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ABSTRACT

Findings from a study to develop and validate an instrument for the measurement of principals' attitudes toward visionary leadership are presented in this paper. Two leadership styles--visionary and managerial--were measured by a 35-item five-point Likert attitude scale. Questionnaires mailed to a random sample of 250 K-12 Nebraska and 250 California principals yielded 387 completions, a 77 percent response rate. Factor analysis confirmed that factors corresponding to the two leadership styles were implicit in the instrument design and supported the instrument's validity for measuring attitudes toward the conceptualization of visionary leadership. The instrument may be used for empirical substantiation of a generalization of visionary leadership style, for diagnostic purposes, and as a screening tool. Two tables, including a statistical analysis of the survey item results are provided. (11 references) (LMI)

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Using Factor Analysis

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Validation of a Leadership Attitude Instrument

Using Factor Analysis

Typologies of leadership style are emerging from naturalistic studies conducted by researchers at school sites. Through extensive observation and interviews with members of schools, researchers have accomplished specific description of the values and behavioral attributes of leaders. For example, Bennis and Nanus (1985), Blumberg and Greenfield (1980), Deal and Kennedy (1982), Lightfoot (1983), and Wolcott (1973) have presented informative studies of schools and organizations. These analyses of leadership in context have contributed to the identification of notable, effective leadership qualities.

The emerging research base provides valuable data about the practices of leaders in outstanding schools. However, the schools and principals studied are unusual because of their outstanding reputations. The potential for generalization to a larger population is limited by small sample size and procedures of sample selection (Goetz & LeCompte, 1984). There is a need for research which permits generalization beyond small and often idiosyncratic numbers of cases. While the leadership propensities of some notable school principals are documented, it is impossible to judge the extent of these propensities in a random sample of principals.

In an effort to address the need, an exploratory instrument was developed and administered to a randomly-selected sample of practicing school principals. The purpose of the instrument was to measure attitude toward a conceptualization of leadership comprised of the findings summarized from naturalistic studies of outstanding leaders. The concept was named visionary leadership. The purpose of this paper is to report the development and initial validation

of an instrument to measure attitude toward visionary leadership.

Development of the Attitude Instrument

Two Leadership Styles

The genre of effective schools research makes clear the existence of variation in principals' influence upon school quality (Leithwood & Montgomery, 1982; Purkey & Smith, 1982). Some principals are more influential than others in effecting improvements in their school. Some develop reputations as dynamic leaders who foster institutional change, while some are primarily concerned with routine maintenance functions. Detailed descriptive studies of the work of individual principals present much relevant information about differences among leaders.

Qualities shared by principals who accomplish change were compiled into a conceptualization of the ideal leader. The concept title "visionary" subsumed the attributes demonstrated by principals who had reputations for implementing outstanding leadership. Taken together, the attributes were considered to represent a leadership ideal which was related to vitality and improvement in the life of the school.

Five prominent attributes emerged from the content analysis of leadership studies and were codified into summary statements. First, visionary principals have strong personal convictions to which they are enthusiastically committed. They are typically eager to express their own definitive beliefs about learning, students, or educational purposes (Blumberg & Greenfield, 1983; Lightfoot, 1983; Manasse, 1986). Second, visionary principals vigorously work toward realizing goals in the school that are consistent with their personal convictions. They proactively enforce their own values. Third, visionary principals treat the school organization as a culture

with traits and processes to be skillfully employed in efforts to effect change. Visionary principals are especially skillful in using cultural features, such as rituals, symbols, and communication networks, to induce a shared image of the school and promote valued goals. Schools led by visionary principals are characterized by a sense of clear purpose and a prominent ideological stance among members (Bennis & Nanus, 1985; Deal & Kennedy, 1982; Kottkamp, 1984; Lightfoot, 1983). Fourth, visionary principals gain reputations as innovators, because they assertively initiate new actions and new directions for their school. They accept risk for the sake of improvement rather than preservation of the status quo (Bennis & Nanus, 1985). Fifth, and perhaps most fundamental to the leadership concept, they have a personal image of their school in the future. The imagined school of the future is specifically better in some ways than the school of the present. Tenacious pursuit of their vision of a better future drives the leadership actions of visionary principals (Bennis & Nanus, 1985; Blumberg & Greenfield, 1983).

