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ABSTRACT

This multidimensional study examined the stress experienced by academic department chairs with emphasis on the chair's "person in the middle" role between faculty colleagues and the institution's administration. The study combined factors from the Administrative Stress Index with the Faculty Stress Index to develop a single, multidimensional instrument which focused on task-based factors, role-based factors, conflict-mediating factors, reward and recognition factors, and professional identity factors. The sample consisted of 808 chairs from 101 institutions. Participants were from academic disciplines stratified by Biglan's eight cell classification of the six characteristics of the subject matter of disciplines: hard versus soft, applied versus pure, and life versus nonlife. Examples of cells are: hard-pure-nonlife (e.g., chemistry); and soft-pure-nonlife (e.g., English). Of those sent the survey, 564 responded. The results of the study indicated that stress appeared to be monolithic in its effect. No differences were found among men and women chairs, age differences of chairs, chairs in different disciplines (except for the professional identity factor), and whether chairs were oriented toward faculty or administration. Department chairs appeared to have more similarities than differences across disciplines. The conflict-mediating role of the chair position is the most stressful and may influence chairs' willingness to serve again. Included are 5 tables and 47 references. (JB)

SOURCES OF STRESS FOR ACADEMIC DEPARTMENT CHAIRS:
A National Study

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This paper was presented at the annual meeting of the Association for the Study of Higher Education held at the Park Plaza Hotel & Towers in Boston, Massachusetts, October 31-November 3, 1991. This paper was reviewed by ASHE and was judged to be of high quality and of interest to others concerned with the research of higher education. It has therefore been selected to be included in the ERIC collection of ASHE conference papers.

Introduction

Focus of Investigation

Little research has been done to date to investigate stress experienced by academic department chairs. To help bridge the gap in the literature regarding stress and academic department chairs, this study is concerned with a multidimensional investigation of stress. The following research questions guided this study: 1. What job dimensions are perceived as stressful by university department chairs? 2. To what degree do chairs exhibit stress from their dual faculty and administrator roles? 3. What influence does academic discipline have on chair stress? 4. What influence do personal attributes have on chair stress?

The Academic Department Chair: The Janus Job

In Roman mythology, the god *Janus* was depicted as the god who had two faces. Simultaneously, one face turned to the front and the other to the back. Though department chairs are not in danger of deification, they also have two faces. One face is that of an administrator, the other the face of a faculty member. "The chairpersons hold the classic person-in-the-middle role; their academic future is tied firmly to the department, but their ability to represent the department effectively in budgetary and personnel matters is directly related to the quality of their working relationship with the dean" (McCarty & Reyes, 1987, p. 4).

As a faculty member, the department chair has been variously described as a first among equals, as a representative of the faculty to the administration, and as a faculty member who would willingly but reluctantly devote a portion of a career in service to the department and the faculty (Creswell, Wheeler, Seagren, Egly & Beyer, 1990; Dressel, Johnson & Marcus, 1970; Jennerich, 1981; Tucker, 1984). The department chair is often viewed as a faculty peer who sacrificially subordinates primary professional responsibilities (teaching, research and writing) to temporarily serve to his or her colleagues by performing essential departmental administrative tasks. This

sacrifice is made so other faculty members can pursue their teaching, research and writing interests unencumbered by administrivia (Milstein, 1987).

Juxtapositionally, as an administrator, the department chair position has been identified as key in the management of today's colleges and universities (Bennett, 1983; Booth, 1982; Creswell, et al., 1990; Dressel, et al., 1970; Moses & Roe, 1990; Smart, 1976; Smart & Elton, 1976; Staton-Spicer & Spicer, 1987; Tucker, 1984). Regarding the depth of understanding scholars have about the administrative position of department chair, Jennerich stated: ". . .given the obvious importance of these individuals to the enterprise of higher education, we know very little about the function and selection of the department chairperson and the competencies necessary for them to effectively perform their delegated responsibilities" (1981, p. 47). The primary qualification most chairs bring to the position is that they have gained a measure of personal and professional respect from their faculty peers. An individual's training, experience or competency as an administrator may not be the primary criteria for selection as chair.

