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ABSTRACT

Time constraints often diminish college administrators capacity to address problems and concerns. The lack of time to accomplish administrative responsibilities can both produce and magnify stress. Perceptions of amounts of time spent on problems associated with 21 administrative activities were obtained from 373 public community, public technical, and private technical college presidents or directors within the area of the Southern Association of Colleges and Schools. This study involved the collection of demographic data; a principal component analysis of patterns of time associated with the 21 administrative activities clustered in the areas of instruction, support, relationships, facilities, and accreditation; and a comparison of the difference between average time allocations of academic and technical college presidents as well as the differences between public and private college presidents. Study results included the following: (1) there was no relationship between years as an administrator and the five clusters of administrative activities; (2) time devoted to instructional considerations, and time spent to develop or foster relationships was significantly higher for technical college presidents (both public and private) than for public college presidents, while time spent to obtain support for the institution was significantly lower for technical college presidents; (3) time spent on matters of accreditation was significantly higher for private technical college presidents than for the presidents of public institutions; and (4) the majority of presidents were white, middle-aged males who held doctorates. Data tables and references are included. (PAA)

An Analysis of Time-On-Task Perceptions of Public and Private College Administrators

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ABSTRACT:TIME CONSTRAINTS OFTEN DIMINISH COLLEGE ADMINISTRATORS CAPACITY TO ADDRESS PROBLEMS AND CONCERNS. THE LACK OF TIME TO ACCOMPLISH ADMINISTRATIVE RESPONSIBILITIES CAN BOTH PRODUCE AND MAGNIFY STRESS. TECHNICAL, SOCIAL, CULTURAL, AND ECONOMIC PRESSURES WITHIN EDUCATIONAL ENVIRONMENTS INDUCE STRESS FOR COLLEGE ADMINISTRATORS WHO TYPICALLY ARE FORCED TO RESPOND WITH TIMELY DECISIONS. PERCEPTIONS OF AMOUNTS OF TIME SPENT ON PROBLEMS ASSOCIATED WITH 21 ADMINISTRATIVE ACTIVITIES WERE OBTAINED FROM 373 PUBLIC COMMUNITY/PUBLIC TECHNICAL/PRIVATE TECHNICAL COLLEGE PRESIDENTS OR DIRECTORS WITHIN THE AREA OF THE SOUTHERN ASSOCIATION OF COLLEGES AND SCHOOLS. THIS REPORT PROVIDES: DEMOGRAPHIC DATA; PRINCIPAL COMPONENT ANALYSIS ISOLATES PATTERNS OF TIME ASSOCIATED WITH CLUSTERS OF THE 21 ADMINISTRATIVE ACTIVITIES; AND CONTRASTS THE DIFFERENCES BETWEEN AVERAGE TIME ALLOCATIONS OF ACADEMIC AND TECHNICAL COLLEGE PRESIDENTS AS WELL AS DIFFERENCES BETWEEN PUBLIC AND PRIVATE TECHNICAL COLLEGE PRESIDENTS.

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An Analysis of Time-On-Task Perceptions of Public and Private College Administrators

James W. Selman

Research indicates that stress is increasing for collegiate level employees; this is particularly true for top level administrators such as college presidents or directors (Veninga and Spradley, 1981). The pressures associated with these leadership positions and the expectations of various publics, with respect to their demands, have changed in recent years. (Chronicle of Higher Education, 1984). Today's educational executive is expected to function as a fund raiser, a politician, soothsayer, and a problem solver (Schuler, 1981). Such activities are considered normal parts of executive responsibilities.

The spectrum of executive duties associated with stress-related activities with their levels of intensity, are contingencies limiting the amount of time and physical stamina available for conducting more primary responsibilities in daily operations of an institution (Selman, 1990). These time constraints often diminish administrator capacity to address problems and concerns. Moreover, time or lack of time can both produce and magnify stress (Selye, 1983).

Administrative decisions and events that normally produce non-stressful responses may become increasingly stressful as time constraints are imposed. Decisions affecting the operations of the institution, its community, and the lives of its faculty and students are often made at varying levels of physical and psychological costs to the decision maker (Grammateo, 1980; Schuster & Bowen 1985). Heart and arterial disease, chronic indigestion and ulcers, migraine headaches, mental breakdown, and alcoholism and drug addiction are only a few of the more familiar ailments said to be associated with time

induced stress. The question of whether or not stress takes a heavy toll on physical and mental health ultimately depends on how time induced stresses are handled (Wooley, 1983). Academic preparation for formalized educational degrees attempts to provide administrators with the skills needed to recognize and respond to job responsibilities and concerns. However, in day-to-day operations of a college survival may not be so academic. Time in the presidency and the accumulation of experiences obtained through the process of living may be a better indication of ability to serve successfully as a college president or director.

