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THE ACADEMIC DEAN:
An Imperiled Species Searching for Balance

Walter H. Gmelch, Mimi Wolverton, Marvin L. Wolverton, and James C. Sarros

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The academic deanship is the least studied and most misunderstood position in the academy. The work of administration and the pursuit of scholarly endeavors do not make good bedfellows since deans' academic interests turn them firmly toward their departments, but their leadership of the colleges and schools depends largely on directions from the provost and university. The resulting paradoxical situation causes many academic leaders to burn out from the strain of trying to be effective administrators, on the one hand, and attempting to protect the academic autonomy and independence of faculty on the other (Gmelch and Miskin, 1993, 1995). Many academic leaders, such as deans, end their administrative careers fatigued and suffering from excessive levels of stress (Gmelch and Burns, 1994). The first phase of this study explores the sources of stress experienced by deans in both Australia and the United States.

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The academic deanship is the least studied and most misunderstood position in the academy. While many scholars have written about the organization and governance of higher education, relatively little is known about those who lead and support colleges. Aside from anecdotal speeches, unpublished research reports, and magazine articles, literature on the deanship consists of two volumes published in the mid-1960s (Dibden, 1968; Gould, 1964) and one in the 1980s (Tucker and Bryan, 1988), a few articles based on studies of deans of colleges of education (Anderson and King, 1987; Kapel and Dejnozka, 1979), social work (Otis and Caragonne, 1979), law (Abramson and Moss, 1979), liberal arts (Scott, 1979), and sociology (Bowker, 1982). Since that time a few studies have emerged investigating career paths and gender and ethnicity issues in the deanship (Astin and Leland, 1991; Bowker and Lynch, 1985; Moore, 1983).

Not only has time passed since these studies but we suggest that the role,

Walter H. Gmelch, Iowa State University; Mimi Wolverton and Marvin L. Wolverton, Washington State University; James C. Sarros, Monash University, Australia. Address correspondence to: Mimi Wolverton, Washington State University, Box 642136, Pullman, WA 99164-2136; e-mail: mimi-wolverton@wsu.edu

responsibilities and tenure of, satisfaction with, and commitment to the position have drastically changed. Over time, deans of academic units appear to have undergone a transformation from chief academic officers to chief executive officers with more emphasis placed on extramural funding, personnel decision making, and alumni relations. Increasingly, the vision of the dean as a quiet, scholarly leader has been replaced by an executive image of the dean as politically astute and economically savvy. More recent writers describe the role of the dean as a *dove* of peace intervening among warring factions that are causing destructive turbulence in the college, a *dragon* driving away internal or external forces that threaten the college, and a *diplomat* guiding, inspiring, and encouraging people who live and work in the college (Tucker and Bryan, 1988). No matter what the view, today's dean resembles an academic species whose existence is imperiled. A quote from *Fortune* magazine illustrates the point:

> Something bad is happening to [business school] deans. Their terms in office seem to get shorter. No more serene-looking . . . deans reigning for decades, but plenty of troubled faces whizzing by, brass nameplates revealing that one lasted three years, another four. (O'Reilly, 1994, p. 64)

Such a statement may be true of other deans as well. With increasing demands for responsiveness to diverse populations, accountability, public relations, and fiscal restraint, colleges are becoming impossible to manage well, and academics who are trying to run or repair them are getting "burned out and eased out with astonishing speed." Edward Lawler, an organizational effectiveness scholar, concludes: "Most deans now seem to fail. It is a terribly difficult balancing act" (O'Reilly, 1994).

The deans' delicate balancing act is viewed differently by faculty, provosts, students, and deans themselves. For example, part of the friction between deans and faculty members stems from disagreement on the roles rather than the personalities of deans, which contributes to low levels of satisfaction (Bowker, 1982). Similarly, the work of administration and the pursuit of scholarly endeavors do not make good bedfellows, since deans' academic interests turn them firmly toward their departments, but their leadership of the colleges and schools depends largely on directions from the provost and university.

This aggregation of participants with differing perceptions on the position places multiple, conflicting, and consequential pressures upon deans. The resulting paradoxical situation causes many academic leaders to burn out from the strain of trying to be effective administrators, on the one hand, and attempting to protect the academic autonomy and independence of faculty on the other (Gmelch and Miskin, 1993, 1995). Many academic leaders, such as deans, end their administrative careers fatigued and suffering from excessive levels of stress (Gmelch and Burns, 1994).

UNDERSTANDING STRESS AND THE DEANSHIP

Stress intrigues and plagues the practitioner and researcher alike. Internationally, scholars and professionals have authored over 100,000 books, journals, and articles dedicated to the phenomena of stress, with an additional 6,000 publications catalogued each year (Gmelch, 1989).

Generally stress has been distinguished by three basic orientations: systemic or physiological (e.g., Cannon, 1939; Selye, 1974), psychological (e.g., Lazarus, 1966; McGrath, 1976), and social (e.g., Levine and Scotch, 1970). While the concepts are related, what is most surprising and confusing is the lack of consensus by the researchers, practitioners, and experts on the concept and definition of stress (Monat and Lazarus, 1977). Most views can be categorized as stimulus, response, or stress-response and transactional models (Selye, 1976; Lazarus, 1966; Appley and Trumbell, 1967; Levine and Scotch, 1970; McGrath, 1976; Cox, 1978; Gmelch, 1982; Schuler, 1984).

A number of models, in particular, have emerged since the 1970s that recognize the need for a transactional explanation of components of stress. McGrath (1976) first explained stress as a four-stage closed-loop process beginning with situations in the environment (A), which are then perceived by the individual (B), to which the individual selects a response (C), restating in consequences (D) for both the individual and the situation, which closes the loop. Each of the four stages is connected by the linking processes of cognitive appraisal, decision, performance, and outcome.