Therefore, the position is plagued with inherent structural conflict since the chair must act as the conduit of information and policy between the administration and the faculty of the institution (Lee, 1985; Milstein, 1987). The contribution of role conflict and role ambiguity to the occupational stress associated with this *Janus* position has been discussed in several studies (Blackburn, 1985; Carlton & Bennet, 1980; Gmelch & Seedorf, 1989; Lee, 1985; Milstein, 1987; Rasch, Hutchison & Tollefson, 1986; Simpson, 1984; Singleton, 1987; Staton-Spicer & Spicer, 1987). The role of chair is often poorly defined, and conflicting expectations are common in terms of what deans, faculty members and chairs themselves expect the functions of the chair to include (Singleton, 1987). Lee reported chairs' reflections on the conflicts associated with the role when she wrote: "The chairs clearly saw their feet in two camps, no matter how the line of command went . . . identification is with the faculty (possibly because the chair must return to it)" (1985).

One of the conclusions that can be drawn from these and similar studies about the chair is that the role is not only dichotomous in terms of dual roles and objectives but is also fractionated in terms of task behaviors. With this complexity and conflict in mind, what is the nature of

department chair stress? Are there identifiable patterns of stress that reflect both the faculty and administration role of department chairs? How can this knowledge help both the individuals and institutions to systematically address the issue of chair stress?

Stress in Higher Education

Although many researchers have identified the existence of general sources of occupational stress (Gmelch, 1982; Kahn, Wolfe, Quinn, Snoek & Rosenthal, 1964; McGrath, 1970), most such generalized findings do not reflect the full character of profession-specific stress in terms of its multidimensionality nor its uniqueness in comparison with other professions. Recently, however, several studies in higher education have identified factor-analyzed dimensions of faculty stress and administrative stress. With respect to faculty stress, a national study of 2,000 faculty in research and doctoral-granting institutions yielded five dimensions of stress: *reward and recognition* pertained to the question of professional recognition or rewards, with inadequate rewards, unclear expectations and insufficient recognition; *time constraints* included general duties such as paperwork, meetings and telephone and visitor interruptions; *departmental influence* dealt with knowing evaluation criteria and influencing decisions; *professional identity* reflected the pressure of presenting at professional meetings, securing research grant support, and keeping a reputation as a scholar; and *student interaction* contained items relating to students' evaluations, instruction, and advising (Gmelch, Wilke & Lovrich, 1986). A subsequent study of faculty in Israel using similar research methodology discovered identical factors (Perlberg & Keinan, 1986).

With respect to university administration, Rasch and her associates used a similar methodology investigating the administrative side of the department chair role and discovered four factors of university administrators: *task-based stress* or stress arising from performance of day-to-day administrative tasks (similar to the faculty's time constraints factor); *role-based stress* or the role-set interactions and beliefs or attitudes about the role of the chair in higher education; and *conflict-mediating* stress which reflected pressures from resolving conflicts with colleagues and the

dean, and handling student problems. A fourth factor, social-confidence had too weak of an association to be forwarded as a separate dimension of administrative stress.

Separately, neither the Rasch nor Gmelch studies reflect the Janus position or dual chair roles of faculty and administration. The purpose of each of their studies was to assess the stress related to only faculty functions and administrative functions, respectively, but not the dual faculty-administrative profile postulated about department chair stress. This study is advanced to overcome this limitation. Through combining the faculty and administrative stress studies to investigate the potential dual role of chair stress, a remediable oversight in the Rasch research can be overcome. In addition, this study will explore of the possible relationships between chair stress dimensions and chairs' discipline and personal attributes (gender, age, role orientation, and commitment). If chair stress is related to specific professional and/or personal characteristics, then initial clues to identification of high-risk chairs becomes available to both individual chairs and the university central administration for possible preventive or ameliorative interventions.

In summary, the four objectives of this study are (1) to explore the factors of department chair stress; (2) to determine the degree to which chairs exhibit stress from their dual faculty and administration roles; (3) to determine the association of chair stress factors with their academic discipline; (4) to determine the association of chair stress factors with personal attributes of department chairs.