Technical, social, cultural, and economic pressures within educational environments induce stress for college administrators who typically are forced to respond with timely decisions. These pressures are generated by both external (Yates 1979) and internal forces (Schuler 1981). The external forces affecting administrative activities include such factors as: (a). obtaining additional financial support, (b) managing resources while income shrinks and operating expenses increase, (c) providing facilities and a curriculum that accommodates the needs of employees, students, and alumni, (d) maintaining good working relations with student, faculty and alumni, (e) recruiting and retaining technically qualified faculty by competing with salaries and other benefits offered by industry and business for the expertise of the faculty members, and (f) developing and maintaining good public and governance relations. Internal pressures include: (a) pressures resulting from critical schedules and deadlines, (b) multiplicity and rapidness at which changes must occur, (c) inability to minimize available time to accomplish tasks, (d) fear of failure, (e) uncertainty of future career and life choices, (f) absence of clearly defined job descriptions or role definitions that are understood and

accepted by different publics, and (g) personal feeling of being unfulfilled, but not knowing what to do about such feelings (Schuler 1961).

Purpose of the Study

The purpose of the study was to survey college presidents or directors to determine their perceptions of amounts of time spent working on problems associated with 21 administrative activities. To achieve this purpose, two major objectives were formulated to provide direction and investigative constraints for structuring and conducting the study. They were:

1. To cluster 21 administrative activities assumed to be stressful into time related activity clusters or patterns.

2. To investigate differences in activity clusters related to type of institution: public vs. private, and community vs. technical (given public).

Methodology

Population and Sample:

The study involved the use of opinionnaires to reflect self perceptions of college presidents or directors. Three different groups were surveyed: (a) public community college presidents, (b) public technical college presidents, and (c) private technical college presidents or directors.

All institutions were members of the Southern Association of Colleges and Schools (SACS and listed in the "Procceedsings", 1990 Volume 42, Number 2.

The data were obtained with a modified (for demographic data), existing instrument for determining the levels of perceived stress associated with 21 performance variables (Edwards, 1984 & Pinney, 1990). The same activity areas were used to obtain responses from the three sample groups.
The breakdown of the 373 institutions is found in Table I.

Insert Table 1 about here

Statistical Analyses:

Data collected were investigated univariately, bivariately and multivariately. Statistics employed had non-parametric and parametric attributes. Univariately, responses were tested against chance; bivariately, combinations of responses were tested; multivariately, factor analytic with principal components extractions and MANOVA techniques were employed. Additional post hoc analyses based on Scheffe' considerations were conducted.

Factor analysis with principal components extraction was done to reduce the 21 administrative activities (variables) to 5 components (representing clusters) preserving the essential dimensions of the data set and to define corresponding patterns of time spent on the 21 activities.

Factor Analysis:

Table 2 reports initial and final communality estimates for each variable. The measure of sampling adequacy of .63934 was lower than optimum. However, it was determined that this level was marginally high enough to proceed with the reporting.

Eigenvalues in Table 2 indicate seven factors contribute 57.7% of the variance associated with the 21 variables. It was determined that the first five factors accounting for 47.6% would be rotated and retained for additional statistical analysis on the basis of the scree criterion.

Table 3 further reports results of principal component analysis of the 21 time dependent activities. The rotated factor matrix of loadings are in

the center columns for components 1, 2, 3, 4 and 5. In assignment of names greater credence was given to the higher loadings on each of the five components. The five components were labeled instruction, support,

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Insert Table 2 about here.

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relationships, facilities, and accreditation (in the tables labeled TIM-1, TIM-2,...TIM-5 respectively). Table 3 reports communalities for factor patterns and rotated factor pattern matrices, with the corresponding factor score coefficient matrix and the covariance matrix for estimated regression factor scores.

Insert Table 3 about here.

MANOVA Analysis:

Statistically tested were relationships between factors representing administrative activities as reported in terms of time (TIM 1-5) and three administrative groups in Table 3 labeled; Group 1 (public community), Group 2 (public technical) and Group 3 (private technical). The table is divided roughly into thirds vertically. The top two-thirds pertain to unadjusted factor scores for computing multivariate (Wilk's Lambda and its approximating or exact F-test equivalents) and univariate tests. The data indicate multivariately that there is significance at the .05 level. Univariate analyses indicate among groups significance for four of the five TIM components, TIM-4 being the exception.

