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ABSTRACT

This study investigated whether academic or career-technical teachers perceived greater role, task, and environmental stress in a career center setting. Participants were academic and career-technical teachers employed by a career center schools district in southwest Ohio. A total of 24 academic and 50 career-technical teachers, all of whom had fewer than 4 years of teaching experience, completed the Teacher Stress Measure Instrument. A subgroup of participants also completed discussions about their feelings surrounding the topic of teacher stress. Results indicated that career-technical teachers reported greater role stress and task stress in the career-center setting, while academic teachers reported greater school-environmental stress. The paper recommends that career-technical teacher preparation programs implement strategies and techniques to address the role and task stress factors identified in the study. Traditional academic teacher preparation programs need to incorporate additional information and teaching strategies for their students who teach in diverse employment settings, such as career centers and urban schools. (Contains 14 references.) (SM)

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**A COMPARISON OF ROLE/TASK/ENVIRONMENT STRESS EXPERIENCED
 BY BEGINNING ACADEMIC AND CAREER-TECHNICAL TEACHERS IN
 SOUTHWESTERN OHIO CAREER-TECHNICAL SCHOOLS**

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Introduction

Teaching has many intrinsic and extrinsic rewards for people entering the pedagogical arena. However, teaching is not without its inherent problems. Problems associated with job related stress remain at the top of many teachers' list (Fimian & Fastenau, 1990). Historically, the duties and responsibilities for the classroom teacher have been viewed as demanding. Duties such as instructional planning, managing student behavior, interacting with other teachers and administrators professionally, and insuring their programs produce students who can pass state required proficiency tests in order to graduate have continued to increase in both complexity and accountability. Accompanying stressors such as meeting with parents, writing new curriculum, grading and evaluating students, and meeting administrative paperwork requirements can produce a great amount of stressful situations for the classroom teacher. As perceived negative stressors increase, a teacher may not find a good way in which to deal with the stress. Excessive amounts of negative stress can result in teachers deciding to leave secondary teaching for work that has less perceived negative stress.

The building and maintenance of a strong instructional environment within a school requires that school stressors and individual teacher stress that negatively impact a teachers performance be identified. Once identified, programs of teacher education and school staff development can be designed to address and reduce the negative stress factors.

Significance

The significance of the study is found in the need to investigate the perceived differences between academic and career-technical teachers working in a career center regarding; (1) role stress, (2) task stress, and (3) environment stress. The need to identify which group of teachers experiences greater role, task, environment stress can assist university teacher educators in working with the new teachers as the new teacher completes course work and receives visitation in their schools from the teacher educator.

Teachers new to the profession express almost daily the impact perceived negative stress plays in their life as a new teacher. A second purpose of the study was to identify which of the three teacher stress factors role, task, or environment - was selected by academic and career-technical teachers as having the most impact on the amount of perceived negative stress they experience during the school day. Interviews with both academic and career-technical teachers were conducted after the initial data collection to identify additional issues surrounding perceived negative stress not identified by the study instrument.

The need for this study is supported in the literature surrounding teacher stress. Carolyn Wiley (2000) identifies important reasons for studying teacher stress; teachers who experience negative stress in their work can be impacted in numerous ways. Stress can have detrimental effects on the teacher's themselves, their students, and the learning environment. As a consequence of their stressful job conditions, many teachers are finding their feelings about themselves; their students, and their profession grow more negative overtime. Increased negativity can ultimately result in teachers viewing their teaching career as a poor choice of professions, and teachers may seek a new career outside of education.

Statement of the Problem

Much of the recent literature concerning teacher stress has focused on teachers perceptions that their job is more stressful than comparable professions requiring a bachelors degree or higher (Litt & Turk, 1985). Being perceived as more stressful, the teachers state they experience greater job dissatisfaction than found in other forms of employment.

The role and function of academic and career-technical teachers in career centers has always been an area of professional discussion among educators who work in career-technical education. The researcher serves as director of career-technical teacher education at a state supported university in southwest Ohio, and has conducted over 3,000 classroom observations. The researcher has been involved in many discussions surrounding teacher professional responsibilities, and how teacher stress affects both academic and career-technical teachers.

