

CHAPTER 4

FINDINGS

The purpose of this study was to determine the relationship between the frequency of use of time-management practices and

- ◆ school principals' work-management styles most like them,
- ◆ school principals' flexibility in using these work-management styles,
- ◆ school type (public vs. private),
- ◆ school level (elementary vs. middle),
- ◆ school complexity,
- ◆ school principals' years of experience,
- ◆ school principals' gender, and
- ◆ school principals training in time management.

Upon receipt of the data from 304 surveys, a 76% return rate, analysis began. First, the data were entered into a spreadsheet and analyzed with the Statistical Package for Social Sciences (SPSS Inc., 1995). Descriptive statistics for the independent and dependent variables were calculated. The independent variables were: the work-management style *most like them*, the degree of flexibility in using work-management styles, school type, school level, years of experience, hours of training, gender, and school complexity. The dependent variables were: the score for total time-management practice, the score for the six categories score of time-management practices, and the scores for

each of the 64 time-management practices. Only the total score for the time-management practices was used as a dependent variable in the regression analysis. Data analyses by research question are included in the latter part of this chapter.

Descriptive Statistics

The next section contains the independent variables, dependent variables, data analysis, critique of respondent comments, and summary of Chapter 4.

Independent Variables

School Types

In Table 8, 81.9% of the school principals were public school principals; 18% were private school principals.

Years of Experience

Principals were asked to report the number of years of experience they had worked as an elementary assistant principal and elementary principal. The mean number of years of experience for the participating school principals was 15.92 years (see Table 8) with one year being the least and forty-one years being the most.

Hours of Training

In Table 8, the mean number of hours of training in time management for school principals was 8.4, including one principal who reported 200 hours of training which tended to elevate the mean.

Table 8

Demographic Variables for Participating Schools and Principals, N=304

Variable	<u>N</u>	<u>%</u>	<u>N</u>	<u>M</u>	<u>SD</u>
School type					
Public	249	81.9	--	--	--
Private	8	12.5	--	--	--
Missing	17	5.6	--	--	--
Years of experience as principal or assistant principal	--	--	287	15.92	7.21
Hours of training in time-management	--	--	285	8.40 ^a	17.11
School enrollment	--	--	286	564.00	369.00
Gender					
Male	192	66.7		--	--
Female	96	33.3		--	--
School level					
Elementary (PreK-5)	27	8.9		--	--
Middle (6 - 8)	77	25.3		--	--
Remaining Mixed Grades	200	65.8		--	--
PreK-8	130	42.7		--	--

NOTE. Differences in N reflect missing cases.

^a One participant reported 200 hours and was included in the mean.

School Enrollment

The average school enrollment in this study was 564.

Gender of School Principals

Table 8 shows that 66.7% of the school principals were male.

School Levels and Grade Groups

The 288 participating school principals administered 18 variations (see Table 9) of grade groupings from PreK to 12th grade in the study. Two hundred eighty-two (98%) school principals reported that their schools housed grades at or below grade 8. Twenty-seven (9%) housed only grades at or below grade 5. One hundred thirty (45%) principals reported that their schools only housed PreK -8. Seventy-seven (27%) principals reported that their schools housed only grades six through eight. Two hundred eleven (73%) school principals reported that their schools housed elementary grades below grade 5 in addition to housing grades above grade 5. None of the school principals reported that their schools had only grades 9 - 12.

The data are collected, interpreted, and presented as one group in this study.

Table 9

Grade Group Variations of Participating Schools

Group no.	Grade groups	Frequency	Percent	Valid percent	Cumulative percent
1.	PreK-2	2 ^a	.7	.7	.7
2.	Grades 3, 4, & 5	5 ^{a c}	1.6	1.7	2.4
3.	Grades 6, 7, & 8	73 ^{b c}	24.0	25.3	27.8
4.	Grades 9-12	0	.0	.0	27.8
5.	PreK - 5	5 ^{a c}	1.6	1.7	29.5
6.	PreK - 8	56 ^c	18.4	19.4	49.0
7.	K - 8	74 ^c	24.3	25.7	74.7
8.	K - 4	3 ^{a c}	1.0	1.0	75.7
9.	Grades 5, 6, 7, & 8	28 ^c	9.2	9.7	85.4
10.	Grades 4, 5, 6, 7, & 8	5 ^c	1.6	1.7	87.2
11.	Grades 7, & 8	4 ^b	1.3	1.4	88.5
12.	PreK - 6	6 ^c	2.0	2.1	90.6
13.	K - 6	8 ^c	2.6	2.8	93.4
14.	K - 5	12 ^{a c}	3.9	4.2	97.6
15.	K - 12	3 ^c	1.0	1.0	98.6
16.	PreK - 12	2 ^c	.7	.7	99.3
17.	Grades 5 - 12	1 ^c	.3	.3	99.7
18.	PreK - 7	1 ^c	.3	.3	100.0
	Total	288	94.7	100.0	
	Missing	16	5.3		
	Grand Total	304	100.0		

Note. Of the principals reporting, two hundred eighty-two (98%) of their schools housed grades ≤ 8 . ^a Twenty-seven (9%) of their schools housed elementary grades ≤ 5 .

^b Seventy-seven (27%) schools housed grades 6-8. ^c Two hundred eleven (73%) of their schools housed some elementary grades ≤ 5 .