Personal and Professional Variables Associated with Stress

Academics are not a homogeneous group of professionals. Thus, it would be inappropriate to examine chair stress without regard to the chair's professional and personal characteristics. Findings related to gender and age have not been consistent in the research. For example, women academics were found to experience significantly more stress than their male counterparts in the task-based and professional identity stress factors (Gmelch, et al., 1986). However, Tung (1980) found that female educational administrators experienced significantly less stress than males in role-based, boundary spanning, and conflict-mediating stress factors (no difference in task-based stress). With respect to age, one study found that while general stress declines with age, not all

factors of academic stress descend with age; only in task-based and professional identity stress factors (Gmelch, et al., 1986). On the other hand, Rasch and associates (1986) found no significant relationships between age and the stress factors of department chairs.

In addition to age and gender as a personal characteristic associated with stress, department chairs' role orientation between "faculty" and "administration" potentially has considerable impact on the degree and nature of department chair stress. Finally, the commitment indicated by the chair to continue service has been shown to differentiate chairs' attitudes and behaviors toward their positions. The following analysis examines the multidimensional measure of chair stress and investigates how each of the dimensions relates to the personal and profession characteristics previously identified.

The work based on Biglan's model (Creswell & Roskens, 1981) to categorize academic disciplines suggests the potential utility of investigating discipline-based variation in academic stress. Smart and Elton (1976) hypothesized that role behaviors learned by department chairs vary according to the expected norms of their respective academic disciplines, and furthermore, their research demonstrated how Biglan's (1973) a model of academic disciplines can be used to identify variations in role behavior patterns of department chairs. Other work based on Biglan's model also suggests the merit of investigating discipline-based variations in academic stress (Wilke, 1983).

Theoretical Construct

Stress has been the subject of thousands of reported research studies over the last 30 years. In the literature, stress has been defined in numerous ways which in turn have generated various research methodologies to examine it. A four-component stress research paradigm, suggested by McGrath (1970) and others has guided many of the stress investigations by social scientists over the last two decades. Expanding on McGrath's four stages of stress, a stress cycle for managers was developed, and refined into a stress cycle for professionals in higher education (Gmelch, 1982; 1987). In the higher education stress cycle, *Stage I* is concerned with the **identification of stressors** present in the environment. These stressors can include excessive meetings, frequent interruptions, confrontations and other environmental factors. In *Stage II* the

individual's perception of the demands from the environmental factors determine how much stress is produced by those factors. The **individual's stress response** is *Stage III* of the stress cycle. Greater stress is associated with the individual's perception of limited resources to meet the demands of the stressor. Whether an individual is able to muster resources to meet these demands is part of the stress response. To complete the stress cycle, *Stage IV* is termed the **consequences** of the response to stress. Often this stage is associated with long-term negative effects. Thus, the basic theoretical construct of stress underlying this investigation is that stress is the result of respondents' interpretation of stimuli and other events in their environment.

In this study the focus is on the first two stages of the four-stage process: the perception (Stage II) of the stress event (Stage I). Also, consistent with the stress cycle, the following definition of stress is used in this study: one's anticipation of his or her inability to respond (Stage III) adequately to a perceived (Stage II) demand (Stage I), accompanied by the anticipation of negative consequences (Stage IV) for an inadequate response. The perception of the stress event is the significant stage in much stress research and has been supported over the years by Wolff's statement that "the stress accruing from a situation is based in large part on the way the affected subject perceives it" (Wolff, 1953). Perception of the stressor has become the primary construct in recent research on occupational stress as well (Beehr & Newman, 1978; Gmelch & Burns, 1991; Schuler, 1980).

Instrument Development

Researchers believe that stress research should not be limited to a single, generic dimension, but it may be possible to identify specific stress dimensions or stress factors unique to certain professions. Koch et al. (1982) found that while instruments used in stress research were sufficient to examine general stress, they were inadequate for investigating at the multidimensional nature of occupational stress. Rasch, Hutchinson and Tollefson agree and suggest that "Stress is an integral part of the work environment and is most likely multidimensional in nature" (1986, p. 422). They also supported the development of appropriate instruments to investigate occupational stress multidimensionally.