Most other models represent hybrids, elaborations, or extensions of the McGrath model. Cox (1978), for example, enumerates five recognizable stages. The first four (sources of demand, perceived demand and capability, response to stress, and consequences of responses) closely resemble McGrath's stages; and the last stage, feedback, resembles the closed-loop character of McGrath's model. Schuler (1984) proposes an integrative transactional process model of stress that is more elaborate than McGrath's, but still focuses on the four components of environmental stressors, individual perception, stress, and individual responses. Ivancevich and Matteson's model (1980) from organizational stress research is built on a similar set of four stages: antecedents (stressors), perceived stress, physiological and behavior outcomes, and consequences. They have basically extended McGrath's model to compensate for two shortcomings: the lack of integration of medical and behavioral variables and an individualistic focus ignoring group factors that influence the various processes.

THE MANAGERIAL STRESS MODEL

In order to integrate the various approaches to the study of stress and utilize the salient features of existing stress models, a managerial stress model was

developed (Gmelch, 1989). This model provides a broader perspective and clearer understanding of the stress process from a managerial perspective. More importantly, it adheres to the basic premises of research by being able to predict, comprehend, and apply the key concepts of stress.

The managerial stress model includes four primary components, or stages. The steps are set in sequential order and reflect a direct causal effect such that the variables in the first stage are hypothesized to be a direct cause of the variables in the second stage, and so forth. For example, the objective stressors (Stage 1) in an organization's environment impact the perception of stress in the second stage. The degree to which an individual perceives stress from the external environment is influenced by a person's disposition and background characteristics.

Stage 1: Demands or Stressors

The process begins with a set of demands or stressors that are both internal and external to the dean's work environment. For example, McGrath postulated six categories: (1) task-based stress, (2) role-based stress, (3) stress intrinsic to the behavioral setting, (4) stress arising from the physical setting, (5) stress arising from the social environment, and (6) stress within the person system (1976, p. 1369). From an empirical basis, Gmelch and Swent (1984) studied 1,200 principals and superintendents and discovered four factors of administrative stress: (1) task-based, (2) role-based, (3) conflict-mediating, and (4) boundary-spanning. The first three approximate what others have theorized as general dimensions of stress (Kahn et al., 1964; McGrath, 1976), but the last, boundary-spanning, appears to be unique to the field of school management, as it arises from administrators' activities that deal with the interface between the school and the environment. These activities might include collective bargaining, dealing with regulatory agencies, and gaining support for school budgets. In a similar study, 1,920 university faculty revealed five distinct dimensions of perceived stress: reward and recognition, time constraints, departmental influences, professional identity, and student interaction (Gmelch et al., 1986). Recent studies of department chairs identified administrative tasks, academic role, administrative role, human relations, and external time as key dimensions of stress (Wolverton et al., 1999).

Due to the multidimensionality and occupational uniqueness of stressors, it would be inaccurate to represent one list of stressors as generic of occupational stress. Each profession should be recognized for its unique demands and reflect its own multidimensionality in the stress construct. At the same time, faculty, chairs, and deans may share common dimensions of stress reflective of the academy and academic work, in general.

Stage 2: Perception of Stressors

Whether a demand or stressor produces a stress response depends on the perception of the individual. This stage was missing in the previous stimulus-response models and unexplained in the medical and behavioral approaches, which explored causal relationships between stressors and consequences. Stressors represent the objective environment, and the perception of the stressors is what Kurt Lewin calls the "subjective" environment. According to Lazarus and DeLongis (1983), individuals appraise situations based on the degree to which they believe they will be harmed, threatened, or challenged. High perceivers of stress respond to a situation as a threat rather than a challenge. Likewise, if a dean believes that a situation will require resources he/she does not possess, he/she will respond differently than if resource problems do not exist. For example, if a dean perceives a confrontation with a student as not demanding excessive time or resources, stress will not ensue. On the other hand, if another dean perceives the same confrontation as demanding resources of which he/she has little, a discrepancy exists, creating stress. Therefore, the situation may be perceived as a stressor by one dean and not another.

Stage 3: Response to Perceived Stressor

A stress response results if a stressor is perceived as harmful, threatening, or challenging. Here, individuals' physiological and psychological responses are not end products of the stress process but methods of mediating the stressor prior to the consequences. Physiologically, an alarm is sent out without discrimination (nonspecific) to all organs of the body, producing a biochemical chain reaction. In such a reaction, the brain organizes the body for its response to stress by stimulating the hypothalamus, which adjusts the blood supply and relaxes the stomach, bladder, and intestines. The adrenal secretion monitors the liver, pancreas, spleen, and large blood vessels and builds up the supply of fuel while the thyroid gland increases energy production. This internal biochemical response translates into what experimental psychologists call an orientation response. The typical orientation response to such stress situations as public speaking might manifest itself in bodily reactions, such as dilation of the pupils, increased heart rate, dry mouth, sweating palms, increased muscle tone, acute hearing, and changes in breathing patterns. Relatively few researchers have studied school administrators' physiological reactions to stress (Phillipps and Thomas, 1983; Cooper et al., 1988; Whan, 1989).

While the physiological response is much the same for everyone, the psychological and behavioral reaction is an idiosyncratic or personal matter. Theorists postulate that psychological responses to stress can be categorized into four modes: (1) information seeking, (2) direct action, (3) inhibition of action, and

(4) intrapsychic processes (Lazarus and Launier, 1978). In practice, these modes translate into coping categories: social, physical, intellectual, entertainment, personal, managerial, and attitudinal (Gmelch, 1989).