In contrast, other principals primarily direct their energy to the maintenance of school operations. A seminal case study by Wolcott (1973) exemplifies the concerns of a principal whose preoccupation with overseeing immediate circumstances dominated his leadership style. In Bredeson's (1985) study, interviewed principals emphasized their responsibility for maintaining daily order and monitoring ongoing school operations. These studies present managerial leadership actions in contrast to the attributes of visionary leadership. Because management functions and tasks are predominant in their thinking and actions, principals with this leadership style were categorized as managers for the purposes of this study.

Instrument Design

The attributes of visionary leadership and managerial leadership provided the content for the attitude instrument. Even though the purpose of the instrument was to measure attitude toward visionary leadership, both visionary and managerial items were written. Inclusion of items describing the principal-as-manager was intended to reduce the potential response bias that might occur if respondents perceived the survey as an assessment of their attitude toward a popular or preferred leadership style. A total of 56 statements, 28 for each of the two leadership types, were written for a pilot instrument. Each item identified a distinctive behavior or prominent characteristic of either a visionary principal or a managerial principal.

The five prominent attributes of visionary leaders, derived from the analysis of research literature, provided the substantive base for the visionary items. Five subtests, composed of four to seven items, were included. The managerial items were not divided into subtests. Vision and management items were randomly mixed in the format of the instrument.

A five-point Likert attitude scale was used to measure agreement or disagreement with each item. Respondents' scores for each vision attribute were calculated by summing the values of the responses to items within each subtest. Response values for all the visionary items and for all the management items were summed to derive total vision and total management scores respectively for each respondent.

Validation Procedures

Subjects

Since the instrument was developed to aid generalization about practicing school principals' attitude toward visionary leadership, a random sample of

principals was identified for the validation study. Principals of public schools within driving distance of the researchers' home institutions offered an accessible population for other planned data collection procedures. A total of 1250 principals of K-12 schools throughout Nebraska and 1250 in the central valley and central coastal region of California were identified using state public school directories. Two hundred and fifty principals from each of the accessible populations were randomly selected to receive the attitude instrument.

Pilot Study

After content validity of the 56-item instrument was checked by some expert judges in educational administration, a pilot study was conducted. An additional 100 principals in the two geographic areas were randomly selected for the pilot study. An item analysis of the returned instruments indicated which items best discriminated between positive or negative attitude toward visionary leadership. Twenty-four of the vision items with response patterns of strongest agreement, and 11 of the management items with the strongest disagreement, were retained for the validation study (see Table 1 for a list of the retained items). These items maximized the distinction between the visionary and management orientation of principals. The number of vision items exceeded the number of management items because measurement of attitude toward visionary leadership was the rationale for instrument design. The Cronbach Formula to estimate internal consistency yielded an alpha coefficient of .87 on the 28 vision items in the pilot study.

Insert Table 1 about here

Data Collection

The revised instrument of 35 items was mailed to the 500 randomly-selected principals in Nebraska and California. Follow-up letters and telephone calls insured the return of 387 completed instruments. The response rate was 90% in Nebraska and 65% in California for a combined rate of 77%.

Analysis and Results

The means and standard deviations for the items used in the validation study appear in Table 1. The reliability coefficients, as estimated by Cronbach's alpha, for the vision and management subscales are .65 and .55, with .65 for the total instrument. Coefficients for the five vision subscales are .31, .51, .63, .54, and .53 respectively.

All data were subjected to a series of factor analyses. The initial factor analysis, using the management and five vision subscales as variables, was a principal components analysis using the SAS FACTOR procedure. Commonality estimates of one were used, and no minimum eigen value was specified. The eigen values, or the amount of variance explained by each of the six factors, are 2.94, .89, .69, .52, .49, and .47. For this principal components analysis, a factor loading of .7 or greater was considered salient. Since only two factors had loadings of this magnitude, only these two will be reported in Table 2. The interpretation of these factors is rather clear. All the vision subscales are highly loaded on the first factor, and the management subscale is highly loaded on the second factor.

