	4.2	13.5	2.2	-4.93	133	<.001	
Coworkers	17.1	4.5	18.3	1.1	-3.07	132	.003	
Nature of work	20.2	3.4	19.2	1.3	3.39	133	<.001	
Communication	15.0	4.6	14.4	1.8	1.50	133	.135	
Overall job satisfaction	136.9	28.5	136.5	12.1	0.16	133	.872	

To determine which demographic characteristics predicted differences in levels of job satisfaction among industrial and technical teacher educators, stepwise multiple regression analysis was used. The independent variables for this analysis were the demographic characteristics. The dependent variables

were facets of job satisfaction and overall job satisfaction as measured by the JSS. The computer determined the order of entry of the independent variables into the equation based on the R^2 value (Huck, 2000). Because even random numbers explain some variance, a cut-off value was needed to prevent random variables from entering the equation. The researchers used the SPSS (2000) default criteria (F -to-enter $\leq .050$; F -to-remove $\geq .100$) for this value. Using these criteria, no significant predictors were found for the job satisfaction facets of supervision, coworkers, nature of work, and communication. Significant predictors were found for pay, promotion, benefits, contingent rewards, operating conditions, and overall job satisfaction. Table 3 displays the amount of significant difference predicted by demographic characteristics.

Table 3
Results of Stepwise Multiple Regression Analysis

Dependent variable	Model	Predictor(s)	R	R^2	Adjusted R^2	Std. error of the est.
Pay	1	Academic rank	.269	.072	.064	5.04149
Promotion	1	Teaching	.200	.040	.032	4.96462
	2	Teaching, academic rank	.268	.072	.056	4.90211
Benefits	1	Tenure status	.225	.050	.043	5.01740
Contingent rewards	1	Employment status	.193	.037	.029	4.98084
Operating conditions	1	Age	.307	.094	.087	4.01263
	2	Age, gender	.416	.173	.159	3.85002
Overall job satisfaction	1	Employment status	.188	.035	.027	28.77965

Discussion

This study represented an initial step in exploring the dynamics of job satisfaction among this population; much more research is needed to gain a thorough understanding of this complex issue. Although this study's results can be used to generate discussion and recommendations, certain caveats must be kept in mind when viewing such discourse. First, the study's low response rate (38.6%) yielded a correspondingly low sample size ($N = 134$). There may have been differences in respondents and non-respondents that influenced this study's results. Likewise, research conducted on a larger sample might yield different results.

Another caveat pertains to comparing this study's results with Spector's (1997) norm sample. As noted earlier, Spector's sample was composed of individuals from different occupational groups. Also, because no information about the norm sample's demographic composition was available, there could have been wide differences in the demographic compositions of the samples. Therefore, differences in the demographic compositions of the two samples could have influenced results.

Industrial and technical teacher educators in this study reported levels of job satisfaction similar to those reported by Spector's (1997) norm sample. An exception to this general tendency was found in scores for satisfaction with nature of work. Participants reported more satisfaction with nature of work than with any other facet of job satisfaction; likewise, the mean for satisfaction with nature of work ($M = 20.2$) for this study was significantly higher ($p < .001$) than the mean for satisfaction with nature of work ($M = 19.2$) for the norm sample (Spector). Another exception to this general tendency was found in scores for satisfaction with operating conditions. Participants reported less satisfaction with operating conditions than with any other facet of job satisfaction, and the mean for satisfaction with operating conditions ($M = 11.7$) for this study was significantly lower ($p < .001$) than the mean was for satisfaction with operating conditions ($M = 13.5$) for the norm sample (Spector).

These findings might be viewed in terms of autonomy. A primary reason that many postsecondary faculty members enter academia has been the autonomy associated with academic

freedom (Ferrara, 1998; Nickerson & Schaefer, 2001; Wergin, 2001). For example the *National Survey of Postsecondary Faculty* (U.S. Department of Education, 2001) revealed that postsecondary faculty members were highly satisfied with their autonomy to choose course content. In addition, they can choose topics to research as well as research methods. Thus, postsecondary faculty members such as those in industrial and technical teacher education might be inclined to be satisfied with the nature of their work because they have had so much autonomy in choosing it. Relative to the study's theoretical framework, nature of work functions as a motivator. Being satisfied with the nature of their work allows faculty to move toward meeting higher order needs such as self-actualization.

Autonomy also might be an explanatory factor for the finding on participants' satisfaction with operating conditions. For a population such as postsecondary faculty that strongly values autonomy (Ferrara, 1998; Nickerson & Schaefer, 2001; Wergin, 2001), it is logical to assume that attempts to curtail autonomy would not be looked upon favorably. Indeed, concern has been evinced about measures that erode faculty autonomy (Carroll, 2000; Ferrara). Perhaps the low level of satisfaction with operating conditions reported by industrial and technical teacher educators could be attributed to their viewing of the rules and procedures under which they must operate as a threat to their autonomy. Therefore, according to the theoretical framework, although rules and procedures that do not impinge upon autonomy would not promote job satisfaction, rules and procedures (e.g., hygiene factors) that do encroach upon autonomy would foster job dissatisfaction. If this supposition were true, then dissatisfaction with rules and procedures could undermine high satisfaction in such areas as nature of work, thereby putting industrial and technical teacher educators at risk for turnover and eroding educational quality.