Stage 4: Consequences of Responses

The fourth stage, consequences, differs from responses because it takes into account the long-range effects of stress, both due to its duration and intensity. The degree of stress perceived and the degree of stress may produce different problems in different individuals. At the extreme, if one is unable to alleviate some of the stressors or cope adequately, consequences may arise in the form of serious mental or physical illnesses. As Selye (1976) points out, the weakest link in the body breaks down first. A person's weakest link is idiosyncratic and may be determined through hereditary predispositions for heart disease, cancer, headaches, or depression. Therefore, each person has a different threshold to seemingly similar stressful situations. Some deans, by nature, will survive stress longer. Others have a low stress threshold and may succumb sooner.

STUDY OBJECTIVES

This study is advanced to investigate the sources of stress emanating from the multiple roles and pressures currently experienced by deans. It builds upon earlier work, which determined the factors of stress experienced by department chairs (Gmelch et al., 1990, 1992; Wolverton et al., 1999) and university faculty (Gmelch et al., 1986; Gmelch, 1993) and continues the current vain of research by the Center for Academic Leadership at Washington State University. It does so by investigating the dimensions of stress that deans experience and the association of the institutional and personal dimensions of the deanship related to their perceived stress, satisfaction, and performance.

The first phase of this study explores the sources of stress experienced by deans in both Australia and the United States. Conceptually, it focuses on the first and second stages of the four-stage stress model: the perception (Stage 2) of the stress events (Stage 1).

INSTRUMENT DEVELOPMENT

Respondents to the Deans' Stress Inventory (DSI) used a five-point Likert scale of *slight* to *high* to indicate their level of perceived work stress on each of 41 items. The instrument is based on information gained through previous studies of academics, a review of current literature, a qualitative study of deans conducted in Australia (Sarros and Gmelch, 1996), and a series of interviews of deans in the U.S. Modifications to a previously validated chair-stress inventory

reflected job-related stressors that specifically affect deans. The DSI was then piloted as one segment of a larger national survey instrument. This initial test suggested that the DSI was ready for large-scale testing. As a consequence, it was administered as one component of the National Deans Survey.

National Deans Survey

Between October 1996 and January 1997, academic deans in the United States were mailed the *1996 National Survey of Academic Deans in Higher Education*[1] (Gmelch et al., 1996). The following criteria were used to construct the sample. Potential sample institutions came from one of the following three groupings of Carnegie classifications—Research I & II and Doctoral I & II; Masters I & II; or Baccalaureate I & II. From this initial group of colleges and universities, 60 public and 60 private institutions were randomly selected from each Carnegie category, resulting in a sample of 360 institutions. At each of the sample institutions, the deans of the colleges of education, business, liberal arts, and allied health professions (primarily nursing) were then asked to complete the survey. In a few instances, colleges of social work or a similar discipline were also included in the survey. (We included colleges of nursing and public health in a purposeful attempt to increase the number of female respondents.) The overall sample size consisted of 1,370 deans, with a response rate of 60%.

A companion study was conducted simultaneously in Australia by faculty from the Department of Management at Monash University (Sarros et al., 1996). All deans of faculties in Australia were mailed the survey. A total of 195 returns from a population of 287 deans accounted for a 68% response rate. The packet in both surveys included a cover letter and a business reply envelope. The major aspects of the Dillman (1978) *Total Design Method* were used in the design and distribution of the survey.

General Profile of Respondents

The majority of the deans in the U.S. sample work at public universities; however, about 40% of the sample are employed at private institutions. The breakdown of the sample by university category reveals a fairly even distribution—research (33%), comprehensive (46%), and baccalaureate (21%). By college type, 18% of the deans come from business, 29% from liberal arts, 29% from education, 23% from nursing, and 1% from other college types. U.S. deans are, on average, 53.9 years old (the youngest being 31 years and the oldest 76 years). Eighty-two percent of the sample are married and may have as many as six children living at home (the average [.5 children], however, is relatively low). Fifty-nine percent of the U.S. sample are male; 11% are of minority status. U.S. deans have been in their positions from 0.16 to 27 years

(average, 5.62 years). Most deans in the United States perceive themselves to be part administrator, part faculty (59%). However, a sizable proportion (34%) view themselves solely as administrators. In contrast, only 8% define their role strictly in terms of being faculty.

Virtually all universities in Australia (with the exception of one) are public institutions. Sixty-two percent of the deans in the Australian data set work at research institutions, 29% at comprehensive universities, and 10% at baccalaureate colleges. Because the Australian data set is a sample drawn from the entire population of universities and all deans, more college types are represented. By college type, 15% of the deans head business colleges, 21% liberal arts, 24% science, 11% education, 12% nursing, 7% medicine, 6% law, and 4% other types. Australian deans, on average, are slightly younger than U.S. deans ($\bar{x}$ = 53.4 years old—the range of ages runs from 36 to 76 years). Eighty-nine percent are married and have, on average, 1.29 children living at home (the range is from no children to five). Eighty-five percent of the Australian sample are male; 7% can be classified as minority.[2] Australian deans have been in their positions for a shorter length of time ($\bar{x}$ = 4.18 years; range: 0.10 to 30 years) than their U.S. counterparts. A greater percentage of Australian deans (71%) than U.S. deans describe themselves as both administrators and faculty. A far greater percentage (22%) think of themselves as faculty only, and a much smaller percentage (7%) consider themselves to be solely administrators.