Insert Table 4 about here.

In the lower third of Table 4 Scheffe procedures were used to determine the post hoc differences among the three groups (Grp 1-3). Data indicated that there is significance between group means for all but one factor score (TIM-4). Group as a source for all other factor scores was significant (.05 level):

1. For data in the instruction (TIM-1) cell, group 2 and group 3 mean scores are significantly different from the group 1 mean score but the mean scores for groups 2 and 3 don't differ significantly from one another.

2. Scores in the support (TIM-2) cell indicate that the mean score for group 2 is significantly different from the group 1 mean and that the group 3 mean score is significantly different from the means of both groups 1 and 2.

3. Relationships (TIM-3) cell data indicate that the means of groups 2 and 3 are significantly different from group 1 but do not differ significantly from each other.

4. Scores in accreditation (TIM-5) cell, show that the mean for group 3 differs significantly only from the mean for group 2.

Conclusions:

Based upon the statistical results, one arrives at the following conclusions:

1. There is no relationship (not tabulated) between years as administrator and the five time clusters extracted from the 21 administrative activities included in this study.

2. Principal Component Analysis did isolate patterns of time spent on the 21 administrative activities. These patterns could be clustered into five components; instruction, support, relationships, facilities, and accreditation.

3. Differences in mean scores for activity clusters were observed for type of institution (group 1 public community, group 2 public technical, and group 3 private technical).

These differences among groups are detailed in the following:

1. Time devoted to instructional considerations was significantly higher for technical college presidents (public and private) compared to time spent by public community college presidents.

2. Time spent to obtain support for the institution was significantly lower for technical colleges than for public community colleges. Data indicated that time spent to obtain support for private technical colleges was significantly lower than for public technical colleges.

3. Time to develop or foster relationships (community, faculty, and students) was significantly higher for technical college presidents (public and private) when compared with the time spent by public community college presidents on the same component.

4. Time spent on matters relative to facilities was not significantly different for the three groups of administrators.

5. Time spent on matters pertaining to accreditation was significantly higher for private technical college presidents than for the presidents of the public institutions.

Findings indicate that the majority of the presidents were white, middle-aged males who held doctorates and had under ten years experience as a

president of a college. They were married, frequently attended church, participated in hobbies as a means to relax from the pressures or their responsibilities, and had three administrative assistants. Most institutions consisted of a single campus, being governed by local boards and were almost evenly divided between rural and urban locations.

The 21 administrative activities could be clustered into major components (instruction, support, relationships, facilities and accreditation). The amount of time devoted to administrative activities associated with these five components varied between type of institution (public community, public technical, and private technical). It appears that technical college presidents spend more time working with instructional considerations than community college presidents. Community college presidents devote more of their time to support activities than do technical college presidents. Time devoted to addressing relationship matters is greater also greater for technical college presidents than for their academic counterparts. Private technical college spend more time addressing accreditation concerns than do other types of college presidents.

This study contrasts the differences between average time allocations of academic and technical college presidents as well as differences between public and private technical college presidents. The findings have implications that should be considered in structuring formal educational experiences for specific types of college administrators, and in evaluating the leadership experiences of prospective college presidents. There is an indication for additional research to account for observed variation in the facilities component (cluster).

Table I

Summary of Demographic Characteristics for the Sample (N=373: public technical, n=119; private technical, n=79; public community, n=175)

YEAR	Freq	%	GENDER	Freq	%	MARITAL	Freq	%	HOBBIES	Freq	%
1988	175	46.9	FEMALE	56	15.0	MARRIED	340	91.2	YES	303	81.2
1990	198	53.1	MALE	316	84.7	SINGLE	32	8.6	NO	66	17.7
			MISS	1	.3	MISS	1	.3	MISS	4	1.1

ETHNIC	Freq	%	DEGREE	Freq	%	GOVRNCE	Freq	%	STATE	Freq	%
BLACK	18	4.8	EDD-PHD	178	47.7	LOCAL BD	149	39.9	AL	30	8.0
CAUC	344	92.2	EDS	19	5.1	STATE BD	54	14.5	FL	43	11.5
HISPANIC	5	1.3	MS	105	28.2	CHANCEL	80	21.4	GA	35	9.4
US IND	1	.3	BS-BA	34	9.1	OTHER	81	21.7	KY	25	6.7
ORENTIAL	1	.3	OTHER	21	5.6	MISS	9	2.4	LA	32	8.6
OTHER	2	.5	NONE	13	3.5				MS	10	2.7
MISS	2	.5	MISS	3	.8				NC	47	12.6
									SC	15	4.0