Insert Table 2 about here

To further substantiate a two factor vision and management solution, a second principal components factor analysis was performed using all 35 items as variables. Again, commonality estimates of one were used, and no minimum eigen value was specified. Since only two factors were interpreted, the eigen values for factors one and two are 5.80 and 2.14 respectively. For this principal components analysis, a factor loading of .25 or greater was deemed sufficient. The factor loadings for the principal components analysis using all 35 items as variables are presented in Table 1.

Of the 11 management items, 9 loaded on the management factor, one (item 9) loaded on the vision factor, and one (item 16) loaded on neither factor. These items should be revised or dropped from the instrument. Two items loaded on both the management and the vision factors. One (item 5) loaded more highly on the management factor and is an acceptable management item. The other (item 18) loaded more highly on the vision factor and should be revised to reduce ambiguity.

All 24 vision items loaded on the vision factor, although four items (21, 27, 29, 32) also loaded on the management factor. In all four cases, the higher loading was on the vision factor as expected. There are some plausible explanations for the double loadings. The analysis suggests overlap between the vision and management conceptualizations, particularly in regard to commitment to school goals. In addition, the loadings may suggest alternate interpretations of the intended meaning of selected terms. For example, some respondents may conceptualize managers as leaders who "create new ideas" or "take risks" in the context of their administrative duties. However, the items are intended to describe proactive leadership.

To further refine and expand the visionary style to support the five

dominant attributes of visionary leaders, two additional rotated factor analyses were performed. However, so few factor loadings reached the specified criterion of .25 or greater that these solutions were untenable. Therefore, leadership appears to fall into only two categories, managerial and visionary, and further subdivisions of the visionary style are unwarranted.

Discussion

The findings of the validation procedure support the suitability of the exploratory instrument for the intended purpose. The two factors retained are consistent with the researchers' conception of two leadership styles. The analysis confirms that factors corresponding to visionary and managerial leadership are implicit in the instrument design. The instrument is valid for the measurement of attitude toward the conceptualization of leadership called visionary. However, the division of visionary leadership into distinct attributes was not supported by the analysis.

The validation results support the credibility of the instrument as an aid to research and instruction. It is now possible to include wide-scale attitude assessment procedures in future research studies. Generalizations about acceptance of the visionary leadership style can be empirically substantiated. In addition, as a valid representation of a timely and relevant leadership orientation, the instrument is useful for diagnostic purposes. The propensities of individuals enrolled in leadership preparation programs can be assessed and instruction modified accordingly. Professional development experiences for practicing administrators can be individualized to enhance visionary capabilities.

The instrument may function as a valuable screening tool for use in personnel deliberations in school districts. Variation among individuals' perception of the leadership role will be made apparent by comparison of scores. Those who show an inclination to precipitate change are promising candidates for hiring or promotion in districts which favor restructuring of education. Active implementation of visionary leadership is a necessary component of successful reform in schools.

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Table 1

Means, Standard Deviations, and Factor Loadings for All Items

Items	Mean	Standard Deviation	Factor 1	Factor 2
			Vision	Management
Management				
1. Principals should avoid taking risks.	4.14	1.00	-.22	<u>.53</u>
3. Principals should not let their goals interfere with functioning programs.	3.17	1.16	-.21	<u>.45</u>
5. The stability of school operations is more important than activity for change.	3.34	1.19	<u>.30</u>	<u>.52</u>
6. Principals are leaders, if they accept existing standards.	3.72	1.06	.15	<u>.34</u>
7. The character of life is generally the same in each school, because basic beliefs about students and learning do not differ.	4.13	1.14	-.10	<u>.29</u>
9. The principal does not have the authority to decide what's right for the school.	3.51	1.25	<u>-.34</u>	.19
16. Principals should communicate school goals in subtle ways.	2.87	1.33	-.05	-.10

(table continues)