Deans' Responses to Individual Stress Variables

Nine of the ten stress variables with the highest means and the greatest percentage of respondents expressing serious stress (assigning either 4 [above average] or 5 [high or excessive] out of a possible 5 points) are the same in both countries. The variable, attending too many meetings, rose to the top of the list, with mean scores of 3.61 in the U.S. and 3.51 in Australia, with more than 50% of the deans in each country indicating above average or excessive stress. Imposing excessively high self-expectations ($\bar{x}$ = 3.45), a stressor that factored out as a unique variable, was also perceived as creating excessive stress by more than 50% of the U.S. deans. While this variable also ranked in the top 10 group for Australian deans, it did not rank as high ($\bar{x}$ = 3.07) nor did as many deans (42%) experience high stress levels. The other seven top stressors that deans seem to hold in common across countries include having insufficient time to keep current in my academic field (number 3 in the U.S., $\bar{x}$ = 3.40, 49%; number 2 in Australia, $\bar{x}$ = 3.46, 49%), trying to gain financial support for college programs, finding balance between my professional and personal lives, handling faculty conflicts, having too heavy a work load, making faculty and staff tenure and advancement decisions, and having to meet report deadlines. For deans in the U.S., experiencing frequent interruptions also caused problems

TABLE 1. Deans Responses to the 10 Most Stressful Individual Stress Variables

Variable	U.S. Mean	Std. Deviation	% 4/5	U.S. Rank	Aus. Mean	Std. Deviation	% 4/5	Aus. Rank
Attend too many meetings	3.61	1.07	.58	1	3.51	1.10	.53	1
Impose excessively high expectations	3.45	1.24	.55	2	3.07	1.24	.49	7
Have insufficient time to keep current in academics	3.40	1.13	.49	3	3.46	1.21	.46	2
Trying to get financial support for college programs	3.30	1.20	.49	4	3.18	1.22	.47	5
Balancing professional and personal lives	3.28	1.25	.47	5	3.27	1.31	.45	4
Handling faculty conflicts	3.24	1.10	.44	6	2.92	1.19	.42	10
Having too heavy workload	3.21	1.22	.43	7	3.27	1.13	.42	3
Making tenure decisions	3.13	1.23	.41	8	2.93	1.30	.35	9
Having frequent interruptions	3.01	1.25	.38	9	2.66	1.24		16
Meeting report deadlines	3.00	1.16	.36	10	2.94	1.18	.35	8
Balancing leadership and scholarship responsibilities	2.85	1.18		16	3.09	1.29	.32	6

Responses were on a Likert scale from 1 to 5.

(this variable ranked 16 for Australian deans). Australian deans added attempting to balance my leadership and scholarship responsibilities to their list (in the U.S. deans' list, this variable ranked 16th). (See Table 1.)

FACTOR ANALYSIS OF THE DEAN STRESS

To reduce the dimensionality of the U.S. and Australian survey data generated by the DSI, we employed principal components factor analysis with Varimax rotation using the SPSS statistical package. In each analysis, factors carrying eigenvalues greater than one were initially considered to be significant (Hair et al., 1992).

The factor matrices for U.S. and Australian deans are presented in Tables 2 and 3. This analysis indicates that 29 of the 41 items cluster around seven interpretable factors. The proportion of the DSI variance explained by the seven factors is 59.9% for the U.S. data set and 67.3% for the Australian data set. Four other stressors—imposing excessively high self-expectations, promoting diversity, adapting to technology, and dealing with student conflicts and concerns—emerged as unique, unidimensional variables.

In each factor analysis, the first factor to emerge accounts for the greatest amount of the variance in the instrument, and the variables loading more heavily on a specific factor are the most indicative of the underlying construct that the factor represents. The last factor to materialize in the analysis carries the least predictive reliability, as do the variables loading least heavily on a

TABLE 2. Dean Stress Inventory Principal Components Factor Analysis (U.S. Data)

Variable	Varimax Rotated Factor Loadings						
	F1	F2	F3	F4	F5	F6	F7
Administrative Task Stress (AT Stress)							
Meeting report and other paperwork deadlines	.77	.10	.10	.07	.14	.01	.10
Preparing budgets and allocating resources	.70	.08	.20	−.03	.06	.03	.27
Writing letters and memos, and responding to other paperwork	.63	.05	.05	.24	.06	.10	.21
Feeling I have too heavy a work load	.58	.19	.14	.31	.25	.08	−.03
Being frequently interrupted by telephone calls & drop-in visitors	.62	.10	.11	.10	.12	.17	−.06
Attending meetings which take up too much time	.49	.20	.09	.23	.10	.40	.09
Cronbach's alpha	.80						
Provost/Supervisor-Related Stress (P Stress)							
Resolving differences with my provost/ superior	.02	.83	.02	.03	.01	−.01	.09
Trying to influence the actions and decisions of my provost/superior	.12	.80	.04	.09	.03	.03	.17
Having insufficient authority to perform my college responsibilities	.08	.62	.19	.01	.14	.17	.05
Feeling I will not be able to satisfy the conflicting demands of those in positions of authority over me	.22	.70	.12	.03	.17	.13	−.02
Feeling unreasonable pressure for better job performance	.36	.51	.13	.03	.13	.28	.02
Not knowing how my provost/superior evaluates my performance	.08	.57	.02	.16	.02	.48	.11
Cronbach's alpha		.83					
Faculty/Chair (Head)-Related Stress (F/C Stress)							
Handling concerns and conflicts with faculty	.15	.11	.81	.13	.07	.10	.01
Handling concerns and conflicts with chairs	.05	.16	.79	.12	.10	.00	.14
Evaluating chairs, faculty, and staff performance	.40	.05	.62	.07	−.01	.11	.13
Having to make tenure, promotion, and advancement decisions	.43	.10	.47	.02	.17	−.12	.22
Cronbach's alpha			.76				
Time/Personal Stress (TP Stress)							
Participating in work-related activities outside regular working hours that conflict with personal activities	.26	.06	.05	.82	.09	.06	−.02

TABLE 2. (*Continued*)

