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Characteristics of Effective School Principals:
A Mixed-Research Study

In this multi-stage mixed analysis study, the views of 615 college students enrolled at two Hispanic-serving institutions in the Southwest were obtained concerning characteristics of effective school principals. Through the method of constant comparison (qualitative phase), 29 dominant themes were determined to be present in respondent-identified characteristics of effective school principals: Leader, Communication, Caring, Understanding, Knowledgeable, Fair, Works Well With Others, Listening, Service, Organized, Disciplinarian, Good Attitude, Patience, Respectful, Helping, Open-Mindedness, Motivating, Professional, Flexible, Being Visible, Honest, Good Role Model, Responsible, Builds Relationships, Involving, Consistent, Friendly, Focus on Schools, and Experience in the Classroom. An exploratory factor analysis revealed that these 29 themes represented five meta-themes. Then these themes (quantitative phase) were converted into numbers (i.e., quantitized) into an interrespondent matrix that consisted of a series of 1s and 0s and were analyzed to determine whether participants' themes differed as a function of sex, ethnicity, college status, and first-generation/non-first-generation status. Statistically significant differences were present between undergraduate and graduate students, between males and females, between Hispanics and Whites, and between first-generation and non-first-generation college students. Implications are discussed.

Dans analyse mixte multisources portant sur les caractéristiques de directeurs d'école efficaces, nous avons recueilli les points de vue de 615 étudiants inscrits à deux institutions qui desservent les étudiants hispanophones dans le sud-ouest des États-Unis. En nous appuyant sur la méthode d'analyse comparative constante (phase qualitative), nous avons repéré 29 thèmes dominants dans les réponses des étudiants sur les caractéristiques des directeurs d'école efficaces : leader, communication, bienveillance, sollicitude, bien renseigné, équitable, bon collaborateur, à l'écoute, service, organisé, disciplinaire, bonne attitude, patience, respectueux, obligeant, esprit ouvert, motivant, professionnel, souple, visible, honnête, bon modèle de rôle, digne de confiance, crée des rapports, inspirant, cohérent, aimable, centré sur les écoles, et expérience en salle de classe. Une analyse exploratoire des facteurs a révélé que ces 29 thèmes représentent cinq métathèmes. Par la suite, ces thèmes (phase quantitative) ont été convertis en nombres, c'est-à-dire, quantifiés, dans une matrice inter-répondants constituée d'une série de 1 et de

0, et analysés pour déterminer si les thèmes des participants variaient en fonction de leur genre, ethnicité, statut au collège et statut comme membre de la première génération ou pas. Des différences statistiquement significatives se sont révélées entre les étudiants du premier cycle et ceux aux études supérieures, entre les hommes et les femmes, entre les Hispaniques et les blancs, et entre les étudiants de première génération et ceux qui ne sont pas de première génération. Nous discutons des répercussions de ces résultats.

Men have become the tools of their tools. (Thoreau, cited in Lazear, 1992)

School principals have been thrust into a brighter spotlight by the *No Child Left Behind Act* and corresponding state regulations that impose sanctions for poor student achievement. For example, under current United States laws, schools that fail to maintain Adequate Yearly Progress (AYP) are faced with possible corrective actions such as the replacement of those staff associated with the failure, enactment of a new curriculum, a significant decrease in the management authority of the principal, assignment of outside experts, extension of the school day or year, and a restructuring of the school (US Department of Education, 2003). Because of this increased accountability for better academic performance, school districts are seeking to build leaders with the skills and attributes necessary to lead their campuses to an exemplary academic standing and to avoid the sanctions associated with poor results. Wong and Nicotera (2007) contended that "educational leaders are critical to the process of improving student performance with educational accountability by preparing themselves to provide teachers with the necessary knowledge and skills to make significant improvements" (p. 39). According to Banks, Gay, Nieto, and Ragoff (2007), "Learning is situated in broad socio-economic and historical contexts and is mediated by local cultural practices and perspectives" (p. 15). Therefore, in addition to state and national accountability standards, which have placed greater focus on the performance of principals, unique local factors must be considered in terms of campus leadership.

With most of this sample (71%) being Hispanic students attending Hispanic-serving institutions (HSIs) in the Southwest United States, many of our participants were or will be working in schools with relatively high numbers of limited English-proficient students and with high percentages of economically disadvantaged children. For example, the largest district in the locations of the study has a total enrollment of 61,839 students. More than 68% of this population is considered to be economically disadvantaged compared with the state average of about 55% (Texas Education Agency, 2008). In respect to students with limited English proficiency, 29% of this district's enrollment falls in this category compared with a state norm of 16.7% (Texas Education Agency). Other school systems in the areas of study have similar demographics.