In order to capture the dual administration-faculty role of department chairs, it was determined to combine the factors from the Administrative Stress Index (ASI) (Gmelch & Swent, 1984; Rasch, et al., 1986) and Faculty Stress Index (FSI) (Gmelch, et al., 1986) into a single, multidimensional instrument. Both the ASI and FSI were developed and validated using identical methodology: through a series of iterations designed to ensure that all potentially relevant facets of job-related strain would be explored. The ASI was first developed from the 15 item index of Job-Related Strain which comprised the initial questionnaire core (Indik, Seashore & Slesinger, 1964). This index was supplemented by items suggested from a review of current job descriptions of administrators and by items taken from stress logs kept by 40 administrators for a period of one week. Those keeping stress logs were asked by researchers to keep a diary of work-related stress on a daily basis with respect to (1) the most stressful single incident occurring that day; and (2) the most stressful series of related incidents. At the end of the week they were asked to identify other sources of stress that might not have occurred during the week in which the stress logs were kept. An additional 23 items were developed from the stress logs and reviews. Thus, the Administrative Stress Index permitted a more comprehensive assessment of stress in this population than would be permitted by use of the generic instruments such as the Job-Related Strain index. Finally, 1211 administrators completed the ASI which was then factor-analyzed resulting in four administrative stress dimensions: task-based stress; role-based stress; conflict-mediating stress; and boundary-spanning stress. A follow-up study conducted by Rasch and her associates (1986) with 1108 university administrators resulted in the same first three dimensions, with a weak fourth dimension, social-confidence stress, which was substituted by Rasch for the original boundary-spanning stress factor.

The Faculty Stress Index was developed using the same methodology. The 15 item Job-Related Strain index comprised the initial questionnaire core and was supplemented by items culled from a review of previous research and by items suggested from stress logs kept by 20 faculty for a period of one week. The pilot instrument consisted of a list of demands on faculty which was field tested for content validity and clarity. After revision, the final Faculty Stress Index (FSI) was

completed by 1221 faculty in research and doctorate-granting universities in the United States. The potential multidimensionality of the 45-item FSI was investigated through factor analysis which generated five distinct dimensions as previously described: reward and recognition; task-based stress; departmental influence; professional identity; and student interaction.

The five factors used in the Department Chair Stress Index (DCSI) for this study consisted of the (1) task-based factor which represented both administrator (ASI) and faculty stress (FSI); (2) role-based and (3) conflict-mediating reflecting administrator stress (ASI); and two faculty factors from the FSI, (4) reward and recognition and (5) professional identity, which were unique faculty stress factors. Twenty-two items representing these five factors from the composite ASI and FSI were selected based on two criteria: (1) items with the largest factor coefficient or loading indicating the greatest tendency to be associated with a particular factor; and (2) items emanating from factors most applicable to the dual administration and faculty roles of department chairs. Overall, an item reliability assessment conducted by test-retest with a two-week interval resulted a mean item-reliability coefficient of .83, indicating a high degree of consistency of measurement in the items (Gmelch, et al., 1986).

Population and Sample

All research and doctorate granting institutions classified by the Carnegie Commission on Higher Education comprised the population. Of these 237 institutions, 101 were randomly selected for the sample. Eight department chairs were selected from each institution, stratified by Biglan's eight cell classification of disciplines of hard vs soft, applied vs pure, and life vs nonlife (see Biglan, 1973b). Thus, 808 department chairs were sampled for the study in equal proportions of chairs from each of the eight Biglan disciplinary clusters.

The major aspects of the Dillman (1978) *total design method* were used in the design and distribution of the survey. After a series of three mailings, 564 usable surveys were returned, representing a 70.2% response rate. The respondents answering the survey across the stratification of disciplines responded in very similar proportions, thereby inspiring confidence that the data gathered were largely representative of the population sampled. Although the use of a stratified

sampling design makes the generalization of descriptive statistics to the actual universe of department chairs inappropriate, the analytical power provided by the focused sampling design allows the testing of the important proposition of disciplinary differences among department chairs.

Demographically, of the 564 respondents, 90% were male and 10% female; 95% were White, 3% Asian, 1.5% Black, .18% Native American and none were Hispanic. The average department chair was 51 years old, tenured, full professor, served an average of six years as chair, and had 16 years of experience as a professor in higher education before becoming a department chair. Eighty percent of the chairs were appointed from within their own institution and 20% came from outside the institution. Sixty percent served on a 12 month annual appointment, 14% on ten month and 26% on nine month. With regard to administrative stipend, 72% received a stipend averaging 12% or $3,432. The average department size was 17 tenured faculty and six non-tenured.