Variable	Varimax Rotated Factor Loadings						
	F1	F2	F3	F4	F5	F6	F7
Meeting social obligations (clubs, parties, volunteer work) expected of deans	.15	.08	.04	**.81**	.06	.04	.15
Having to travel to fulfill job expectations	.04	.02	.20	**.55**	−.01	.10	.23
Attempting to balance my professional and personal lives	.46	.14	.17	**.46**	.32	.02	.23
Cronbach's alpha				.73			
Scholarship Stress (S Stress)							
Having insufficient time to stay current in my academic field	.27	.10	−.02	.07	**.76**	−.03	.03
Attempting to balance my leadership and scholarship responsibilities	.32	.03	.06	.10	**.74**	.12	.15
Believing my academic career progress is not what it should be	.00	.22	.20	.02	**.67**	.29	−.05
Cronbach's alpha					.71		
Salary/Recognition Stress (S/R Stress)							
Receiving inadequate salary	.18	.07	−.04	.05	.03	**.79**	.05
Receiving insufficient recognition for performing administrative functions	.14	.36	.22	.08	.15	**.61**	.01
Receiving insufficient recognition for my scholarly performance	.02	.20	.10	.10	.38	**.57**	.25
Cronbach's alpha						.66	
Fund Raising Stress (FR Stress)							
Having to engage in fund raising activities	.03	.09	.13	.17	.03	.12	**.77**
Trying to gain financial support for college programs	.33	.21	.05	.06	.08	.01	**.63**
Trying to satisfy constituent groups (e.g., alumni, legislators, community)	.19	.10	.42	.11	−.00	.12	**.51**
Cronbach's alpha							.61
Eigenvalue	8.1	2.4	1.8	1.5	1.3	1.2	1.03
Percent of variance accounted for	27.9	8.4	6.1	5.2	4.7	4.1	3.6
Cumulative percent of variance accounted for							59.9

particular factor. Cronbach's alpha was calculated for variables loading most heavily on each factor within each analysis to determine the reliability of the instrument (Noursis, 1994).

The ordering of the seven factors in terms of variance accounted for differed by country; and certain variables loaded on different factors depending on whether we were dealing with U.S. or Australian dean data. The variables in the U.S. data set loaded more consistent with the underlying DSI constructs than did those in the Australian set. However, variables that characterized and

TABLE 3. Dean Stress Inventory Principal Components Factor Analysis (Aus. Data)

Variable	Varimax Rotated Factor Loadings						
	F1	F2	F3	F4	F5	F6	F7
Administrative Task Stress (AT Stress)							
Meeting report and other paperwork deadlines	.78	.23	.12	.22	−.02	−.01	.16
Preparing budgets and allocating resources	.42	.09	.36	.35	.37	.00	.00
Writing letters and memos, and responding to other paperwork	.72	.11	.13	−.01	−.02	.23	.12
Feeling I have too heavy a work load	.59	.19	.06	.21	.17	.36	.16
Being frequently interrupted by telephone calls & drop-in visitors	.56	.23	.28	.21	−.03	.12	.19
Attending meetings which take up too much time	.56	−.06	.06	.16	.24	.40	.23
Having to make tenure, promotion, & advancement decisions	.49	−.01	.11	−.05	.17	−.02	−.15
Cronbach's alpha	.84						
Scholarship Stress (S Stress)							
Feeling unreasonable pressure for better job performance	.19	.46	.45	.19	.28	.09	.05
Not knowing how my supervisor evaluates my performance	.04	.57	.21	.03	.48	.01	.26
Having insufficient time to stay current in my academic field	.46	.49	−.02	.16	.10	.34	.09
Attempting to balance my leadership and scholarship responsibilities	.45	.58	.15	.09	.04	.30	.30
Believing my academic career progress is not what it should be	.21	.78	.07	.19	.06	.11	.10
Cronbach's alpha		.76					
Fund Raising Stress (FR Stress)							
Having to engage in fund raising	.07	.09	.73	.09	−.07	.23	.26
Trying to gain financial support for faculty programs	.29	.08	.67	.19	.29	.11	.11

TABLE 3. *(Continued)*

Variable	Varimax Rotated Factor Loadings						
	F1	F2	F3	F4	F5	F6	F7
Trying to satisfy constituent groups (e.g., alumni, legislators, community)	.10	.11	**.64**	.20	.12	.22	.11
Cronbach's alpha			.72				
Faculty/(Chair) Head-Related Stress (F/H Stress)							
Handling concerns and conflicts with academic staff	.17	.14	.20	**.82**	.13	.03	−.01
Handling concerns and conflicts with department heads	.16	.13	.01	**.83**	.11	.01	.13
Evaluating department heads, academic, and admin. staff performance	.17	.03	.37	**.60**	.07	−.13	.18
Having to travel to fulfill job expectations	−.08	.41	.07	**.43**	−.02	.38	.19
Cronbach's alpha				.74			
Provost/Supervisor-Related Stress (P Stress)							
Resolving differences with my superior	−.09	−.07	−.09	.21	**.79**	.19	.12
Trying to influence the actions and decisions of my superior	.06	.20	.23	.05	**.79**	.13	.13
Feeling I will not be able to satisfy the conflicting demands of those in positions of authority over me	.31	.37	.34	−.02	**.58**	−.11	.02
Cronbach's alpha					.70		
Time/Personal Stress (TP Stress)							
Participating in work-related activities outside regular working hours that conflict with personal activities	.33	.05	.11	−.05	.17	**.77**	.06
Meeting social obligations (clubs, parties, volunteer work) expected of deans	.13	.16	.38	−.06	.06	**.71**	.09
Attempting to balance my professional and personal lives	.49	.25	.18	−.02	.02	**.56**	.23
Cronbach's alpha						.80	