The most common types of stress found in career center schools revolve around teacher role, teacher task, and the

school environment itself. The daily discussion between teachers in many career center schools may include a discussion on perceived levels of stress. Identification of what types of stress are experienced, and who experiences the greater amount of stress between academic and career-technical teachers teaching in a career center remains an issue. Additional questions that are typically raised in conversation include what kind of stress has the most negative impact on academic and career-technical teachers, and how can stress be addressed by schools of education and career center staff development programs.

The importance of answering the questions is found in the problem of career-technical teachers leaving the teaching profession, and returning to their previous or other employment. If career-technical teachers experience excessive negative stress situations in teaching, they have the option of returning to their previous occupation. Academic teachers who experience negative job stress working at a career center may decide to leave the school and seek employment with another school district. A decision by the academic teacher to remain at the career center, even if deemed a stressful place to work by the academic teacher, might be made in order to receive higher wages and benefits typically offered by a career center school. However, the academic teacher may not be effective in the classroom due to the stress experienced at the career center.

Both academic and career-technical teachers see a need for staff development to address their specific concerns regarding negative stress. Career-technical teachers also state professional teacher preparation programs should provide increased knowledge about and coping strategies for working within a career center environment.

Among career center faculty, placement of students into career-technical programs who have exhibited high levels of disruptive behavior prior to entering the career center leads the list of reported stress related problems. Almost half of career-technical teachers indicated student motivation and maintaining career-technical program enrollments were also serious problems that produced negative stress (NCES, 1994).

Career-technical teachers argue that their teaching responsibilities and stress levels exceed that of traditional academic teachers. The statement is made based on the fact the career-technical teachers have the same classroom responsibilities as academic teachers, but career-technical

teachers have additional liability issues, due to the nature of their occupational training laboratories. Supervising student's use of dangerous laboratory equipment. Other factors that increase career-technical teacher stress include recruiting and retaining students in their occupational programs, operating a co-curricular career-technical student organization, coordinating a career-technical advisory committee, finding and placing students in occupational specific job training programs, and coordinating the development of integrated technical and academic competencies (see Adams, 1996).

Conceptual Framework and Related Literature

Many of the issues surrounding teaching and negative stress in a career center school are derived from the demands placed on both the academic and career-technical teachers. The literature on teachers who experience perceived negative stress in schools identified no clear recommendation as to a conceptual or theoretical model by which to conduct the study. However, Camp (2001) encourages researchers who study career-technical phenomenon to design a theoretical or conceptual framework based upon substantive theory. Camp further encourages the researcher to develop the study with an empirical foundation, with supportable premises, and then extend that premise through a logical path of reported research and clear reasoning.

Using the charge provided by Camp, the researcher developed this study based upon empirical evidence and theory in the literature. Loyd Pettegrew and Glenda Wolfe developed the Teacher Stress Measure (TSM) to rate teacher role, task, and environment stress. Examination of the stressors commonly found in the career center can also be categorized into these three distinct areas. Both academic and career-technical teachers must deal with (1) teacher role stress, (2) teacher task stress, and (3) school-environment stress in their daily teaching lives. Pettegrew and Wolfe defined the three measures of teacher stress as:

Role Stress

Role Ambiguity is the absence of clear or adequate information about the role one must perform.

Role Overload denotes the absence of sufficient resources to perform ones role adequately.

Role Conflict involves the presence of two or more work demands that are incompatible.

Nonparticipation concerns not being directly involved in the decision-making process on issues that specifically affect ones

work.

Role Preparedness represents stress due to feeling a lack of competency or preparation to perform a given role.

Task Stress

Task Stress: tasks a teacher may be asked to perform, that may create an increased stress anxiety in the teacher.

Environment Stress

Environment Stress: environment stress looks at the school as an environment that can increase the teachers stress level.

For this study, the previous definitions provided by Pettegrew for the three stress areas are used.