Results and Discussion

Stress Factors

In order to identify the magnitude of stress across each factor, mean scores were computed for items and subsequent factors (Table 1). Conflict-mediating registered the highest stress ($x = 3.37$) followed closely by task-based stress ($x = 3.34$) and professional identity ($x = 3.10$). Role-based and reward and recognition proved to be the least stressful factors, both with a mean stress score of 2.56. These results only partially confirm what Rasch and her associates found in similar research universities: "task- and role-based stress have the greatest impact at lower levels of administration" (Rasch et al., 1986, p. 429).

While the role-based factor did not prove to be as strong in this study, the conflict-mediating factor was a full interval more stressful (3.4) than in Rasch's study (2.4). Negotiating rules and regulations, program approvals, and disputes between faculty causes chairs the greatest concern. As proposed by the Janus description, chairs are caught in the middle and stressed by their need to mediate the constraints of the institution and differences among faculty. This factor

accentuates the difficulty department chairs have in being caught in the crossroads between faculty and administration pressures.

In addition, the task-based nature of chairs' jobs leaves them with heavy workloads, trying to keep current in their disciplines, attending meetings, balancing their personal and professional time, and dealing with telephone and personal interruptions. As Mintzberg (1973) discovered, managerial jobs are characterized by brevity, variety, fragmentation, and a preference for live action. Nevertheless, faculty stress studies also disclose faculty frustrations with time constraints from committees and meetings, interruptions, insufficient time for service, teaching and research as well as too heavy a work load for any given day. The "time" and "task" factor for academics appears to be universal whether one is in the faculty ranks or administration.

Professional identity, the third most significant dimension of chair stress, plagues chairs even though they technically are in a management line position. They remain concerned about preparing manuscripts for publication and securing support for their research even though they are serving as chair. These faculty responsibilities coupled with trying to perform the duties of the department chair may answer why chairs also identify "excessively high self expectations" as a stressor.

The least stress was found within the dimensions of reward and recognition and role-based stress. Ironically, reward and recognition accounted for the highest degree of the stress experienced by young, untenured, assistant professors in research and doctorate granting institutions (Gmelch et al., 1986). Perhaps chairs, who tend to be older (51 years of age), more experienced (16 years in the profession), and tenured (with the rank of professor), experience less stress than faculty in the earlier career stages. This factor, therefore may not appear to be a significant detriment of stress for department chairs.

In addition, the role-based dimensions of "resolving differences with superiors", "too much authority without responsibility", and "career progress not what it should be" causes some concern among department chairs but not the same magnitude as conflict and time constraints. The nature of the stress items within the role-based stress factor reflects more role-ambiguity of chair

position than the role-conflict. It may not be the ambiguity of the position which stresses chairs as much as the role-conflict from trying to fill a Janus position.

Stress and Academic Disciplines

In addition to identifying the most troublesome sources of department chair stress, this study also sought to determine if these sources of stress are perceived uniformly across all disciplines, or vary from one discipline to another. In the Biglan (1973a) model, academic departments are clustered into eight cells based upon the characteristics of their subject matter: (1) the existence of a mutually agree-upon paradigm -- i.e., *hard* versus *soft* areas; (2) the extent of application of the subject matter -- i.e., *pure* versus *applied* areas; and (3) the focus upon living or organic versus nonliving objects of study -- *life* versus *nonlife*. The cells are hard-pure-nonlife, (HPN) e.g., chemistry; hard-pure-life, (HPL) e.g., biology; soft-pure-nonlife, (SPN) e.g., English; soft-pure-life, (SPL) e.g., history; hard-applied-nonlife, (HAN) e.g., engineering; hard-applied-life, (HAL) e.g., agriculture; soft-applied-nonlife, (SAN) e.g., economics; and soft-applied-life, (SAL) e.g., educational administration.