TABLE 3. (*Continued*)

Variable	Varimax Rotated Factor Loadings						
	F1	F2	F3	F4	F5	F6	F7
Salary/Recognition Stress (S/R Stress)							
Receiving inadequate salary	.17	.06	.13	.02	.03	.17	.81
Receiving insufficient recognition for performing administrative functions	.16	.18	.18	.10	.13	.11	.78
Receiving insufficient recognition for my scholarly performance	.28	.52	.14	.03	.19	.01	.55
Cronbach's alpha							.78
Eigenvalue	9.9	2.3	1.9	1.5	1.3	1.2	1.05
Percent of variance accounted for	34.1	8.0	6.7	5.2	4.5	4.0	3.6
Cumulative percent of variance accounted for							67.3

loaded most consistently on each stress dimension remain constant across countries. In all instances, Cronbach's alphas indicate moderate to strong reliability of the factor loadings. (See Tables 2 and 3.) The seven underlying constructs that contribute to total dean-stress variance are administrative task, provost/supervisor-related, faculty/chair-related, time/personal, scholarship, salary/recognition, and fund-raising stress.

Administrative task stress. Factor 1, accounting for 34.1% and 27.9% of the common variance for Australian and U.S. deans, respectively, is very similar to the task-based stress items of the public school administrator stress instrument (ASI) and the university department chairs instrument (CSI). In all three cases this dimension reflects the stress arising from the performance of administrator's day-to-day tasks and pressures of deadlines, meetings, paperwork, budgets, and interruptions.

Provost/supervisor-related stress. The second factor (accounting for 4.5% and 8.4 % of the common variance for Australian and U.S. deans, respectively) reflects the role- and relationship-based conflict occurring between management levels. Deans express frustration over trying to resolve differences and conflicting demands with, and influence decisions of, their provost; having insufficient authority to perform their responsibilities; and feeling pressure for job performance without knowing how the provost evaluates their performance.

Faculty/chair (Head)-related stress. The third dimension of deans' stress (explaining 5.2% and 6.1% of common variance for Australian and U.S. deans,

respectively) reflects the conflict-ridden and personnel nature of academic administrator positions. This stress emanates from handing conflict with faculty and chairs, as well as making staff evaluation and promotion and tenure decisions.

Time/personal stress. Factor 4 (accounting for 4.0% and 5.2% of the common variance for Australian and U.S. deans, respectively) represents a new dimension of administrator stress not previously identified. Although some of the items in this factor have appeared on other administrator stress instruments (e.g., ASI and CSI), this dimension is more holistic of demands felt from external after-hour activities from social obligations, travel, and competition for time between the dean's personal and professional lives.

Scholarship stress. Scholarship stress represents the fifth dimension of dean stress, explaining 8.0% of the common variance for Australian deans and 4.7% for U.S. deans. Similar to department chairs, deans express frustration from insufficient time to stay current in their academic field, not making progress in their academic career, and trying to balance their leadership and scholarship responsibilities. As with department chair stress, this dimension appears to be unique among academic administrators in higher education and not found in public schools or business and industry.

Salary/recognition stress. The sixth factor (representing 3.6% and 4.1% of the common variance for Australian and U.S. deans, respectively) is more reflective of the dimension of stress expressed by faculty in an earlier study (Gmelch et al., 1986). This stress arises from the feeling of inadequate salary and insufficient recognition for administrative and scholarly performance.

Fund-raising. The last factor, and most unique to that of deans, is fund-raising, explaining 6.7% and 3.6% of the common variance for Australian and U.S. deans. This is most likely the newest dimension of dean stress, reflective of current pressures on deans to engage in fund-raising and financial support activities and to satisfy demands of constituent groups. (See Table 4.)

Across countries many variables loaded similarly on each of the seven stress dimensions. For instance, the first six variables loading on the dimension that explained the most variance in dean stress in both the U.S. and Australia (administrative task stress) were the same. For the supervisor-related stress dimension, three stress variables—resolving differences with my superior, trying to influence his/her decisions, and feeling that I am unable to satisfy conflicting demands of those in positions of authority over me—loaded similarly. The same held true for faculty/chair-related stress, where handling concerns and conflicts with faculty and with chairs, and evaluating faculty, chairs, and staff performance, loaded the same. Three variables also loaded on the time/personal stress dimension regardless of country. These were participating in work-related activities outside of regular work hours, meeting position-related social obligations, and attempting to balance my professional and personal lives.

TABLE 4. Factor Order and % of Variance Explained by Country

Stress Dimension	Australian Order	Australian % Variance	U.S. order	U.S. % Variance
Administrative task stress	(1)	34.1%	(1)	27.9%
Provost/supervisor-related stress	(5)	4.5%	(2)	8.4%
Faculty/chair (head)-related stress	(4)	5.2%	(3)	6.1%
Time/personal stress	(6)	4.0%	(4)	5.2%
Scholarship stress	(2)	8.0%	(5)	4.7%
Salary/recognition stress	(7)	3.6%	(6)	4.1%
Fund-raising stress	(3)	6.7%	(7)	3.6%

Having insufficient time to stay current in my academic field, attempting to balance my leadership and scholarship responsibilities, and believing my academic career progress is not what it should be were common concerns reflected in scholarship stress. Finally, the stress variables that identified salary/recognition stress (inadequate salary, and insufficient recognition for administrative functions and scholarly performance) and fund-raising stress (having to engage in fund-raising activities, gaining financial support for programming, and satisfying external constituent groups) were identical for U.S. and Australian deans. (See Tables 2 and 3.)