CHURCH	Freq	%	LOCATION	Freq	%	SPAN	Freq	%	TN	32	8.6
									TX	66	17.7
YES	250	67.0	RURAL	163	43.7	1 CAMPUS	229	61.4	VA	30	8.0
NO	121	32.4	URBAN	182	48.8	MULTI-CA	129	34.6	MISS	8	2.2
MISS	2	.5	MISS	28	7.5	MISS	15	4.0			

Stat \ Var	AGE	YRSPRES	ASSTNTS
Mean	50.628	9.672	3.25
Std Dev	8.004	7.213	2.46
Range	62.	43.	12.
Minimum	26.	1.	0.
Maximum	88.	44.	12.

Table 2

Initial and Final Communality and Eigenvalue Properties for Principal Component Analysis of Administrative Activities

Variable	Communality Initial	Communality Final
Plan	.19749	.15697
ComNeed	.05019	.04995
StafRel	.52835	.58197
StuRel	.33532	.36728
FacRel	.60537	.69989
ComRel	.23213	.23134
Comply	.13034	.13680
Fiscal	.23550	.21752
BoardRel	.05865	.07353
CurrEval	.34375	.39095
SupIns	.41083	.45601
F-Raise	.17272	.20719
Accred	.46230	.55155
ClasLab	.48352	.57190
Legal	.23822	.21672
Library	.43542	.52023
NewConst	.45070	.50592
Maint	.28037	.25147
LegRel	.29164	.35924
Alumni	.26382	.30600
InstAnal	.10114	.06973

Determinant of Correlation Matrix = .0124522

Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .63934

Fact	Initial Eigenvalue	Initial Pct of Var	Initial Cum Pct	Final Eigenvalue	Final Pct of Var	Final Cum Pct
1	3.47	16.5	16.5	2.83	13.5	13.5
2	2.15	10.2	26.7	1.49	7.1	20.6
3	1.82	8.7	35.4	1.25	6.0	26.5
4	1.38	6.6	42.0	.77	3.7	30.2
5	1.19	5.7	47.6	.58	2.8	33.0
6	1.06	5.1	52.7			
7	1.05	5.0	57.7			

Note: Variables Names:

Long-range planning (Plan), Community needs assessment (ComNeed), Staff relations (StafRel), Student relations (StuRel), Faculty relations (FacRel), Community relations (ComRel), Complying with federal and state guidelines (Comply), Fiscal management (Fiscal), Board relations (BoardRel), Curriculum evaluations (CurrEval), Supervision of instruction (SupIns), Fund raising (F-F-raise), Accreditation (Accred), Classrooms and laboratories) ClasLab), Legal matters (Legal), Library (Library), New construction (NewConst), Maintenance (Maint), Relations with Legislature (LegRel), Alumni relations (Alumni), and Institutional analysis (InstAal).

Table 3

Summary for Principal Component Analysis of 21 Time Dependent Administrative Activities

Activity	Factor Matrix:					Rotated Factor Matrix:					Factor Score Coefficient Matrix:				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Plan	.34	.15	.05	-.11	.06	.26	.23	.04	-.01	.19	.07	.08	-.01	-.03	.05
ComNeed	.17	.04	-.08	.00	.10	.20	.08	-.04	.06	-.00	.06	.02	-.04	.00	-.02
StafRel	.48	-.37	.35	.08	-.29	.18	.08	.74	-.03	.03	-.04	-.02	.36	.01	.05
StuRel	.46	-.39	-.00	-.06	-.00	.45	-.11	.39	.01	-.02	.15	-.10	.09	-.02	-.00
FacRel	.58	-.40	.36	.14	-.23	.27	.13	.78	-.02	-.03	-.01	.07	.53	.01	-.05
ComRel	.31	.09	.28	.16	.13	.16	.39	.18	-.12	-.08	.04	.17	.01	-.07	-.08
Comply	.23	-.13	-.12	-.16	.17	.36	-.08	-.00	-.04	.03	.13	-.05	-.03	-.05	.00
Fiscal	.40	-.12	.03	-.16	.13	.42	.05	.15	-.08	.09	.15	-.00	-.00	-.09	.02
BoardRel	.08	.19	.13	.11	.05	-.02	.27	-.01	-.02	-.00	-.02	.10	-.01	-.01	-.02
CurrEval	.52	-.03	-.23	-.04	.25	.60	.11	-.01	.13	-.01	.26	.03	-.09	-.00	-.06
SupIns	.54	-.25	-.24	-.06	.19	.64	-.05	.14	.12	-.05	.30	-.07	-.04	-.01	-.07
F-raise	.08	.33	.19	.22	.07	-.08	.44	-.05	-.00	-.04	-.04	.19	-.02	-.00	-.06
Accred	.38	.26	-.07	-.55	-.18	.29	.04	-.01	.06	.68	.12	-.11	-.04	-.02	.50
ClasLab	.39	.07	-.56	.22	-.23	.28	.02	.02	.70	.01	.04	-.03	.02	.46	-.01
Legal	.31	.31	.13	.10	.02	.11	.43	.04	.06	.10	.01	.17	-.02	.01	.01
Library	.24	.21	-.52	.25	-.28	.10	.08	-.07	.70	.04	-.04	.02	-.00	.42	.00
NewConst	.24	.50	.18	-.33	-.23	-.02	.35	-.01	.00	.62	-.09	.16	.03	.00	.38
Maint	.47	.06	-.01	.03	.15	.41	.26	.10	.06	.02	.15	.09	-.04	-.02	-.02
LegRel	.25	.42	.29	.18	.01	-.02	.59	.05	-.00	.09	-.05	.28	-.00	-.01	-.01
Alumni	.40	.33	-.02	.13	.12	.27	.45	-.06	.16	.05	.08	.21	-.06	.03	-.04
InstAnal	.22	.11	.02	.04	.07	.16	.20	.02	.04	.03	.04	.07	-.02	.00	-.00