Popham (1999) stated, "The higher your family's socioeconomic status is, the more likely you are to do well on a number of test items" (p. 14). Goodlad (1997) offered, "So far, with achievement test scores, the conventional output criteria for excellence, the only correlation in which we can have confidence is that of the high association of test scores and the socioeconomic level of the school's clients" (p. 111). Educational leaders in these survey areas are obviously faced with unique issues. Hampton (2005) reported that successful principals serving in regions with higher numbers of economically disadvantaged

and limited-English students employed certain instructional and adminis-trative leadership strategies, including restructuring the schedule, realigning the curriculum, and establishing special remedial laboratories to increase test scores. Hampton's work reveals a tendency of principals to adapt to and comply with the demands of the accountability system.

Other academics have suggested that school principals in these areas should give attention to challenging the status quo. For example, Merchant and Shoho (2006) said,

> We believe that too narrow a focus on compliance with federal, state, and district mandates distracts administrators from raising important questions about the consequences of implementing such mandates, which is likely to perpetuate serious inequities in student learning opportunities and outcomes. (p. 85)

A tension exists between compliant leadership behavior such as described by Hampton (2005) and the need for principals in these regions to reflect on the fairness of the system. Dantley and Tillman (2006) referred to this quality as "moral transformative leadership" (p. 286). Moral transformative leaders would not be instruments to advance the reform agenda, but rather advocates for children by questioning the fairness of these policies and possible inequi-table effects on the student populations they serve. Dantley and Tillman as-serted, "moral transformative leadership deconstructs the work of school administration in order to unearth how leadership practices generate and perpetuate inequities and the marginalization of members of the learning community who are outside the dominant culture" (p. 289). Murphy (2002) contended that educational leaders must keep focused on organizational core values that are just and that maintain fairness. Lopez, Gonzalez, and Fierro (2006) asserted about educators along the Mexican border, "To be certain, the borders they (school leaders in this region) navigate on a daily basis engender linguistic, social, economic, generational, political, historical, psychological, physical, and other logistical and/or positional spaces" (p. 65). School prin-cipals in this area of the country must possess the ability to communicate effectively with students, parents, and community members who are monolin-gual Spanish-speakers. Ershler (2007) offered, "Educational leaders must com-municate well within and between the many communities that make up the general community" (p. 3). Lopez et al. argued that educators along the US-Mexico border must create "caring and/or emancipatory spaces for students" (p. 67). In view of the distinctiveness and complexity of the issues faced by leaders in these regions, it would be informative to determine the views of students aspiring to assume teacher and leader positions in these regions.

Goodlad (1984) noted, "Legislators prefer to select highly specific targets in seeking school improvement and the principalship often is seen as the bull's-eye" (p. 307). This statement is certainly prophetic and increasingly accurate when one considers the history of accountability policy development since the mid-1980s. This increasing focus on the principal is not without justification. In his review of successful schools, particularly those schools in high-poverty areas, Fullan (2005) reported that "leadership at the school and district levels was identified as crucial to success" (p. 3). Waters, Marzano, and McNulty (2003) conducted a meta-analysis of studies in which student characteristics,

teacher characteristics, and school practices related to student success were examined. "The data from our meta-analysis demonstrate that there is, in fact, a substantial relationship between leadership and student achievement. We found that the average effect size (expressed as a correlation) between leadership and student achievement is .25" (p. 3).

Effective school leaders provide for both quality as primarily measured by student achievement and equity, which involves the fair and just appropriation of human and fiscal resources. Lezotte and Bancroft (1985) maintained,

> An effective school is able to demonstrate both quality and equity in its program outcomes. Americans continue to expect their public schools to provide an opportunity for every student to obtain a quality education and to ensure that each student is offered equal educational opportunity. (p. 27)

Beyond the unique characteristics required of principals based on local demographics, a broader consideration of what makes an effective school leader is informative. An abundance of literature exists in which the characteristics or attributes of effective school principals have been delineated. For example, the Organisation for Economic Co-operation and Development (OCED) launched the "OECD Improving School Leadership Activity" initiative in 2006 (Ischinger, 2008, Slide 2). This multination endeavor was intended "to help policy makers formulate school leadership policies leading to improved teaching and learning" (Slide 2). This group found that school leaders in participating countries would have to attend increasingly to effective instructional leadership practices, support collaborative teaching practice, and must be prepared for diverse learning populations (Slide 2). This effort includes suggestions for preparing leaders to meet these demands. In addition, Sweeny (cited in Becker, 1992) contended that the best school leaders promote academic achievement by: "(1) emphasizing achievement; (2) setting instructional strategies; (3) providing an orderly school atmosphere; (4) frequently evaluating pupil progress; (5) coordinating instruction; and by (6) supporting teachers" (p. 24). Waters et al. (2003) identified 21 characteristics (what they refer to as responsibilities) that are significantly related to student achievement. Among these responsibilities are,