Work-Management Styles

On Question 1 (see Appendix A), each respondent used a five-point Likert scale to rate the frequency they used each of five work-management styles in conducting their work. Their rating options were: 5 (very often), 4 (often), 3 (sometimes), 2 (rarely), and 1 (never). Findings in Table 10 show that principals used the Hopper style (\underline{M} =3.94, \underline{SD} = 1.03) of managing time most frequently, followed by the Perfectionist Plus style (\underline{M} = 2.80, \underline{SD} = 1.64), the Allergic to Details style (\underline{M} = 2.63, \underline{SD} = 1.15), the Cliff Hanger style (\underline{M} =2.04, \underline{SD} = 2.61), and, lastly, the Fence Sitter style (\underline{M} =1.94, \underline{SD} = .80). These findings support the nature of how busy principals manage time, which is illustrated by the statement written by Participant 275, “ I do not hop from job to job, but interruptions keep me from completing [what I’ve started]- - usually student/parent concerns....” This quote also supports the notion that principals may not intentionally just move from task to task, but rather that the nature of the job requires principals to respond to the teachers, parents, students, and others very often; thus, they frequently cannot complete a task that was started.

Relationship Between Work-Management Styles and Gender, School Type, and School Level

Table 11 shows that the rank order of mean scores of work-management styles was the same for males and females. However, males scored slightly higher than females in

three work-management styles-- Allergic to Details style (+.17), Fence Sitter style (+.08), and Cliff Hanger style (+.21)-- but none was significantly higher (see Appendix L).

The mean scores of public and private school principals and elementary and middle school principals were ranked in the same order. They differed from the order of the scores for males and females only for two types. The Fence Sitter style and the Cliff Hanger style vied for last position (see Table 11). Because principals were asked how frequently they behaved like the description in each work-management style, they received a score on each of the five styles. Public school principals scored slightly higher than private school principals on all five work-management styles (see Table 11). Elementary school principals scored higher than middle school principals on the Perfectionist Plus (+.26), Allergic to Details (+.16), and Fence Sitters styles (+.07), but not significantly so. The middle school principals scored slightly higher than elementary school principals as Hoppers (+.09) and Cliff Hangers (+.14), but not significantly so.

Table 10

Means and Standard Deviations of Work-management Styles, and the Work-management Styles Most Like Them, (the Participating Principals) N= 304

Styles	N	Missing	M ^a	SD	Style most like them		
					N	%	
Hopper	282	22		3.94	1.03	163	61.5
Perfectionist Plus	277	27		2.80	1.64	33	12.5
Allergic to Details	279	25		2.63	1.15	53	20.0
Cliff Hanger	274	30		2.04	2.61	8	3.0
Fence Sitter	275	29		1.94	.80	6	2.3
						Total	263
						Missing	41
						Total respondents	304

^aScale values were 1(never), 2 (rarely), 3 (sometimes), 4 (often), and 5 (very often).

Table 11

Rank Order of Principals' Mean Scores for Work-Management Styles by Gender, School Type, and School Level

Style	Total sample			Males			Females		
	<u>N</u>	<u>M^a</u>	<u>SD</u>	<u>N</u>	<u>M^a</u>	<u>SD</u>	<u>N</u>	<u>M^a</u>	<u>SD</u>
Hopper	282	3.94	1.03	190	3.92	1.05	90	3.99	.99
Perfectionist Plus	277	2.80	1.64	187	2.78	1.90	88	2.84	.92
Allergic to Details	279	2.63	1.15	187	2.69	1.15	90	2.52	1.15
Cliff Hangers	274	2.04	2.61	186	1.97	.82	87	1.89	.77
Fence Sitters	275	1.94	.80	184	1.96	.83	88	1.75	.79

(Table 11 continues)Note. Differences in N reflect missing cases.^a Scale values were 1 (never), 2 (rarely), 3 (sometimes), 4 (often), and 5 (very often).

Table 11 (continued)

Rank Order of Principals' Mean Scores for Work-Management Styles by Gender, School Type, and School Level

Style	Public school principals			Private school principals		
	<u>N</u>	<u>M</u> ^a	<u>SD</u>	<u>N</u>	<u>M</u> ^a	<u>SD</u>
Hopper	244	3.95	1.04	35	3.83	1.01
Perfectionist Plus	241	2.80	1.74	33	2.76	.79
Allergic to Details	240	2.65	1.13	36	2.58	1.25
Cliff Hangers	239	1.90	.81	32	1.78	.83
Fence Sitters	240	1.97	.81	32	1.75	.76

(Table 11 continues)Note. Differences in N reflect missing cases.^a Scale values were 1 (never), 2 (rarely), 3 (sometimes), 4 (often), and 5 (very often).

Table 11 (continued)

Rank Order of Principals' Mean Scores for Work-Management Styles by Gender, School Type, and School Level

Style	School principals with only grades K-5			School principals with only grades 6 - 8		
	<u>N</u>	<u>M</u> ^a	<u>SD</u>	<u>N</u>	<u>M</u> ^a	<u>SD</u>
Hopper	26	3.96	1.00	76	4.05	.98
Perfectionist Plus	26	2.88	1.03	74	2.62	1.04
Allergic to Details	27	2.67	1.21	75	2.51	1.03
Cliff Hangers	26	1.85	.78	74	1.99	.82
Fence Sitters	26	1.92	.84	74	1.85	.70

Note. Differences in N reflect missing cases.

^a Scale values were 1 (never), 2 (rarely), 3 (sometimes), 4 (often), and 5 (very often).