Table 2 reports the results of mean dimension comparisons across discipline categories. Analysis of variance was used to test for mean differences in stress among the eight discipline cells. The F-values for these analysis suggest that significant differences exist in only one of the five factors, professional identity. Further paired comparisons revealed that chairs in the hard, pure, life (HPL) disciplines (biology) were significantly more stressed than chairs in all the soft disciplines (e.g., history (SPL), fine arts (HPN), educational administration (SAL), economics (SAN)). In contrast, the study of faculty stress found that professional identity was not significantly different across disciplines. Perhaps the nature of the hard disciplines (especially hard, pure, life where discoveries and changes in the knowledge base occur more rapidly than the soft disciplines), lends itself to higher professional identity stress for chairs than in the soft disciplines. It seems the time away from the discipline while serving as chair more severely impacts the hard science chairs' ability to keep current in their discipline. Therefore, the time and attention lost to the discipline to serve as department chair more greatly impacts the chair's ability to

"secure support for research" and "prepare manuscripts for publication"-- thus, resulting in stress from their possible loss of professional identity. Overall, the studies by Biglan (1973), Wilke (1983) and Gmelch and associates (1986) have indicated that academics in different disciplines report differing levels of professional commitment, use of time, and experience with stress.

Personal Characteristics of Chair Stress

In addition to exploring differences by discipline, chairs were asked to provide demographic data (age and gender) and to answer two work-related questions regarding their faculty versus administration role orientation and whether they would be willing to serve another term as chair. Overall, researchers have noted the importance of age-based differences in faculty (Fulton & Trow, 1974; Ladd & Lipset, 1975), and conventionally believe that stress universally declines with chronological age. Pearson product moment correlations between age and the five department chair factor scores were calculated and revealed a slightly negative, but insignificant relationship. While inconsistent with general findings in stress research, this finding is consistent with Rasch and her colleagues conclusion that non significant relationships existed between age and department chair stress factors. Previous research on faculty revealed that time constraints (task stress) and professional identity declined with age, but the other factors of reward and recognition, departmental influence and student interaction did not (Gmelch, et al., 1986). Thus, while it is curious that stress did not decline with age, it seems reasonable that, although chairs had similar number of years in academe compared to other senior faculty, these chairs had fewer years of experience in the chair position itself. Specifically, the relative newness of the chair roles, responsibilities and activities would accentuate and not temper the stress from time constraints (task-based) and professional identity.

Perhaps the assumption that stress declines with age should be challenged, especially with respect to department chairs in doctoral universities. Even though for faculty, overall, age may temper stress, the slight variation in age of the department chairs in this study may not buffer certain stressful conditions of the chair position. The nature of the position and relatively short tenure as chair (average of six years) may account for the insignificant differences in chair stress by

chronological age. Another possible explanation is that stress may be tempered more in this situation by years of experience rather than age. Several researchers (Farber & Spence, 1956; Koch, et al., 1982; McGrath, 1970; Ulrich, 1957) have shown that past experience by either familiarity with the situation or in the form of practice and training can significantly reduce subjectively experienced stress. This possibility remains untested in this study due to the short range of chairs' years of experience, but should be explored in future investigations.

The second area of personal characteristics to be investigated is the influence of gender differences on stress. Some evidence is available which suggests that women academics are provided with less support and recognition than their male counterparts (Tuckman and Tuckman, 1976). In addition, women are still more restricted from interaction which provide professional support and intellectual stimulation than male colleagues (Kanter, 1977; Koontz, 1979; Lynch, 1973). One would expect, therefore, to find that women department chairs experience more stress in some of the factors of chair stress. In fact, in the study of faculty which used similar stress factors, professional identity and task-based stress were higher for women than men (Gmelch, et al., 1986). Although the mean stress scores were higher for women on both of these factors for department chairs also, Table 3 reveals non-significant F-ratios between the men and women department chairs on all five factors. This finding is consistent with the conclusion of Rasch, et al., who reported no significant relationships between gender and the stress factors for department chairs (1986).

The results and conclusions regarding stress and gender remain confusing and confounding. Based on studies in higher education one would expect women academics to experience more stress. On the other hand, Tung (1980) found that women administrators experienced less role-based and conflict-mediating stress. The current study found no significant difference in any of the stress dimensions. While studies still need to investigate differences with respect to gender, the issue is clearly more complex than gender alone. For example, studies of faculty reveal that marital status has a significant association with gender and stress.