When discussing stress and the role it plays in the lives of teachers, its meaning and application can have several interpretations depending on the situations involved. Teacher stress, as identified in the literature, points to the interaction between the teacher and one of several environments. These environments are the school, interpersonal, and intra-personal environments. As noted by Litt and Turk (1985) and others, stress can be conceptualized to include job satisfaction (Kyriacou & Sutcliffe, 1979; Price, 1971; Rudd & Wiseman, 1962), absenteeism (Bridges 1980), intention to leave the profession (Kyriacou & Sutcliffe, 1979), psychological and physical distress (Coates & Thoresen, 1979; Needle, Griffen, & Svendsen, 1979; Taylor & Dean, 1971). Prince (1988) suggested stress results when a person perceives the demands of the situation to be greater than his or her capabilities to meet those demands. Prince further states an individual does not create stress; rather, it derives from an individual's perception of workplace demands and personal abilities of being able to address those demands. The question arises as to when and how stress occurs in a teacher's occupational life. Issues relating to teacher perceived self-efficacy can and do play a part in perceiving stress related situations and environments. While not a focus of the study, it should be duly noted that this was considered at the outset of the study.

Work conditions that are typically attributed to causing teacher stress were cited in Norton (1999), They are:

- (1) Problems and frustrations with the variety of administrative routines and accompanying paperwork encountered.
- (2) Concerns about the evaluation of student performance and school grading practices.
- (3) Problems relating to student behavior and handling of student discipline.

- (4) Problems relating to teacher load and expectations for assuming extra-curricular activities
- (5) Concerns about relationships with their peers and administrative personnel, including supervisory relationships and communication channels
- (6) Problems of finance; meeting the requirements of increased personal and professional expenditures on a first-year teacher salary. A known stress inducing factor for career-technical teachers during their first two years of teaching, when the costs of attaining their teaching license can be over \$10,000.

Eskridge & Coker (1985) also state certain professional variables stimulate teacher stress. For example, secondary teachers experience stress more frequently than elementary teachers do. Also, the fewer years of professional preparation a teacher has increases the likelihood of stress. Milstein and Golaszewski (1983) in their study of organizationally based stress found the age and sex of the teacher did not result in significant findings of difference on the effects of organizational stress being studied.

As noted, the fewer number of years of professional teacher preparation teachers have impacts their ability to handle negative stress successfully. Career-technical teacher certification/licensure in Ohio has undergone major revisions since 1998, when the latest Ohio Department of Education Teacher Licensure standards went into effect (Ohio Department of Education, 1997). Career-technical teachers in Ohio can receive their provisional two-year teaching license and ultimately their five-year professional license by completing a 42-quarter hour teacher licensure program at an approved university that offers such a program.

One of the unique features of career-technical education is the fact career-technical teachers are allowed to teach a class or program of study to secondary career center students as they spend two-years completing their initial teacher licensure requirements. Career-technical teachers have all of the classroom responsibilities of traditional academic teachers, as well as other employment obligations specific only to career-technical teachers. However, the career-technical teacher enters the classroom with little or no exposure to professional teacher preparation or student teaching. This fact alone almost assures that career-technical teachers will experience negative stress during their teaching assignment.

It should be noted career-technical teachers are required

to complete the 42-quarter hour licensure program even though they may have a bachelor's or master's degree in their occupational field. One of the areas of stress frequently discussed with the researcher by career-technical teachers is the amount of money, time and travel involved in obtaining their initial teaching license. The career-technical teacher licensure program is offered only at one state supported university in Southwestern Ohio. Many of the teachers in the region must travel three to four hours roundtrip to attend class, in addition to attending a 3-hour class at the university. Career-technical teachers can spend nine to twelve hours weekly in obtaining their teaching license in addition to spending 35-40 clock hours per week teaching in the classroom.

Career-technical teachers spend two to three weeks during the summer in licensure classes during their initial two years of teaching. Career-technical teachers also complete all State of Ohio Praxis I, II, and III examinations in order to receive their professional five-year teaching license. Passage of the Praxis series tests, I, II, III - developed by the Educational Testing Service are considered an additional stressful situation identified by career-technical teachers.

Academic teachers usually complete their professional teacher preparation prior to actually accepting a full-time teaching assignment and have completed a field-based student teaching practicum. Exposure to the classroom setting for academic teachers is an advantage a career-technical teacher hired from business and industry to teach high school students does not have. Career-technical teachers literally accept a teaching position, and in many cases, begin teaching without the benefit of a professional teacher preparation program, in-service, or mentoring environment. This environment for career-technical teachers can result in high levels of frustration, anxiety, and negative stress, which can impact the individual's teaching performance or decision to remain in the teaching field.