Work-Management Style Most Like Them

On Question 2 of the Survey of Time-Management Practices (see Appendix A), respondents reported the one work-management style that was *most like them*. Of the participating school principals, 61.5% or 163 indicated that the Hopper style of managing work was clearly *most like them* (see Table 10) followed by Allergic to Details style, Perfectionist Plus style, Cliff Hanger style, and Fence Sitter style as the least like them.

Degree of Flexibility in Using Work-Management Styles

On Question 1, principals were given the following directions: “Listed below are five descriptions of how principals possibly manage their work day. Looking back over the past few weeks, how frequently would each paragraph describe your work behavior?” Their rating options were: 5 (very often), 4 (often), 3 (sometimes), 2 (rarely), and 1 (never). The degree of flexibility was measured as the variation between the ratings (standard deviation) assigned to the five work-management styles.

Two hundred seventy-nine school principals in the study yielded an average standard deviation score of 1.22 on flexibility in using the five work-management styles. This means that, in general, school principals tend to use all of the work-management styles in their work as opposed to using just one dominant style. School principals were flexible in using the five work-management styles measured. Participant 224 wrote, “Although time-management techniques are important,... flexibility in managing time is

critical....” Flexible principals can make the most of their time by knowing how and when to use each of the five work-management styles.

School Complexity Score

The complexity of a school was measured with an additive index score of the following variables (see Table 12):

- ◆ school enrollment
- ◆ number of speciality programs monitored by principals,
- ◆ percentage of students with Individual Education Plans (IEP’s) and 504 Plans,
- ◆ percentage of students on free or reduced-price lunches,
- ◆ number of staff members requiring summative evaluations by principals personally,
- ◆ average number of formal observations required on each employee,
- ◆ number of employees requiring extra paperwork and
- ◆ the number of full or part time adult support personnel in the building.

School complexity index score. The average complexity index score was 30.3 with a standard deviation of 18.82 ($N = 290$). The minimum complexity index score was 5.50 and the maximum complexity index score was 128.00. The assumption was that the higher the score, the more complex the school. There was no significant correlation between a school’s complexity index and work-management styles of principals. A

significant correlation of .16 ($p \leq .01$) existed between a school's complexity index score and the total time-management practices score.

School enrollment. In Table 12, the average school enrollment reported by principals in question 5, was 564 students. The smallest school enrollment reported was 45 students, and the largest enrollment reported was 3700 students.

Specialty programs. School principals reported the number of federal, state, and local funded specialty programs currently in their schools. The mean number of specialty programs was 2.96 (see Table 12).

Percentage of IEP's and 504 plans. Ninety-two point three percent of the responding school principals reported less than 26% of their student enrollment with IEP's and 504 Plans.

Percentage of free and reduced-price lunch. Fifty percent of the responding school principals had 26% of their student enrollment on free or reduced-price lunches. Only 5.3% of the schools had more than 77% of their student enrollment on free or reduced-price lunch.

Number of summative evaluations. About 25% of the school principals indicated that they were personally responsible for completing up to 17 summative evaluations during the 97- 98 school year. Twenty-six percent indicated they would complete as many as 26 summative evaluations during that same year.

Number of formal observations. Principals reported the average number of formal observations (written & with conferences) they have done on each employee requiring summative evaluations each year. Because there were two interpretations of this question, the data are unreliable. The first interpretation was to give the average number of formal observations done on the entire staff in a year. Participants who took the pilot survey indicated that they did not read on to the end of this statement when questioned about their response. Perhaps this also occurred with some of the principals in the study. The second interpretation, and intended meaning, was to give the average number of formal observations completed by principals on *each* employee *each* year. Even with two interpretations, 32% or 97 of the responding principals reported that they observed each employee, on average, twice a year.

Number of staff requiring extra paperwork (documentation including letters of reprimand, and plans of action). Sixty-seven point five percent of the responding principals indicated that fewer than 3 of their employees required extra paperwork or documentation. Yet, 3.8% reported that more than 15 of their employees required extra paperwork, which implies the use of more time on the part of school principals.

Full & part-time personnel. The average number of additional adult support personnel available to school principals was about 7. However, approximately 50% of the responding principals had 5.5 or fewer adult support personnel available to them.

Table 12

Variables in the School Complexity Measure, N=304

Variable	<u>N</u>	<u>%</u>	<u>N</u>	<u>M</u>	<u>SD</u>
School enrollment	--	--	286	564.92	369.67
Specialty programs	--	--	278	2.96	3.46
Percentage of IEP's or 504's	286	100.0		--	--
0 - 12%	129	45.1		--	--
13 - 25%	135	47.2		--	--
26 - 38%	20	7.0		--	--
39 - 51%	2	.7		--	--
52 - 64%	0	.0		--	--
65 - 77%	0	.0		--	--
more than 77%	0	.0		--	--
Percentage of free or reduced-price lunches	284	100.0		--	--
Less than 12%	81	28.5		--	--
13 - 25%	61	21.5		--	--
26 - 38%	49	17.3		--	--
39 - 51%	40	14.1		--	--
52 - 64%	23	8.1		--	--
65 - 77%	15	5.3		--	--
more than 77%	15	5.3		--	--

(Table 12 continues)

Table 12 (continued)

Variables in the School Complexity Measure, N=304

Variable	<u>N</u>	<u>%</u>	<u>N</u>	<u>M</u>	<u>SD</u>
Number of summative evaluations	288	100		--	--
Fewer than 8	36	12.5		--	--
9 - 17	71	24.7		--	--
18 - 26	75	26.0		--	--
27 - 35	48	16.7		--	--
36 - 44	23	8.0		--	--
more than 44	34	11.8		--	--
Number of formal observations	--	--		284	9.99 ^a 15.89 ^a
Full & part-time personnel	--	--		288	7.07 7.02
Number requiring extra paperwork	287	100		--	--
Fewer than 3	194	67.5		--	--
4 - 6	56	19.5		--	--
7 - 9	14	4.9		--	--
10 - 12	11	3.8		--	--
13 - 15	1	.3		--	--
more than 15	11	3.8		--	--

NOTE. Differences in N reflect missing cases.