RELATING THE STRESS FACTORS TO STRESS LEVELS

To determine which dimension accounted for the highest levels of stress, we categorized the top 10 stressors by dimension. For U.S. deans, four of these stress variables—attending too many meetings, having too heavy a work load, experiencing frequent interruptions, and meeting report deadlines—load on the administrative task (AT) stress dimension. Two top-10 stressors—handling faculty conflicts and making tenure and promotion decisions—loaded on faculty/chair-related (FC) stress. Attempting to balance my professional and private lives loaded on time/personal (TP) stress; having insufficient time to stay current in my academic field loaded on scholarship (S) stress; and trying to gain financial support for college programs loaded on fund-raising (FR) stress. The remaining stressor, holding excessively high self-expectations, is a unique variable that has the potential to impact all stress dimensions. (See Tables 1 and 2.)

Australian deans also experience greatest stress from the AT dimension. Here, three of the top stressors—attending too many meetings, having too heavy a work load, and meeting report deadlines—loaded on this dimension. Two other dimensions also figure prominently in the stress levels of Australian deans—scholarship (S) and faculty/head relations (FC). In each case, two of the top stressors loaded on each dimension (insufficient time to stay current and

balancing scholarship and leadership responsibilities on the S dimension and handling faculty conflicts and making tenure decisions on the FC(H) dimension). As with U.S. deans, one top stressor loaded on fund-raising (trying to gain financial support for programs) and another (balancing professional and personal lives) on TP stress. Again, the unique self-expectation variable appears to be a possible influence on all dimensions. (See Tables 1 and 3.)

For deans in the U.S. and Australia, the AT stress dimension not only accounts for the greatest amount of variance in stress but also brings about the highest levels of stress. The conclusion we might draw is that getting caught up in the day-to-day minutiae of running a college detracts from what deans may consider their primary responsibilities. Managing details, putting out fires, and continually operating in a crisis mode create a situation that does not necessarily lend itself to either true leadership or scholarship.

Interestingly, in both countries, stress levels arising from the supervisor-related dimension appear to be much lower. This may be because deans expect stress to exist in these relationships and understand it to be part of the job. In contrast, stress levels brought on by the faculty/chair (head)-related stress dimension appear to be higher, suggesting that making judgments about subordinates concerning work-related issues (settling conflicts and the like) and their professional futures (deciding about tenure) may be more difficult than dealing with the consequences of being judged themselves (a reflection of provost/supervisor-related stress). Supervisor stress levels may also be lower and faculty-chair stress higher because provosts/supervisors and their deans enter into a kind of collaborative effort to get faculty to move professionally in directions with which faculty may not agree. This situation places deans in a "we" relationship with the provost but an "us and them" adversarial position with the faculty.

For Australian deans (and U.S. deans to a lesser extent), issues of scholarly productivity also seem to contribute to increased stress levels. The dilemma here may very well stem from how deans describe themselves professionally. Australian deans, overwhelmingly, think of themselves as faculty or some combination of faculty and administrator. Very few consider themselves to be purely administrators. Since one of the primary roles of faculty revolves around research, it stands to reason that stress levels would increase in individuals who no longer devote sufficient time to such endeavors. In contrast, more U.S. deans view themselves as primarily administrators. Holding such a perspective may allow them to redefine their primary responsibilities in terms of management, and perhaps leadership, and away from the rigors of research.

The indication that fund-raising is one of the more stressful activities in which deans engage raises some interesting questions. As public funding becomes increasingly tied to the public's perception of academic productivity and effectiveness, will this dimension begin to carry added weight? Will deans, as

funding becomes scarcer and as faculty and university roles become redefined to meet public expectations, be required to become more dollar-driven and bottom-line oriented? And, if so, will this move from scholar/administrator to administrator/CEO (as in private enterprise) bring about still greater levels of stress in deans?

Tasks related to each of these stress dimensions consume time. As the job description of deans has expanded to include a heavier focus on funding, and the responsibilities tied to managing and dealing with increasingly diverse faculty, students, and staff have become more complex, past duties have not been cut away or redesigned to make room for the added work. Instead, deans find their work world intruding into their personal lives, eating away time once devoted to family, friends, and personal needs. Unless the system changes, the stress related to this time/personal dimension seems destined to increase.

Finally, although inadequate salary and insufficient recognition do not appear to be top contributors to stress, the mere fact that these "hygiene" items (Herzberg, 1968) appear at all should be cause for concern. As the dean's position continually edges toward its private sector counterpart (perhaps to the point where they become indistinguishable), deans may say enough is enough. If I'm to be motivated do this job and do it well at least take care of my basic needs—train me to do it and pay me what I can earn in a comparable private sector position.

IMPLICATIONS

Multimensionality of the Academic Dean Stress

Until about 1970, most measures of job-related stress reflected a single, generic source of stress (e.g., Indik et al., 1964). While scholars hypothesized multiple sources of stress in an organizational setting (McGrath, 1970), few investigations reflected possible multiple sources of stress. In the 1980s and 1990s, researchers in education began to reflect the multidimensionality of stress in public school administrators (Koch et al., 1982), higher education faculty (Gmelch et al., 1986), university administrators (Rasch et al., 1986), and university department chairs (Gmelch and Burns, 1994). Some of these studies revealed interpretable factors consistent with theoretically derived models of administrative stress (e.g., Koch et al., 1986) while others reflected new dimensions specific to occupational differences within higher education professions, such as university faculty as compared to department chairs (Gmelch et al., 1986; Gmelch and Burns, 1994).

One could further postulate that faculty and academic administrators such as deans and department chairs might be similar enough in their pressures to reflect identical dimensions of stress. In fact, several perceived dimensions of stress are common among academics in universities: time constraints, conflict,

recognition, supervisor relationships, and scholarship. While many dimensions were similar, this study underscores the importance of discriminating within academics to ferret out factors unique to the roles and responsibilities of deans as compared to faculty and department chairs. The ever-expanding role of the academic dean is reflected in the additional stress factor of fund-raising. Also not found to the same extent by academic department heads and chairs is the factor reflective of pressures outside normal office hours for time and balancing personal and professional lives.