Research Methods

The general purpose of the study was to determine which group of teachers; academic or career-technical perceives greater role, task, and environment stress in a career center setting. The three stress variables selected for the study are role stress, task stress, and environment stress as previously defined by Pettegrew and Wolfe. The research questions that were

addressed in the study are: (1) Do differences exist between academic and career-technical teachers perceived role stress in a career center as measured by the Teacher Stress Measure Instrument? (2) Do differences exist between academic and career-technical teachers perceived task stress in a career center as measured by the Teacher Stress Measure Instrument? (3) Do differences exist between academic and career-technical teachers perceived environment stress in a career center as measured by the Teacher Stress Measure Instrument?

Pettegrew and Wolfe conducted a validity study of several measures of teacher stress and developed the Teacher Stress Measure (TSM) consisting of thirteen different subcategories and sixty-seven items. Items in the instrument are measured on a 6-point Likert-type scale. For the study, the subsets of role stress (items 1-25), task stress (items 46-54), and environment stress (items 26-30) were specifically examined. Scoring of the TSM instrument was accomplished by computing a mean score for each of the three sub-groups of stress. The three sub-groups comprise the three teacher stress dependent variables of role, task, and environment. The mean scores of the three stress variables are computed for both academic and career-technical teachers, and comparisons were made between the mean scores of each teacher group. The mean scores of the academic and career-technical teachers for each of the three stress variables were compared to determine overall stress levels.

The stress measures of role, task, and environment were analyzed using both descriptive and inferential statistical tests. Statistical means, standard deviations, MANOVA and ANOVA were computed. The reliability of the questions within the subcategories was measured by Cronbach's alpha. The coefficient alphas calculated for each of the variables used in the Pettegrew and Wolfe study, along with the coefficient alphas for this study are reported

Insert Table 1 about here

Pettegrew & Wolfe's study of teacher stress measures also found the structural reliability and predictive validity associated with their subcategories to meet or exceed standards related to the constructs. Of the subcategories identified by Pettegrew and Wolfe, five subcategories - role ambiguity, role overload, role conflict, nonparticipation, and role preparedness - in the Teacher Stress Measure Instrument are used as variables in the study to assess the dependent variable role stress. One category, task stress was used to assess task stress. School

stress was used to assess the dependent variable school-environment stress.

The participants for the study were academic and career-technical teachers employed by a career center school district in Southwest Ohio. A total of 24 academic and 50 career-technical teachers agreed to participate voluntarily in the study. The participants are teachers who have less than 4 years of teaching experience, and have not obtained a Professional 5-year teaching license or 4-year certificate. The 74 surveys were divided into separate groups, academic teachers and career-technical teachers. Each survey was reviewed for completeness and the three subsets of role, task, and environment stress were identified on each survey.

The raw data for each of the three subsets from the surveys was entered into the statistical software package "Statistical Processing for the Social Sciences version 10.0" (1991-2000). Grand mean totals for each of the subsets for role, task, and environment stress were computed for both academic and career-technical teachers. Multivariate analysis of variance (MANOVA) procedures were applied to determine whether statistically significant mean differences existed for role stress, task stress, and environment stress as measured by the Teacher Stress Measure Instrument between academic and career-technical teachers who are completing four or less years of teaching service in Southwest Ohio career centers. For MANOVA results that showed statistical significance at the .06 level, one-way analysis of variance compared the mean scores for the two independent variables academic teachers and career-technical teachers with the stress subgroups of role, task, and environment. An alpha level of .06 was used to determine statistical significance of all tests. The selection of .06 was based upon the low number of teachers participating in the study.

In addition to the administration of the Teacher Stress Measure Instrument, participants were asked to consider staying after the completion of the TSM, and to meet with the researcher to discuss their feelings surrounding the topic of teacher stress and answer a series of questions developed by the researcher.

Insert table 2 about here

Two groups, of 10 teachers each, who had completed the Teacher Stress Measure agreed to participate in the discussions.

The researcher provided some basic definitions regarding role, task, and environment stress as defined by Pettegrew.