^a Because there were two interpretations of this question, these numbers are unreliable.

There were several items from several categories that contained questions about the use of the school secretary. They are discussed as a group in the next section of this chapter.

Use of Secretary

This section contains findings from questions across categories that were about school principals and the time-management practices used with their school secretaries. The use of secretaries, or lack thereof, was illustrated by several findings. Forty-one percent of school principals reported that they “never” had their secretary open, read, and put important mail on top of the stack, while 38.5% of school principals did it every day. Fifty-seven percent of the principals “often to very often” used their secretaries to screen their telephone calls. However, when messages are taken for principals, 39.8% reported that they were “never” written on one sheet or form. Forty-seven percent of the principals reported that their school secretaries “often to very often” protected them from walk-ins. A large proportion (71%) of the principals “often to very often” allowed their secretaries to distribute mail to people to whom they had delegated certain responsibilities. Only 10.9% of the principals set aside a daily time during the work day to review mail and bills with the secretary. Twenty-nine percent reviewed their mail with the secretary only once a week and 18.1 % never reviewed it *with* their secretary at all. Fifty-two percent of the principals reported returning most of their mail back to the secretary with instructions, retaining only those that require further thought. Seventy-two percent of principals

reported that their secretaries “often to very often” used a computer to generate correspondence.

Years of Experience

Table 13 depicts the frequencies of years of experience of principals in five categories. The largest percentage (44%) of the principals had 11-20 years of experience. while the next two largest groups of principals (26%) and (21.7%) of the principals had 1 - 10 years of experience.

Training in Time Management

Table 13 also depicts the frequencies of hours of training in time management that principals reported on the TMP survey. Sixty-eight percent of the principals reported that they had nine hours or less of training in time management.

Table 13

Frequencies and Percentages of Principals grouped by Years of Experience and Hours of Training in Time-Management Practices,

Variable	Group	<u>N</u>	<u>%</u>
Years of experience			
1 - 10	1	79	26.0
11 - 20	2	134	44.0
21 - 30	3	66	21.7
≥ 31	4	8	2.7
Missing	5	17	5.6
Total	--	304	100.0
Hours of training			
0 - 9	1	207	68.0
10 - 19	2	42	13.8
20 - 29	3	13	4.3
30 - 39	4	13	4.3
40 - 49	5	5	1.6
≥ 50	6	5	1.6
Missing	7	19	6.3
Total	--	304	99.9

Dependent Variables

Time-Management Practices (TMP) Scores

The total time-management practices (TMP) score was determined by averaging the means of the six categories (meetings, priorities, delegations, interruptions, contacts, and paperwork) of all 304 participating principals. The six time-management categories were ranked from highest mean use to lowest mean use in Table 14. This table shows that school principals in the United States tend to use the recommended practices for managing meetings followed by practices for establishing priorities, delegations, interruptions, contacts, and managing paperwork in that order. This table also shows the rankings from highest mean use to lowest mean use of the six time-management categories by gender, school type (public vs. private), and by school level (elementary vs. middle) which will be discussed later on in this chapter.

Six Categories of Time-Management

Appendix M contains a summary of the mean use of time-management practices in the six categories by gender, school type, and school level. There were no significant differences in the mean use of the categories of time-management practice when the principals were grouped by gender, school type or school level.

Appendix N contains the time-management practices in order of frequency of use within each category. Appendix Q contains the frequencies and percentages of the principals who responded to each practice by response categories.

Table 14

Rank Order of Categories of Time-Management Practices by Gender

Total sample				Males				Females			
Category	<u>N</u>	<u>M</u> ^a	<u>SD</u>	Category	<u>N</u>	<u>M</u> ^a	<u>SD</u>	Category	<u>N</u>	<u>M</u> ^a	<u>SD</u>
Meetings	287	3.94	.54	Meetings	191	3.87	.55	Meetings	95	4.08	.49
Priorities	290	3.92	.81	Priorities	192	3.86	.77	Priorities	96	4.03	.87
Delegations	287	3.71	.68	Delegations	191	3.62	.69	Delegations	95	3.89	.61
Interruptions	288	3.19	.63	Interruptions	191	3.14	.61	Interruptions	96	3.28	.67
Contacts	290	3.08	.61	Paperwork	191	3.03	.56	Contacts	94	3.22	.58
Paperwork	288	3.05	.57	Contacts	192	3.01	.61	Paperwork	96	3.11	.60

Note.^aScale values were 1 (never), 2 (rarely), 3 (sometimes), 4 (often), and 5 (very often).