The third personal variable explored was the role orientation of department chairs. As has been stated earlier, higher education scholars believe that chairs fill an ambiguous role which hovers between faculty and administration. With this ambiguous role in mind, department chairs in this survey were asked to indicate on a 1 (faculty) to 7 (administration) continuum, their sense of role orientation. Sixty percent of the chairs identified more with faculty, 23% with administration, and 17% with faculty and administration equally. One could assume that a chair's orientation toward his or her job might have an impact on the nature of their stress, e.g., that chairs with a closer affinity or identification with faculty would have a more stress dealing with faculty conflict than administrative-oriented chairs. However, the opposite tended to be true since the mean score on the conflict-mediating factor was higher for administratively oriented chairs than faculty oriented chairs. An analysis of variance did not disclose significant differences on any of the five stress factors with regard to chairs' role orientation (Table 4). Initially one must conclude that neither the administrative nor faculty Janus face of the chair position has significant differential effect on the dimensions of chair stress.

Finally, since higher education seems to have difficulty in attracting and retaining academic leaders, the department chairs were asked whether they would serve another term as chair. Fifty-five percent said they would, 29% would not, and 16% were undecided. In addition, the association between stress and chairs' willingness to serve was explored by analysis of variance. As displayed in Table 5, only one factor, conflict-mediating, proved significant: those chairs unwilling to serve again had higher stress dealing with rules and regulations, obtaining program support and approval, and resolving differences with and among colleagues. While one cannot assume a causal relationship, these conflict stressors may be distressing enough to discourage chairs from continuing on in the chair position or higher in the administrative ranks. In fact, 65% of the department chairs return to faculty status after serving as chair and only 19% continue in higher education administration (Carroll, 1990).

Conclusions

Scholars and administrators alike speak about a great leadership crisis in higher education. Rarely do we study what is perhaps the most important impediment to attracting professors into academic leadership: the stress and dual-pressure of the department chair position. Chairs come to the position without leadership training; without prior administrative experience; without a clear understanding of the ambiguity and complexity of their role; and without recognition of the stresses inherent from the Janus-like position. While department chair stress has received some attention, most information has come in the form of anecdotal speeches, professional papers, and popular journal articles, with a few data-based studies interspersed. This study was forwarded to understand the potential Janus nature of chair stress and explore identifiable personal and professional patterns of stress to help both chairs and institutions of higher education systematically address this issue.

The results of the study indicate that, overall, stress among department chairs appears to be monolithic in its effect. No differences were found among men and women chairs, age difference of chairs, chairs in different disciplines (except for the professional identity factor), and whether chairs were oriented toward faculty or administration. There appears to be more personal (age, gender) and professional (disciplines) homogeneity on the effect of stress on department chairs than professors. Stress intervention programs which might work well in one occupation have been found to have relatively little success in others. While disciplines within universities potentially represent different occupations with regard to stress, department chairs seem to have more similarities than differences across disciplines. It seems likely, therefore, that institutional strategies for department chair stress management may be applicable across campus. Each of the factors of department chair stress (conflict, time, identity, rewards, and roles) represent possible seminar and workshop topics beneficial to department chairs.

With respect to attracting and retaining academic leadership, the results of this study indicate that the conflict-mediating role of the department chair position is most stressful and may have some influence on whether chairs are willing to serve again. Progress and change cannot be made without conflict and nothing is as important for American higher education than the emergence of academic leaders equipped to handle conflict in a positive and constructive manner.

The Janus posture of the department chair stress was reinforced by high stress loadings in both faculty and administrative areas of concern: the typical conflict-mediating profile of administrators and professional identity profile of faculty. In contrast, the faculty stress factor of reward and recognition and traditional administrative role-based stress appeared to be not as troublesome for department chairs. Both faculty and administrators in previous studies also identified time constraints or task-based stress as areas of difficulty. Department chairs in this study echoed the stresses from meetings, committees, interruptions, and heavy work loads.

In drawing conclusions from this study, two limitations should be noted. First, this study is focused on research and doctorate granting institutions of higher education and the results should not be extrapolated to non-research colleges and universities. While the factors of task- and role-based stress are generic across many types of management, the items which comprise the factors of conflict-mediating, reward and recognition and professional identity may not be common to managers in other organizations as well as other institutions of higher education. However, the relative homogeneity of the sample institutions does allow generalizability to the population of all 237 doctorate and research universities.