The discussions occurred in a classroom with only the participants and the researcher present. No local school administrators or staff members were present. The researcher collected the participant discussion consent forms prior to the start of the discussion. Both academic and career-technical teachers were present in the room as the questions were asked and opened for discussion. The researcher asked each question, and allowed the group to provide open-ended responses. The researcher only interrupted the participants when a point of clarification was needed regarding a statement made by them. Additionally, a follow-up phone interview with 10% of the participants was conducted to discuss data analysis.

Findings and Conclusions

To directly answer the original research questions:

(1) Do differences exist between academic and career-technical teachers perceived role stress in a career center as measured by the Teacher Stress Measure Instrument?

Answer to research question (1) Career-technical teachers report greater role stress in a career center setting. The difference between academic and career-technical mean scores on role stress is statistically significant.

(2) Do differences exist between academic and career-technical teachers perceived task stress in a career center as measured by the Teacher Stress Measure Instrument?

Answer to research question (2) Career-technical teachers report greater task stress in a career center setting. The difference in mean scores between academic and career-technical task stress is statistically significant.

(3) Do differences exist between academic and career-technical teachers perceived environment stress in a career center as measured by the Teacher Stress Measure Instrument?

Answer to research question (3) Academic teachers report greater school-environment stress. The mean scores between academic and career-technical teachers environment stress is not statistically significant.

Insert table 3 about here

A question to be considered based upon the study findings is: comparing academic and career-technical teachers mean scores for role, task, and environment stress, which group score

indicates perceived higher or lower stress when compared to teacher mean scores in high stress schools as reported by Pettegrew and Wolfe's study. Pettegrew and Wolfe reported teacher mean scores for role, task, and environment stress as they occurred in high stress schools. Examining academic and career-technical teachers mean scores on the variables of role, task, and environment stress in comparison to the high stress mean scores reported by Pettegrew and Wolfe was interpreted in the following manner. For role stress, academic (2.75) and career-technical (2.98) teachers exceed the mean score reported by Pettegrew (2.72). Both groups of teachers experience role stress. For task stress, academic (3.19) and career-technical (3.55) are below the mean score reported by Pettegrew of 3.70. For environment stress, academic (3.52) and career-technical (3.31) are below the mean score reported by Pettegrew of 3.70.

Examining the comparison of academic and career-technical teachers as a whole, academic teachers experience less role stress than career-technical teachers, but rate higher role stress than teachers reporting role stress in the Pettegrew study. Academic teachers have less task stress than career-technical teachers and less task stress than teachers reporting task stress in the Pettegrew study. Academic teachers experience greater environment stress than do career-technical teachers but less environment stress than teachers reporting environment stress in the Pettegrew study. It should be noted that the Pettegrew and Wolfe study is now 20+ years old, and some stress factors may have changed in schools.

The study determined that career-technical teachers experience greater amounts of stress in the categories of role and task. Academic teachers experience greater amounts of school-environment stress. Adams (1996) noted in her study that it is encouraging that teachers are reporting slight to moderate levels of stress. This finding indicates the teacher has not reached the stage of no stress where productivity is greatly diminished.

The finding that both academic and career-technical teachers are experiencing stress may be an indicator of productivity in their teaching roles. Comparing the study findings against the reported findings of Adams (1996), differences in outcomes are noted. Adams found role ambiguity to cause career-technical teacher stress. This finding was not supported by the study. Adams reported role overload as a significant stressor. The study findings support Adams findings; career-technical and academic teachers feel their work

exceeds their expectations. Role conflict was not found to be significant in either study. Nonparticipation was found by Adams not to be a stressor for career-technical teachers. Academic teachers rated nonparticipation as stressful. Role preparedness was examined by Adams and found to be significant contributors to career-technical teacher stress. Role preparedness had no significant outcomes from this study. Task stress was found to generate occupational stress in the Adams study.

This study found task stress generated occupational stress in both academic and career-technical teachers as well. School-environment stress was found to contribute significant stress on career-technical teachers in Adams study. This study supports that finding as well. Academic and career-technical teachers report experiencing school-environment stress almost equally. School-environment stress appears to be a common denominator for teachers (Adams, 1996).