(Table 14 continues)

Table 14 (continued)

Rank Order of Categories of Time-Management Practices by School Type

Total sample			Public			Private					
Category	<u>N</u>	<u>M^a</u>	<u>SD</u>	Category	<u>N</u>	<u>M^a</u>	<u>SD</u>	Category	<u>N</u>	<u>M^a</u>	<u>SD</u>
Meetings	287	3.94	.54	Meetings	247	3.93	.53	Meetings	38	3.97	.58
Priorities	290	3.92	.81	Priorities	249	3.93	.84	Priorities	38	3.84	.52
Delegations	287	3.71	.68	Delegations	247	3.72	.66	Delegations	38	3.67	.80
Interruptions	288	3.19	.63	Interruptions	248	3.17	.62	Interruptions	38	3.26	.71
Contacts	290	3.08	.61	Contacts	248	3.06	.60	Contacts	37	3.19	.63
Paperwork	288	3.05	.57	Paperwork	248	3.05	.58	Paperwork	38	3.08	.54

Note.^aScale values were 1 (never), 2 (rarely), 3 (sometimes), 4 (often), and 5 (very often).

(Table 14 continues)

Table 14 (continued)

Rank Order of Categories of Time-Management Practices by School Level

Total sample				Elementary				Middle			
Category	<u>N</u>	<u>M</u> ^a	<u>SD</u>	Category	<u>N</u>	<u>M</u> ^a	<u>SD</u>	Category	<u>N</u>	<u>M</u> ^a	<u>SD</u>
Meetings	287	3.94	.54	Meetings	27	4.14	.52	Meetings	75	3.90	.50
Priorities	290	3.92	.81	Priorities	27	3.94	.37	Priorities	77	3.82	.57
Delegations	287	3.71	.68	Delegations	27	3.86	.67	Delegations	75	3.73	.67
Interruptions	288	3.19	.63	Interruptions	27	3.41	.67	Interruptions	76	3.18	.61
Contacts	290	3.08	.61	Contacts	27	3.18	.47	Contacts	76	3.08	.62
Paperwork	288	3.05	.57	Paperwork	27	3.04	.52	Paperwork	76	3.00	.57

Note. Differences in N reflect missing cases.

^aScale values were 1 (never), 2 (rarely), 3 (sometimes), 4 (often), and 5 (very often).

Practices for managing meetings. The practices for managing meetings ($M = 3.94$, $SD = .54$) were used most frequently by the principals (see Appendix N). More than 80% of the principals used these practices “often to very often” (see Appendix Q). Over 87% of the principals reported that the purpose for their meetings was known prior to the start, over 82% reported that general time limits were set for meetings, and over 84% percent reported that their meetings start and end on time. Over sixty-six percent of the principals indicated that they “often to very often” had a system for follow through on actions to be taken following the meetings, while about 90% indicated that they at least sometimes summarized the major points at the end of meetings. Distributing minutes of meetings was the practice used the least in managing meetings, with a mean score of 3.30 and standard deviation of 1.27. Principals are split on how frequently they used this practice. About eighteen percent “rarely” do it, about 26% percent reported distributing minutes “sometimes,” about 20% reported doing this “often,” and about 21% reported that they distributed minutes “very often”.

Practices for establishing priorities. Twenty-four percent of the principals shared a master list of top priorities weekly, while 28.9% shared it monthly (see Appendix Q). About thirty-four percent and thirty percent of the principals respectively, discussed high-priority tasks with the leadership team and professional staff weekly, while about thirty-nine percent of the principals discussed high priority tasks with both groups monthly.

Anton (1993) wrote in his article that principals knew how to link school priorities to district priorities. The principals in this study confirm that notion as over 87% of them reported that grade-level priorities were “often to very often” linked to school priorities, and about 82% reported that school priorities were “often to very often” linked to district priorities.

About sixty-nine percent of the principals reported that they maintain a “To-Do” list daily, 17.8% do it weekly, 1.3% monthly, 3% do it annually, and .3% reported that they “never” do it (see Appendix Q). About fifty-five percent of the school principals indicate that their tasks are prioritized as A (must be done), B (should be done), and C (might be done).

Practices for delegating. About forty-six percent of the principals reported that their staff “often” knew to whom certain responsibilities were delegated while 35.2% reported that their staff knew “very often” (see Appendix Q). About seventy-one percent of the principals indicated that their secretary knew to whom certain responsibilities were delegated and used that information to distribute mail. Time lines were used “sometimes” by 23.4%, “often” by 44.4%, and “very often” by 20.1% of the principals. About 20% of principals “never” used a tickler file or some system to monitor delegations, while about 22% indicated that they use them “often”.

Practices for handling interruptions. This category ranked fourth among the time-management practice categories (see Appendix N). About 65% of the principals

reported that they were “often or very often” interrupted by walk-ins (see Appendix Q). Seventy-six percent of them reported that they did allow their secretaries to screen walk-ins, but evidently the secretaries still allowed the walk-ins to interrupt the principals often because 64.9% of them reported that they were interrupted “often or very often” daily. Over sixty-two percent of the principals indicated that they toured or walked around their buildings three or more times a day, including 30% who reported that they toured over five times a day.

Principals in the study are split on the practice of not allowing visitors in the main office to have direct eye contact with them while they are seated at their desks. Nearly forty-three percent reported that visitors in the main office “often or very often” did not have direct eye contact with them as they sat at their desks working, while 39.4% reported that they “rarely or never” could make direct eye contact with the principals sitting at their desks.

Nearly 60% of the principals reported that less than 20 minutes per day were scheduled as unencumbered time when no visitors or phone calls were accepted except in cases of emergencies.