> The extent to which the principal … fosters shared beliefs & a sense of community & cooperation (culture) … establishes a set of standard operating procedures & routines (order) … establishes strong lines of communication with teachers & among students (communication) … involves teachers in the design & implementation of important decisions & policies (input). (p. 4)

Effective campus leadership also involves the ability to facilitate shared decision-making and to build internal capacity. In reference to the development of internal capacity, Lambert (2003) stated, "Shared learning, purpose, action, and responsibility demand the realignment of power and authority. Districts and principals need to explicitly release authority, and staff need to learn how to enhance personal power and informal authority" (p. 20). According to Wehlage, Rutter, and Turnbaugh (1987), when teachers are given greater autonomy, they gain greater ownership of the program and teachers "feel accountable for the success of both students and the program as a whole" (p. 71). School leaders who promote collaboration and internal capacity are often

called transformational leaders. Leithwood (1992) maintained that "transformational school leaders are in more or less continual pursuit of three fundamental goals: 1) helping staff members develop and maintain a collaborative, professional school culture; 2) fostering teacher development; and 3) helping them solve problems together more effectively" (pp. 9-10). With the above-cited literature in mind, it is important to note that research on preservice educators' views of the characteristics of effective principals is scarce.

One of the few researchers who sought to determine the perceptions of aspiring principals regarding the characteristics of effective school principals documented differences in opinions based on the career background of the participants. Schneider and Burton (2005) surveyed individuals with military experience and leadership students coming from the education field. They reported that the students with military backgrounds rated leadership as the most important attribute, whereas teachers considered leadership as a trait to be developed. This research yielded three major domains of attributes: leadership, management, and pedagogic. Under the leadership heading were sub-skills such as being creative, ability to delegate and work on teams, and being charismatic. The management realm included organizational and marketing skills, systems management, knowledge of educational law, and various other attributes. The final domain, pedagogic, was represented by professional credibility, educational goal-setting, and curriculum planning and development.

It is evident that current accountability policies place a great deal of the burden for improving academic performance on the shoulders of principals, which may be compounded by equity issues in districts that serve higher numbers of minority and low-income students. In this study, we explored the views of educators and/or potential educators likely to work in schools with these kinds of students. They would be about to embark on the management of a test-driven system, leading instructional efforts for diverse populations and being the focal point of reform efforts.

Purpose of the Study

The purpose of this study is twofold: (a) To examine the characteristics that preservice teachers (undergraduate students) and educators as graduate students perceive as being indicative of an effective school principal; and (b) to examine the extent to which these characteristics differ as a function of participants' sex, ethnicity, college status, and whether the student was a first-generation college student.

Significance of the Study

This information can be used to build a more extensive literature on effective school leadership as perceived by persons interested in and/or practicing in schools in areas of low socioeconomic status and having minority students.

Method

Participants

Participants for this study were 615 education students enrolled in courses at two major universities in the Southwest. University A had 346 participants (56.3%), and University B had 269 participants (43.7%). Both universities are Hispanic-serving institutions located in the Southwest US. Most participants

were female (*n*=489, 79.5%), with 125 males in the study (20.3%). Most participants were Hispanic (*n*=437; 71.1%), followed by White (*n*=139; 22.6%) as the next largest ethnic group. Fifteen African-Americans (2.4%) were in the study, followed by 19 participants who classified themselves as *Other* (3.1%). Of the 615 participants in this study, 363 (59.0%) were undergraduate education students, referred to as preservice teachers, and 251 (40.8%) were graduate education students, individuals who all had an undergraduate degree in education. The average age of participants was 29.97 years (*SD*=9.17), with the youngest student being 17 years old. Information about the demographic characteristics of the sample is provided in Table 1.

Procedures

Courses in teacher education were identified through discussions with the department chair. These courses included the initial teacher education courses with students beginning in teacher education, field-based courses with students at the end of their degree plan, and graduate courses with students who were practitioners. In addition, courses in educational administration and in counseling and guidance at the master's level provided students who were currently practicing in the schools. We obtained a list of courses and contacted each faculty member to request permission to conduct the survey with the students in the faculty member's course. The survey, taking approximately 15 minutes to complete, was carried out at a time selected by the faculty members who agreed to participate in this study.