Universities need to consider the consequences of increasing dean responsibilities without reassigning some existing duties to other administrators or perhaps doing away with them all together. Deans continually fight the intrusion of "administrivia" into their personal and scholarly lives as they attempt to balance their professional and personal affairs and their leadership and scholarly responsibilities. Adding qualified staff to the dean's office to deal with tasks, such as fund-raising, alumni relations, report preparation, and nonpressing personnel issues, might be a first step. Such a move frees deans up to engage in reflective thinking about where the college is and where it should be in the future.

Cross-Cultural Comparisons

While some of the dimensions of the dean's academic leadership are unique to their position, cross-cultural comparisons between deans in the United States and Australia reveal more similarities than differences. At the level of individual stressors, both Australian and U.S. deans identified the same 9 of the top 10 stressors, with both identifying excessive meetings as being number 1. In contrast, possibly due to their perceived differences in academic versus administrative roles, more Australian than U.S. deans experienced serious stress from balancing leadership and scholarship responsibilities (only 8% of U.S. deans think of themselves solely as faculty as compared to 22% in Australia). Likewise, frequent interruptions caused more stress for U.S. deans than their Australian counterparts. One could only speculate on personal style or office management practices as to why interruptions impacted deans in the two countries differently.

With regard to dimensions or factors of dean stress, while minor statistical variations occurred when comparing Australian and U.S. factors of dean stress, the practical integrity of the factors was fairly consistent. The deadlines, paperwork, interruptions, meetings, and work overload of the administrative task factor accounted for the greatest variance for both Australian deans (34.1%) and U.S. deans (27.9%), as well as highest levels of stress. The other six factors reflected similar loadings across countries and, for practical purposes, were similar in their variance as well.

Universities in both countries need to take stock of the manner in which they carry out business. Questions must be asked and answered. For instance, how might universities facilitate the work of deans, not simply add to it? How might universities ensure that support staff are qualified to complete the tasks to which they are assigned? Do reports and paperwork that deans are required to prepare really get used? Is there another way to get the same information covered in the reports, if the university needs it? Can meetings be minimized? Do people within universities meet to meet, or do they meet to accomplish a purpose? Answering these queries, and others like them, could lead universities to restructure the way they operate and what they expect from those who manage their colleges.

Strategies for Dean Survival

While the statistical analysis does not provide answers to what ails deans, the dimensions of the problem lead one to search for strategies for dean survival. Clearly the greatest source of stress emanates from the paperwork, meetings, interruptions, and work load of academic deans. These stressors do not represent the exhaustive challenges of leadership but the day-to-day irritants that wear away at deans, disabling and distracting them from the important issues in academic leadership. Few deans receive basic training in management so that they can transcend the "administrivia" and focus on vital issues.

Such training for deans might take on three dimensions—pre-, present, and postposition. Prior to assuming the deanship (or very early in a new dean's tenure), universities need to systematically invest in and formally train the future leadership of their institutions. They need to think about growing their own deans, cultivating promising academic leaders, spotting them early on in their academic careers as faculty. They need to prepare these potential leaders in such areas as conflict resolution, fund-raising, personnel management, time and stress management, change facilitation and management, team work, delegation, mentoring, planning and visioning, and budgeting and fiscal management. This task need not be as difficult as it might seem. Many universities house MBA programs. Some of the skills necessary for running a college are the same as for operating a business, so why not create an MBA for academics.

During the deanship, universities must provide for continued professional leadership development. In-house retreats with the provost and president go a long way to educating deans about their particular institutions. In addition, a professional development allowance provides deans with the time and money to take advantage of workshops, seminars, and intensive leadership development programs offered elsewhere. Similarly, provisions for periodic renewal, such as professional leaves after five years of service, provide a break from the pressures of the position and further opportunity to pursue professional develop-

ment. Such leaves could be used to promote the continued capacity of the individual as dean, or help him/her prepare to return to the faculty, or for a move to another administrative position. Finally, when deans move out of the dean's role, they can themselves play a part in training future generations of academic leaders by mentoring, counseling, and teaching those new to the endeavor.

CONCLUSION

Are deans an imperiled species? It depends on how you define imperiled. We suspect that there will always be someone to fill the position. Whether that person can do the job is another question. What does seem clear is that unless universities realize that they are rapidly moving toward a situation where they ask too much but support too little, the motivation of those taking the dean's position and their ability to be effective leaders may be less than credible.

We can, for limited periods, sustain life on the edge; our bodies can endure the strain, our minds the stress and tension. Over time, however, we all seek balance in what we do and how we live. It appears that for deans, the time to seek such balance is, at best, rapidly approaching and, more realistically, may already be here.

NOTES

1. Research instruments used in the survey include the Dean's Stress Inventory—the subject of this paper (Gmelch et al., 1996)—the Role Conflict and Role Ambiguity Questionnaire (Rizzo et al., 1970), the Dean's Task Inventory (Gmelch et al., 1996), Satisfaction with Dean's Role (Gmelch et al., 1996), the Dean's Leadership Inventory (Rosenbach and Sashkin, 1995), and demographic and contextual variables (Gmelch et al., 1996).
2. The term *ethnicity* in Australia refers to place of birth—Australia, Europe, Asia, U.S., or other. In the U.S., the term refers to white, African American, Asian American, or American Indian. To make comparisons between U.S. and Australian deans using this variable, we computed the percentage of minority deans by using the Asian and other categories only.

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