Practices for scheduling contacts. Principals used the following scale values when deciding how frequently these ten practices for scheduling contacts described them: 1 (never), 2 (rarely), 3 (sometimes), 4 (often), and 5 (very often). For means and standard deviations in this section, see Appendix N. The mean score for this category was 3.08 and

the standard deviation score was .61. Of the ten practices for scheduling regular contacts with teachers, students, parents, and others, conference calling was used the least with a mean score of 2.05 and a standard deviation score of .93. The contact practice that school principals used the most was that of allowing their secretaries to screen calls and know when to make an exception (\underline{M} = 3.71, \underline{SD} = 1.11). Twenty-seven percent reported that their secretaries screened their telephone calls “very often,” while 30.3 % reported that this happened “often,” and 23.7% reported that it happened “sometimes.” Thirty-four percent of the principals reported that they “rarely” set aside a daily time for returning telephone calls and email messages (\underline{M} = 2.28, \underline{SD} = 1.12). Nearly 56% reported that they “rarely” or “never” set general time limits for such contacts as conferences, meetings, and phone conversations (\underline{M} = 2.39, \underline{SD} = .99). Just over 34.2% of the principals reported that less than 15 minutes a day were set aside for administrative paperwork to be completed during work hours. Over 90% of the principals reported that they “sometimes,” “often,” or “very often” generated lists of issues *during* their contacts with students, teachers, parents and others. Over eighty-two percent indicated that they “sometimes to very often” have a list of priorities prior to contacts.

Practices for managing paperwork. This category was ranked last (see Appendix K) by principals in this study (\underline{M} = 3.05, \underline{SD} = .57), which means that principals used the practices designed to assist with managing paperwork less than they used the practices in the other five categories. Five out of the twelve practices within this category

dealt with principals' relationship with their secretaries. Over 34% of the principals reported that less than 15 minutes were set aside daily for them to complete administrative paperwork. An overwhelming 84.9% of principals reported that they never used a dictaphone for correspondence. Over sixty-two percent of principals reported that they use a computer "often" or "very often" to generate their own correspondence. There are still 11.2% who report "never" generating their own correspondence using a computer. For correspondence coming from outside principals' offices, over 40 % of them reported that they "often" or "very often" wrote their responses and delegations directly on the original piece of correspondence. Principals were split on whether or not to keep a report log to monitor all reports turned by school personnel. Over seventeen percent reported that they did this "very often". Twenty-six percent of principals reported that they "never" used email on a computer at their school, while 17.8% reported that they use email on a computer at their school "very often."

Analysis of Relationships

Time-Management Categories (contacts, delegating, interruptions, paperwork, priorities) and Work-Management Styles

Research Question 1: What is the relationship between the frequency of use of the six categories of time-management practices and principals' work-management styles? Table 15 is a correlation analysis of the six time-management practice categories and the work-management styles used by school principals. This analysis is discussed by category.

Contact Practices

There was no relationship between work-management style and practices for scheduling contacts. None of the correlations between scheduling contacts and work-management styles was significant.

Delegating Practices

There are significant negative correlations (-.19, $p \leq .01$) (-.15, $p \leq .05$) between delegation practices and Fence Sitters and delegation practices and Cliff Hangers. This means that the more characteristics of a Fence Sitter or Cliff Hanger principals display when managing work, the less likely they are to use delegation practices. This makes sense because the more principals wait until the last minute, the less time they have to delegate a task to someone. Fence Sitters are reluctant to make decisions. Thus, they do not make decisions regarding delegations.

Table 15

Pearson Correlation Analysis of Time-Management Categories by Work-Management Styles

Time management category	Work-management styles									
	Hopper		Perfectionist plus		Allergic to details		Fence sitter		Cliff hanger	
	<u>N</u>	<u>r</u>	<u>N</u>	<u>r</u>	<u>N</u>	<u>r</u>	<u>N</u>	<u>r</u>	<u>N</u>	<u>r</u>
Scheduling contacts	282	.03	277	.06	279	.11	275	-.07	274	-.07
Delegations	279	.03	275	.07	277	.06	273	-.19**	272	-.15*
Handling interruptions	280	.10	276	-.03	278	-.11	274	-.02	273	.02
Managing meetings	279	-.07	275	-.02	277	.01	273	-.22**	277	-.09
Managing paperwork	280	-.03	276	.13	278	.13	274	-.07	273	-.02
Establishing priorities	282	-.03	277	.10	279	-.00	275	-.12	274	-.10
Total TMP	282	.01	277	.08	279	.04	275	-.18	274	-.11

Note. Differences in N reflect missing cases. ** $p \leq .01$. * $p \leq .05$.

Practices for Handling Interruptions

There was no relationship between work-management styles and the practices for handling interruptions.

Within the category of handling interruptions, the concept of open door vs. closed door emerged in written comments and in the significance of the data in the answers to Question 39, which asked about how much unencumbered time is scheduled daily, Question 40, which asked principals if they were interrupted daily, and Question 45, which asked them if a daily block of time is set aside for them to do administrative paperwork, (see Appendix A). The relationship between the “open door policy” and the “closed door policy” to the frequency of use of time-management practices evolved. Table 16 shows that principals who more frequently set aside blocks of time to do their paperwork close their doors and score higher on total time-management than those who do not.