Limitations of the Study

A descriptive design using non-random, quota sampling for data collection was employed for the study (Trochim, 1999). The causality of teacher stress reported as role stress, task stress, and environment stress is assumed because of a strong, highly predictive relationship of the stress variables identified in the Teacher Stress Measure Instrument (Hittleman & Simon, 1992).

The non-random, quota-sampling method of data collection provides a second limitation to the study (Trochim, 1999). The non-random quota sample is less optimal than a random sample. Due to the low numbers of the overall population of academic and career-technical teachers with less than four years of teaching experience, the sensitive nature of the study and access to the sample that fit the parameters of the study, the quota sample technique was the best choice for obtaining a study subject group.

The third limitation of the study is the dependency on the Teacher Stress Measure (TSM) 67-item instrument. The study was only able to identify those factors defined by the items comprising the TSM. It is possible other factors regarding stress were missed in the survey data collection or analysis of data.

The fourth limitation of the study is the Teacher Stress

Measure is a self-reporting, paper-pencil survey instrument. The use of teacher observations, teacher absence reports, etc. might have disclosed additional information concerning teacher role, task, and environment stress.

Recommendations

Beginning with the guiding thought that perceived negative stress experienced by new teachers might cause increased attrition of new teachers from the teaching profession, the study sought to identify and clarify the issues of stress in career centers. Presented with the finding concerning academic and career-technical teacher stress, several positive outcomes are possible. The purpose of the study was to determine which group of teachers, academic or career-technical perceives greater stress in a career center school. With the knowledge that career-technical teachers reporting stress in the areas of role and task stress, specific changes to the career-technical teacher licensure program can be made. Schools of education that offer career-technical licensure programs can now examine what factors cause the most stress for career-technical teachers new to the teaching profession.

Issues surrounding specific role and task stress issues need to be addressed in the career-technical teacher education program. School environment issues need to be addressed by career center administrators. It is recommended that replication of the study will occur across the State of Ohio, in hopes of determining if other career-technical and academic teachers uniformly agree with the scores reported on the stress factors role, task, and environment. Schools of education have a starting point to address teacher stress and can collaborate together on the best way in which to reduce stress for either academic or career-technical teachers.

A second implication from the study is the identification of stress issues that exists inside the career center school district. The career center school district can now attempt to design a professional teacher staff development program agenda to address the individual and collective needs of its teaching faculties. Career center administrators and staff development committees need to assist new teachers with clarifying their teacher responsibilities, to include better understanding of the teacher evaluation process. Career center administrators need to be made aware of the time and money issues that new career-technical teachers must expend in order to obtain their initial

teaching license. Career center administrators need to check on the stress levels being experienced by the new teacher, and offer support, encouragement, and peer group discussion as a means to deescalate academic and career-technical teachers stress. It is hoped career center administrators will create mentoring programs for new teachers to lessen the negative stress issues associated with being a new teacher.

Suggestions for further research include a continued analysis of teacher stress issues associated with teaching in a high school career center setting. Identification of different stress variables will also be of great assistance for future study. It is also suggested a program of study be developed for use in pre-service teacher training programs at schools of education to lessen the effects of stress, or provide new teachers with coping strategies that will allow them to recognize negative stress, and find ways in which to relieve the stress.

The present model of evaluating teacher role, task, and environment stress should be replicated across the state and nation to determine if the effects of stress on new academic and career-technical teachers are similar.

As changes to the university career-technical teacher licensure program take place to address the stress issues identified as having a negative impact on teachers, those changes should be studied for their effectiveness at improving career-technical teacher retention, and job satisfaction for the new teacher.

Finally, future research should examine teacher stress based upon a longitudinal study conducted in various parts of the United States. The study should include urban schools and populations of students and teachers not traditionally studied. The study would identify teacher stress issues, identify successful programs created to alleviate teacher stress and disseminate the information for use at all levels and delivery systems of teaching.

The research study determined career-technical teachers employed in Southwestern Ohio experience greater amounts of teacher role and teacher task stress than academic teachers who teach in a career center setting. It was also determined academic teachers experience greater school-environmental stress teaching in a career center setting.