Second, the dual faculty-administration dimensions of the Department Chair Stress Index developed for this study is a sound improvement over the administration-oriented Administrative Stress Index used by Rasch and her associates. However, the procedures used in the development of the ASI and FSI should be replicated to enable researchers to refine the multidimensional nature of department chair stress.

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Table 1
Department Chair Stress Item and Factor Mean Scores

ITEM No.	ITEM	FACTOR LOADING Administration Mean Score (N=55)	Faculty Std. Dev.
Factor 1.	**Task-Based Stress**		
4	Too heavy workload	3.67	0.16
5	Keeping current in discipline	3.45	0.21
7	Job demands interfere/personal time	3.41	0.19
9	Meetings take too much time	3.13	0.13
10	Telephone and visitor interruptions	3.15	0.14
12	Completing paperwork on time	3.20	0.20
	FACTOR	3.34	
Factor 2.	**Role-Based Stress**		
8	Career progress not what should be	2.39	0.23
17	Too much responsibility--too little authority	2.85	0.21
20	Resolving difference with superiors	2.36	0.19
	FACTOR	2.56	
Factor 3.	**Conflict-Mediating Stress (B-S)**		
11	Complying with rules & regulations	3.31	0.11
13	Obtaining program approval and support	3.49	0.21
14	Resolving differences with/among colleagues	3.28	0.18
	FACTOR	3.37	
Factor 4.	**Reward and Recognition Stress**		
3	Inadequate salary	2.40	0.17
18	Receiving inadequate rewards/ recognition	2.57	0.20
19	Incompatible institutional/ department goals	2.65	0.09
	FACTOR	2.56	
Factor 5.	**Professional Identity Stress**		
1	Excessively high self expectations	3.34	0.21
2	Securing support for my research	2.73	0.58
6	Preparing manuscripts for publication	3.22	0.18
	FACTOR	3.10	

TABLE 2

A Comparison of Mean Factor Scores by Biglan Disciplinary Categories

	Task-Based	Role-Based	Conflict-Mediating	Reward & Recognition	Professional Identity
HPL (n=62)	3.27	2.36	3.32	2.39	3.50
HPN (n=76)	3.50	2.64	3.57	2.58	3.36
HAL (n=65)	3.50	2.59	3.40	2.54	3.27
HAN (n=64)	3.32	2.48	3.29	2.41	3.10
SPL (n=69)	3.34	2.49	3.33	2.50	2.80
SPN (n=79)	3.17	2.66	3.40	2.48	2.95
SAL (n=71)	3.24	2.34	3.18	2.58	2.95
SAN (n=72)	3.40	2.68	3.39	2.77	2.89
F-Ratio	1.52	1.58	1.29	1.05	5.77***

***p<.001

TABLE 3

A Comparison of Gender Mean Factor Scores

	Task-Based	Role-Based	Conflict-Mediating	Reward & Recognition	Professional Identity
Female (n=51)	3.46	2.43	3.35	2.50	3.28
Male (n=492)	3.33	2.54	3.36	2.52	3.08
F-Ratio	.73	.86	.39	.13	1.57

TABLE 4

A Comparison of Role Orientation Mean Factor Scores

	Task-Based	Role-Based	Conflict-Mediating	Reward & Recognition	Professional Identity
Faculty Orientation (n=322)	3.33	2.55	3.33	2.54	3.05
Administration Orientation (n=125)	3.42	2.55	3.53	2.58	3.18
F-Ratio	1.23	.32	3.42	.22	1.21

TABLE 5

A Comparison of Chairs' "Willingness To Serve Again"
Mean Factor Scores

	Task-Based	Role-Based	Conflict-Mediating	Reward & Recognition	Professional Identity
Willing to Serve Again (n=290)	3.26	2.49	3.28	2.52	3.13
Undecided (n=83)	3.53	2.59	3.48	2.59	3.29
Not Willing to Serve Again (n=154)	3.40	2.65	3.50	2.55	3.00
F-Ratio	3.33[1]	2.33	3.22*	.15	4.05[1]

*p<.05

[1]Significant at the .05 level but insignificant Tukey comparisons between "Serve Again" and "Not Serve Again"