Managing Meetings

There was a significant negative correlation ($-.22, p \leq .01$) between Fence Sitters and Managing Meetings (see Table 15). This means that when principals are Fence Sitters and cannot make a decision about an issue, they are less likely to use the practices of managing meetings such as sending out agendas ahead of time, following up on actions to

Table 16

Pearson Correlation Analysis of the Relationships Among an Open Door Policy, Closed Door Policy and the Use of Blocks of Time and the Total Time-Management Score

	Closed door		Open door		Blocks of time		Time-mgt.score	
	<u>N</u>	<u>r</u>	<u>N</u>	<u>r</u>	<u>N</u>	<u>r</u>	<u>N</u>	<u>r</u>
Closed door		1.00	282	-.05	273	.38**	283	.38**
Open door				1.00	277	-.17	287	.02
Blocks of time						1.00	277	.36**
Time-mgt. score								1.00

Note. Differences in N reflect missing cases. **. $p \leq .01$.

be taken after the meeting, and distributing minutes at the conclusion of a meeting. Fence Sitters also take a long time to make a decision. It makes sense that if principals cannot make a decision about an issue, they cannot also decide when to call a meeting and whom to invite. Managing and scheduling productive meetings require timeliness.

Managing Paperwork and Establishing Priorities

There are no significant relationships between work-management styles and managing paperwork, establishing priorities, or the total TMP score (see Table 15).

Work-Management Styles and Gender, School Type, and School Level

There were no significant differences in the work-management styles of males/females, public/private, or elementary/middle school principals. None of the groups differed significantly in their use of work-management styles. That is, males and females, public school and private school, elementary and middle school principals used each of the styles at the same frequency (see Appendix L).

Flexibility, Training, and Work-Management Styles

Research Question 2: What is the relationship between the degree of flexibility and training in using the work-management styles?

Flexibility

None of the correlations between the most used work-management styles most like them and their flexibility in using other work-management styles was significant (see Table 17).

Table 17

Pearson Correlation Analysis of Work-Management Styles, Degree of Flexibility, and Training in Time Management, N=272

	Work-management style most like them				
	Hopper	Perfectionist plus	Allergic details	Fence sitter	Cliff hanger
Flexibility	.20	.31	-.11	-.17	.12
Training	.12	.05	-.02	.07	.02

** $p \leq .01$, * $p \leq .05$.

Training and Work-Management Styles

None of the correlations was significant between the work-management styles most like them and training in time management (see Table 17). This finding makes sense because question 7 on the TMP Survey was “Write in the approximate number of hours of training you have received in time management in the past five years.” This question related to training in time management and not to training in work-management styles.

Time-Management and School Type, School Level, and Gender

Research Question 3: What is the relationship between the frequency of use of time-management practices and school type (public vs. private), school level (elementary vs. middle), and gender?

No relationships were found between frequency of use of time-management practices and school type (public vs. private), school level (elementary vs. middle), and gender. None of the differences in time-management practices and school types, or school levels, or gender was significant (see Appendix M).

Time-Management and School Complexity

Research Question 4: What is the relationship between the total time-management score and the complexity of a school? There is a significant correlation of .16 ($p \leq .01$), ($N = 290$) between the total time-management score and the complexity index of a school. This means that the higher the school’s complexity index, the more likely principals will use the time-management practices.

Time Management and Years of Experience

There is no significant relationship between the total time-management score and the number of years of experience of school principals.

Time-Management and Training

Research Question 5: What is the relationship between the use of time-management practices and the amount of training principals received in time management?

A significant correlation of .21 ($p \leq .01$, $N = 285$) existed between the total time-management score and the amount of training principals reported. This means that the more training principals have, the more likely they are to use the time-management practices.

Predictors of Time-Management Practices

Research Question 6: Can the independent variables be used to predict the frequency of use of time-management practices?

Training was the only variable that accounted for a significant proportion of the variance (4%) in the overall use of time-management practices (see Table 18). That is, those principals with more training used time-management practices more frequently. The more training principals had, the more likely they were to use time-management practices. All of the remaining variables did not contribute to the overall score.

Table 18

Summary of Hierarchical Regression Analysis for Independent Variables Predicting the Total Time-Management Practices (TMP) Score.

Independent variables	<u>b</u>	<u>SE</u>	Beta	t	p	
Included variables						
Constant	3.44	.03	--	109.96	.00**	
Training	.005	.00	.21	2.14	.04*	
R ² = .05 F (1, 98) = 4.57**						
Excluded variables						
Gender	--	--	.19	1.97	.05	
School type	--	--	-.01	-.05	.96	
Flexible	--	--	.04	.42	.68	
Hopper	--	--	-.01	-.11	.92	
Perfectionist Plus	--	--	.07	.74	.46	
Allergic to Details	--	--	.05	.45	.65	
Fence Sitter	--	--		-.19	-1.97	.05
Cliff Hanger	--	--	-.11	-1.15	.25	
Complexity	--	--	.14	1.38	.17	
Years of experience	--	--	.00	.03	.98	
School level	--	--	-.15	-1.50	.14	

* p ≤ .05, ** p ≤ .01

Analysis of Respondents' Comments

Principals were given the opportunity to write any additional comments about time management on the back of the Survey of Time-Management Practices (TMP). Fifty-eight or 19% of the respondents chose to write comments. The eleven categories of comments with respondents identification numbers are in Appendix O. The actual comments by identification number are in Appendix P.

The category with the largest number of comments (14) was burn-out. Respondent 76 summarized the feelings of many school principals by writing,

“As the years have passed, time seems to lessen. More pressure from parents, superintendent, local government, school building issues, ed[ucation] reform, state mandates, [and] testing. Paper-work, discipline, [and] broken homes have increased my work load all day with 3-4 night meetings per week [which] have increased to 16 - 18 hour days. My weekends are becoming an extension of the work week. Frankly, the satisfaction of this job is not there anymore -- too many hassles -- so few rewards. My biggest fear is burn-out.”