Items	Standard		Factor 1	Factor 2
	Mean	Deviation	Vision	Management
18. Principals, who are doing their job well, do not have time to think about the future of their school.	4.55	.71	<u>-.49</u>	<u>.27</u>
23. It is important for principals to do what others expect them to do.	3.05	1.11	.04	<u>.29</u>
24. Principals should introduce new practices only after they have been tried in other schools.	4.21	.78	-.21	<u>.34</u>
28. The principal should not impose personal beliefs upon the school.	3.26	1.15	-.18	<u>.45</u>
Vision: Highly motivated by personal beliefs.				
13. Principals' actions should be consistent with their own beliefs.	1.66	.74	<u>.51</u>	-.00
25. Principals are reflective thinkers as well as action oriented.	1.72	.71	<u>.40</u>	.10
34. Principals should maintain personal goals even if some school patrons complain.	1.86	.88	<u>.45</u>	-.17

(table continues)

Items	Standard		Factor 1	Factor 2
	Mean	Deviation	Vision	Management
Vision: Committed to attaining personal goals in the school.				
4. Principals are committed to attaining their personal ideas for their school.	2.71	1.15	<u>.30</u>	-.03
8. Principals should do what is needed to get the results which they want.	2.38	1.05	<u>.29</u>	.01
12. The values and beliefs of the principal are the major influence upon the work of the people in the school.	1.99	.92	<u>.44</u>	.13
15. The principal's own beliefs should be prominent in the atmosphere of the school.	1.96	.94	<u>.52</u>	.02
22. Principals must actively work to promote their ideals in the school.	1.53	.62	<u>.60</u>	.02

Vision: Value a prominent, shared school ideology.

21. Teachers work hard when the principal makes school goals clear.	1.86	.88	<u>.44</u>	<u>.35</u>
26. Principals should vigorously articulate school goals at every opportunity.	1.68	.83	<u>.51</u>	.20

(table continues)

Items	Standard		Factor 1	Factor 2
	Mean	Deviation	Vision	Management
27. In good schools, the principal and teachers are committed to common purposes.	1.28	.52	<u>.40</u>	<u>.32</u>
31. School climate is different in each school, because of the strong influence of each school staff's beliefs about students and learning.	1.74	.79	<u>.27</u>	.07
33. Successful schools have a clearly understood philosophy.	1.41	.60	<u>.60</u>	.12
35. Goals will be attained in a school in which everyone knows what is important for success.	1.56	.78	<u>.52</u>	.15

Vision: Predisposed toward innovation.

14. Temporary disruption of school operations is sometimes necessary to achieve progress.	1.83	.86	<u>.31</u>	-.06
19. A good principal can be expected to take innovative actions.	1.57	.68	<u>.49</u>	.14
20. The principal should create an atmosphere of creativity in the school.	1.42	.57	<u>.45</u>	.20

(table continues)

Items	Standard		Factor 1	Factor 2
	Mean	Deviation	Vision	Management
29. Good principals are driven by a desire to create new ideas.	2.32	1.03	<u>.54</u>	<u>.33</u>
32. Principals must be willing to take risks.	1.43	.59	<u>.57</u>	<u>-.27</u>
<hr/>				
Vision: Visualize a better future.				
2. Leaders should be driven by their vision of a better future.	1.65	.91	<u>.34</u>	.12
10. Some principals become well-known because they are heroic, visionary leaders.	2.20	1.08	<u>.45</u>	.09
11. Principals should spend time actively planning for the future.	1.51	.70	<u>.51</u>	-.17
17. Wise principals focus their school on an image of what the school should be in the future.	1.83	.83	<u>.50</u>	-.00
30. School principals should have a view of a future which is better than the present.	1.75	.85	<u>.47</u>	.09

Table 2

Factor Loading Matrix for the Principal Components Analysis using Subscales as Variables

Subscales	Factor 1	Factor 2
	Vision	Management
Vision: Highly motivated by personal beliefs.	<u>.74</u>	.05
Vision: Committed to attaining personal beliefs in the school.	<u>.71</u>	.06
Vision: Value a prominent, shared school ideology.	<u>.73</u>	.22
Vision: Predisposed toward innovation.	<u>.77</u>	.10
Vision: Visualize a better future.	<u>.77</u>	.06
Management	-.41	<u>.90</u>