On the basis of the results, it is recommended career-technical teacher preparation programs implement strategies and techniques to address the role and task stress factors as identified in the study. Traditional academic teacher preparation programs need to incorporate additional information and teaching strategies for their students who teach in diverse employment settings, such as career centers and urban school districts. Academic teachers experiencing stress will need initial support during their student teaching process and will need professional teacher in-service training to address the on-going stress issues associated with teaching at a career center.

References

- Adams, E. (1996). The Effects of School Systems, Teacher Internal Characteristics, and Students on Vocational Teacher Stress (Doctoral Dissertation, University of Virginia, 1996). UMI Dissertation Services, UMI number 9626113.
- Camp, W. G. (2001). Formulating and evaluating theoretical frameworks for career and technical education research. Journal of Vocational Education Research, 26, (1), 4-25.
- Eskridge, D. H. & Coker, D. R. (1985). Teacher stress: symptoms, causes, and management techniques (EJ320930). : ERIC Document Service.
- Fimian, M. J. & Fastenau, P. S. (1990). The validity and reliability of the teacher stress inventory: A re-analysis of aggregate data. Journal of Organizational Behavior, 11, 151-157.
- Hittleman, D. R. & Simon, A. J. (1992). Interpreting educational research. New York: Macmillian.
- Litt, M. D. & Turk, D. C. (1985). Sources of stress and dissatisfaction in experienced high school teachers (EJ314561). : Eric Document Service.
- Milstein, M. M. & Golaszewski, T. J. (1983). Organizationally-based stress: what bothers teachers (an end of year perspective) (ED231048). Montreal, Quebec, Canada: AERA.

- National Center for Educational Statistics. (1994). Public secondary school teacher survey on vocational education (NCES/FRSS Publication NCES No. 94-409). Washington, DC: U.S. Government Printing Office.
- Norton, M. S. (1999). Teacher retention: reducing costly teacher turnover. Contemporary Education, 70(3), 52-55.
- Ohio Department of Education. (1997). Teacher Education and Licensure Standards. (State of Ohio Publication; Administrative Code 3301-24). Columbus, Ohio.
- Pettegrew, L. S., & Wolfe, G. E. (1981). Validating measures of teacher stress. Nashville, TN. George Peabody College of Vanderbilt University. (ERIC Document Reproduction Service No. ED213743)
- Prince, H. T. II (1988). The leader as stress manager. In J. Abrams, D. Puglisi, and J. Balla (Ed.), Leadership in organizations (pp. 323-340). New York: Avery Publishing Group.
- Trochim, William M. The Research Methods Knowledge Base, 2nd Edition. Internet WWW page, at URL: <http://trochim.human.cornell.edu/kb/index.htm> (version current as of August, 2000.)
- Wiley, C. (2000). A synthesis of research on the causes, effects, and reduction strategies of teacher stress. Journal of Instructional Psychology, 27(2), 80-87.

Table 1. Reliability Coefficients of the Teacher Stress Measure Instrument

Stress Variables	Alpha Reliability Coefficients	
	TSM Study	A-CT Study
role ambiguity	.79	.76
role conflict	.82	.74
role overload	.76	.77
role preparedness	.57	.64
nonparticipation	.76	.74
school-environment	.89	.85
task stress	.84	.82

Table 2. Participant Conversation Questions

"Role/Task/Environment Stress Experienced by Academic and Career-Technical Teachers in Southwestern Ohio Career-Technical Schools"

The following questions will serve as a starting point to focus the participants on the subject of teacher stress:

Question # 1: What activities or situations cause you to experience negative stress while teaching?

Questions # 2: Describe what activities or situations that cause you to experience negative stress while performing your role as a teacher?

Questions # 3: Describe what activities or situations that cause you to experience negative stress while performing your tasks as a teacher?

Questions # 4: Describe the school-environment that you work in, do you experience more or less negative stress than your previous employment?

Question # 5: How would an outside observer know you are experiencing negative stress during the teaching day?

Table 3.

Means and Standard Deviations for Academic and Career-Technical Teachers Role/Task/Environment Stress

	Academic			Career-Technical		
	<u>n</u>	<u>M</u>	<u>SD</u>	<u>n</u>	<u>M</u>	<u>SD</u>
Role Stress	24	2.75	.60	50	2.98	.41
Task Stress	24	3.19	.50	50	3.55	.57
Environment	24	3.52	.67	50	3.31	.55



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