The multiple regression analysis yielded mixed results about the predictive value of demographic factors on job satisfaction. In line with the literature on job satisfaction among postsecondary faculty (Fiorentino, 1999; Hagedorn, 1996, 1998; Tack & Patitu, 1992; U.S. Department of Education, 1998), gender was a significant predictor of differences in satisfaction

with operating conditions. However, gender did not predict differences in any other facet of, or the overall measure of, job satisfaction. Likewise, ethnicity did not predict differences in any facet nor in the overall measure of job satisfaction; this did not support findings in the literature (Olsen et al., 1995; Sanderson et al., 2000). Academic rank was found to predict differences in levels of satisfaction with pay and promotion, and tenure status predicted differences in levels of satisfaction with benefits. In addition, employment status was found to be the only significant predictor of satisfaction with contingent rewards and overall job satisfaction; age was found to predict satisfaction with operating conditions, and time spent teaching predicted satisfaction with promotion. There were no significant predictors among demographic factors for satisfaction with supervision, coworkers, nature of work, or communication.

Although certain demographic factors predicted differences in levels of job satisfaction, the amount of predicted difference was relatively small. For example, although employment status was a significant predictor of overall job satisfaction, it explained only 2.7% of difference in levels of overall job satisfaction, meaning that over 97% of difference in overall job satisfaction could be attributed to factors other than demographics. The model accounting for most difference in any facet of job satisfaction, age followed by gender on satisfaction with operating conditions, still accounted for only 15.9% of the difference, leaving nearly 85% of the difference unexplained. The small amounts of predicted differences could be good news for administrators seeking to improve job satisfaction for postsecondary faculty. Whereas little could be done to alter demographic factors, other factors contributing to job satisfaction could be more amenable to adjustment than are demographics. For instance, if organizational factors were responsible for differences in job satisfaction, efforts to improve job satisfaction could take the form of enacting, changing, or eliminating certain organizational policies and procedures. Likewise, personal characteristics other than demographics that might contribute to job satisfaction could be addressed through personal or career development workshops and initiatives.

Conclusions and Recommendations

To attain and maintain excellence in industrial and technical teacher education, the issue of job satisfaction must be examined and addressed. This study opened the door for in-depth, systematic exploration and discussion of job satisfaction among industrial and technical teacher educators.

The results of the study indicated that personal demographic factors explain only a small amount of the variance in respondents' reported levels of job satisfaction. This finding has implications for how job satisfaction should be addressed in the postsecondary education context. However, the study's relatively low response rate and its correspondingly small sample size should be taken into consideration. Replication of the study with a larger sample size and added measures (e.g., incentives, additional mailings) for ensuring a good response rate is recommended.

Replication of the study also could provide confirmation that personal demographic factors are not highly significant predictors of job satisfaction among industrial and technical teacher educators. Confirmation of this finding would warrant future research regarding other factors that might affect job satisfaction. Because results from this study indicated that participants were least satisfied with operating conditions, future research that addresses organizational factors such as the rules governing faculty members and the procedures under which they must operate is recommended. Furthermore, as rules and procedures tend to vary from institution to institution and from department to department, future research on job satisfaction among this population at the institutional and departmental levels might be relevant. Administrators at postsecondary institutions could identify institutional and departmental rules and procedures that promote job dissatisfaction; then, those rules and procedures identified as adversely impacting job satisfaction could be eliminated and replaced with rules and procedures fostering job satisfaction. Identification of such rules and procedures related to job dissatisfaction could occur through interviews (group or individual) with faculty members, as well as through anonymous questionnaires that give faculty members an opportunity to provide a qualitative response to an inquiry

regarding factors detrimental to their job satisfaction. Suggestions and ideas for improving rules and procedures relative to job satisfaction could be garnered in a similar manner, as well as by consulting the available literature.

Administrators interested in improving job satisfaction among industrial and technical teacher educators also should direct attention toward supervisory policies. Results of this study revealed that the mean for satisfaction with supervision for industrial and technical teacher educators was significantly lower ($p = .004$) than the mean for satisfaction with supervision for the norm sample (Spector, 1997). Administrators should seek to understand why industrial and technical teacher educators reported lower satisfaction with supervision than the norm sample. Do they desire increased participation in making decisions now made primarily by administrators? Are supervisors failing to be supportive, respectful, and communicative? Answers to such questions must be ascertained to gain a thorough understanding of the finding regarding satisfaction with supervision. When those answers are obtained, measures can be taken to improve satisfaction with supervision. Obtaining those answers might be accomplished via such data collection techniques as interviews, focus groups, and anonymous questionnaires aimed at gathering qualitative responses from faculty.

Finally, as knowledge about job satisfaction among industrial and technical teacher educators increases, it must be disseminated to interested parties throughout the field. Future research should not be limited to factors contributing to low job satisfaction. Areas of high satisfaction should be explored thoroughly. Institutions with staff highly satisfied with organizational policies and procedures particularly should endeavor to report their effectiveness, perhaps benchmarking best practices relative to job satisfaction and thereby allowing all involved in industrial and technical teacher education students, faculty, and institution to benefit.

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