PAF Extracted 5 factors. 1 Iteration required.

Quartimax Rotation 1, Analysis 1 -- Kaiser Normalization.

Quartimax converged in 5 iterations.

Covariance Matrix for Estimated Regression Factor Scores:

	Factor-1	Factor-2	Factor-3	Factor-4	Factor-5
Factor-1	.69122				
Factor-2	.03450	.64935			
Factor-3	.10514	.02770	.71627		
Factor-4	.08550	.01460	-.04439	.63630	
Factor-5	.03893	.07693	-.02676	.00095	.60022

Table 4
Summary of MANOVA Statistics for Factors of Administrative Activity Time by Administrative Group (N=373)

Unadjusted Cell Means and Standard Deviations of Factor Scores

College Group	N	TimInst.		TimSupp. 2		TimRel-3		TimFac-4		TimeAccred-5	
		Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
Grp-1	175	-.385	.599	.241	.820	-.221	.689	.004	1.025	.019	.905
Grp-2	119	.343	.826	-.016	.765	.233	.861	-.022	.428	-.150	.412
Grp-3	79	.335	.916	-.510	.563	.139	1.010	.024	.643	.184	.842
Entire	373	.000	.831	-.000	.806	.846	373	.000	.798	-.000	.775

EFFECT .. GROUP

Unadjusted

Multivariate Tests (S = 2, M = 1 , N = 182):

Test Name	Value	Approx. F	DF Hypoth.	DF Error	Sig. of F
Wilks	.61957	19.8	10	732	.000

Univariate F-tests with (2,370) D. F.

Var	SS Hypoth.	SS Error	MS Hypoth.	MS Error	F	Sig. of F
Tim -1	48.74	208.39	24.37	.5632	43.27	.000
Tim -2	30.71	210.85	15.36	.5699	26.94	.000
Tim -3	16.56	249.89	8.280	.6754	12.26	.000
Tim -4	.1090	236.60	.0545	.6394	.0852	.918
Tim -5	5.444	217.84	2.722	.5888	4.624	.010

Multiple Range Test By Variable GROUP, Scheffe Procedure
Table Ranges for the .050 level : 3.48, 3.48
The value actually compared with Mean(J)-Mean(I) is:
Tim-1: .5307 * Range * Sqrt(1/N(I) + 1/N(J))
Tim-2 .5338 * Range * Sqrt(1/N(I) + 1/N(J))
Tim-3 .5811 * Range * Sqrt(1/N(I) + 1/N(J))
Tim-4 .5654 * Range * Sqrt(1/N(I) + 1/N(J))
Tim-5 .5426 * Range * Sqrt(1/N(I) + 1/N(J))

College Group	Tim-1 Mean	Grp 1	2	3	Tim-2 Mean	Grp 1	2	3	Tim 3 Mean	Grp 1	2	3	Tim-4 Mean	Grp 1	2	3	Tim-5 Mean	Grp 1	2	3
Grp-1	-.3845				.2411				-.2212				.0042				.0191			
Grp-2	.3428	*			-.0162	*			.2332	*			-.0223				-.1505			
Grp-3	.3354	*			-.5095	*	*		.1388	*			.0243				.1844		*	

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