The next largest categories of comments were open door and flexibility with eleven comments each. There are still opposing opinions by school principals regarding whether to open or close their door during the day to complete their administrative desk work. In their comments, principals seemed to be either totally for it or totally against it. Respondent 119 wrote, “...an ‘open door’ policy may not be efficient, but it certainly helps staff and

students' morale and it pleases the parents". Respondent 32 also supported the open door policy with the following opinion, "My open door policy does keep some work from being done ASAP but, school climate is much improved through an open door policy in my opinion." Respondent 364 wrote, "I try to keep my door open unless I'm swamped -- then I close it." The recommendations of this study correspond with the comments written by respondent 371, "Despite the popular myth, principals can control their calendar and their time." This statement implies that principals can close their doors during the day. They must, however, believe that they can, and believe that closing doors does not decrease school climate or morale.

The concept of flexibility was mentioned in eleven respondents' comments. Most are similar to respondent 78, who wrote, "...I must be flexible on time and be open to the events of the day." Respondent 397 supported the need for flexibility by writing, "As the role of a principal varies in different settings--likewise ones use of time needs to be reviewed and modified." Respondent 224 wrote, "Although time management techniques are important, ...flexibility in managing time is critical." To lend even more support to the idea of flexibility required in the principalship, Respondent 164 wrote, "As a principal, you do what has to be done at the time.... 'Management Style' varies from day to day depending on situations." Respondent 212 wrote, "I found that question # 1 did not fit me at all. Perhaps the first half was true, but the second half was totally false." These

statements support the finding in the qualitative analysis that principals may use all five of the work-management styles and must be flexible in using them.

The category of unencumbered time was next with ten comments. Five of the comments related to working before or after school. Respondent 357 summarized similar sentiments by writing, "...I do my required paperwork for reports before and after school to try to avoid interruptions." Three of the respondents reported that work was completed during the day. Two respondents in this category supported the need for unencumbered time as Respondent 138 wrote, "Principals need time to reflect on daily responsibilities without having to rush to meetings."

Paperwork, the next category, had six comments. Principals comments generally reported that they are receiving paperwork from many sources and that the paperwork is increasing. With the invention of the computer, it would seem that the amount of paperwork would lessen, but the opposite is true. Because it is so easy to edit and create forms on computers, school principals are receiving more and more paperwork. This fact alone supports the need for more time-management practices designed to help principals manage their paperwork. Paperwork can be lessened if principals use electronic mail to communicate with superiors, teachers, parents, and students. With email, principals can respond promptly and quickly without hard copies at all.

The six comments regarding the category of priorities centered around how the pace of the job on a particular day dictated changing priorities. Respondent 48 explained it

succinctly by writing, “No matter how good your time-management skills are -- there are many priorities that just happen. Some days ‘nothing’ gets done -- some days ‘everything’ gets done.”

There were also six comments addressing the issue of size of the school.

Respondent 262 wrote, “Being a very small school, I have none of the support systems larger schools have.” A unique situation surfaced in Respondent 302's comments, “Please be advised that I am a principal over 6 rural schools, some as far as 65 miles from town with student populations from 3 students to 12 students. In addition to these duties, I also teach in one of my schools.”

Six comments also fell into the category of personnel when three out of the six principals' comments, principals mentioned the lack of personnel. This was illustrated by Respondent 245 who wrote, “In a small district the responsibilities are compounded by lack of other personnel.” One principal wrote of part-time personnel and the fact that they have teaching responsibilities, too. Respondent 335 wrote, “I have a secretary part-time. I also teach kindergarten and music -- 20 minutes.” Only Respondent 396 mentioned having exceptional staff; the principal wrote, “I'm lucky - - I work with a top flight secretary and school staff.”

The technology category elicited five comments from the principals. Two of the five comments related to principals trying to return telephone calls by the end of the work day. Respondent 78 wrote, “I try (99%) to return all calls before leaving the building.” The

remaining technology comments related to other types of technology. Respondent 349 mentioned, “We do not have e-mail in our district yet.” While Respondent 360 wrote, “I believe pagers, beepers etc. are a barrier to effective time management causing unnecessary interruptions and distractions.” This last statement illustrates that principals feel they are not in control, but rather are being controlled. Respondent 357 was the only principal to mention dictation. The comment was, “One of my secretaries takes shorthand and I do a great deal of dictation.” Since several previous principals mentioned how frequently they travel from school to school, the use of a dictaphone could be very helpful to them.

In the category of interruptions, Respondent 357 expressed the sentiments of the four principals by writing, “I do my required paperwork for reports before and after school to try to avoid interruptions [to my work].” This statement is evidence that principals believe that if their administrative paperwork is done before staff, teachers, parents, and students arrive, then they can be available and more accessible. Respondent 204's statement corresponds with the recommendations of this study, “Staff know they can access me at any time for emergencies but, are very experienced/empowered and do so rarely.”

Obtaining a Summary of Results

Each participant could check on the back of the envelope, if they desired a summary of the results of this study. Eighty-two or 27% of the participants requested a summary of the results. They were sent a postcard (see Appendix G) that gave a web address where they could retrieve a summary of the results

A summary of the results may be found until December 31, 1999 at the following web address:

<http://www.vt.edu:10021/P/perobert/index.html>

Summary

Chapter 4 contains the findings, descriptive statistics, quantitative data analysis, an analysis of respondents comments, and information on how to obtain a summary of the results. A summary of findings are included at the beginning of Chapter 5.