Instrument

The survey was used in two earlier studies (Minor, Onwuegbuzie, Witcher, & James, 2002; Witcher, Onwuegbuzie, & Minor, 2001). To make the survey amenable to use for this study, one open-ended question was added in which participants were asked to list the characteristics they viewed as being indicative of an effective school principal. The other questions on this survey were

Table 1
Demographic Characteristics of Sample

Demographic Characteristic	n	% age
Sex		
Males	125	20.3
Females	489	79.5
Ethnicity		
Hispanic	437	71.1
White	139	22.6
African American	15	2.4
Other	19	3.1
Student status		
Undergraduate	363	59.0
Males	55	15.2
Females	307	84.6
Graduate	251	40.8
Males	69	27.5
Females	182	72.5

about characteristics of effective teachers. Research data were then generated in both qualitative and quantitative form. The quantitative portion of the study gathered data initially on participant demographics, whereas the qualitative portion gathered data on participants' perceptions on what comprised effective leadership at the individual school level.

Analysis

The mixed analysis technique used represented an equal-status sequential multitype mixed analysis (ES-SMMA; Onwuegbuzie, Slate, Leech, & Collins, 2009). The ES-SMMA uses both inductive and deductive reasoning (Onwuegbuzie & Teddlie, 2003) and involves the sequential use of quantitative and qualitative data analytic techniques. In particular, in the present investigation, qualitative analyses were followed by quantitative analyses that built on the qualitative analyses. The mixed analysis technique was deemed to represent an equal-status mixed analysis because the qualitative and quantitative analyses were given approximately equal weight. The purpose of the mixed analysis was *development* (i.e., the findings emerging from one data-analytic technique, i.e., quantitative analysis) informed the use of the other procedure (i.e., qualitative analysis, Greene, Caracelli, & Graham, 1989). The purpose of the mixed analysis also was complementarity, that is, to seek, elaborate, enhance, illustrate, and/or clarify the results from one method (i.e., from the qualitative analysis) with results from the other method (i.e., from the quantitative analyses). Further, the goal of the ES-SMMA was typology development (Caracelli & Greene, 1993). The typology development here was the construction of preservice and inservice teachers' perceptions of an effective school principal and how these constructions are related to each other and vary as a function of demographic characteristics.

Results

The ES-SMMA involved three major phases. Specifically, the first phase (i.e., qualitative data analysis phase; exploratory phase) involved use of the method of constant comparison (Glaser & Strauss, 1967) to ascertain the characteristics that preservice teachers (undergraduate students) and educators as graduate students perceive as being indicative of an effective school principal by analyzing their qualitative responses. We used constant comparison to extract themes. Extraction of these themes marked the end of the first phase. The second phase (i.e., quantitative data analysis phase; exploratory phase) involved converting the themes to numeric data and then determining the frequency of the themes among the participants. This phase also involved using exploratory factor analysis techniques to determine how and the extent to which the emergent themes relate to each other. The third phase (i.e., quantitative data analysis phase; confirmatory phase) involved using a series of discriminant analyses to examine the extent to which these characteristics (i.e., themes) differ as a function of participants' sex, ethnicity, college status, and whether the student was a first-generation college student.

Exploratory Phases

Students' responses to the open-ended question "Now, please list three to six characteristics that you think make principals *effective leaders* at their schools" were analyzed for emergent themes. This process involved reading and reread-

ing participants' written responses. These responses then were unitized (Glaser & Strauss, 1967), which then served as the basis for extracting a list of non-repetitive, nonoverlapping significant statements (i.e., *horizonalization* of data, Creswell, 2007), with each statement being given equal weight. Units were eliminated that contained the same or similar statements such that each unit corresponded to a unique perception. Meanings then were formulated by explicating the meaning of each significant statement. Next, each subsequent significant statement was compared with previous codes such that similar clusters were labeled with the same code. After all the data had been coded, the codes were grouped by similarity, and a theme was identified and documented based on each grouping. That is, the aggregate formulated meanings were organized into emergent themes, with each theme consisting of units that were deemed similar in content. For example, the comment by one of the participants, "good communication between teacher and student/teacher and parent/principal and teacher/principal and parents/teacher and staff," was classified as a unit. This unit was then grouped with all other units of this type (e.g., "provides tools to communicate with students"), and subsequently was labeled under the emergent theme Communication.

These themes were identified for each individual participant and coded into the SPSS database that already contained their demographic information. First we realized that 10 was the maximum number of identified emergent themes pertaining to perceived characteristics of effective school principals for any single participant. Accordingly, 10 columns were created in the SPSS file to record participants' themes. The codes for themes that were directly written on the participants' surveys were then typed directly into a SPSS database for this inquiry. Consequently, all participants had 10 columns in which themes extracted from their written responses were coded. The lowest number of dominant themes noted for any single participant was 1, with the maximum number of dominant themes for three participants being 8. Initially, frequencies were computed for all the themes coded into the SPSS database. Because more than 100 unique individual words and/or phrases had been identified, we decided that a theme was present when it occurred on at least 31 occasions. The cut-point of 31 was used because it represented an endorsement rate of 5%, which translated to being close to a medium effect size (using Cohen's, 1988, nonlinear arcsine transformation). This procedure resulted in many words and/or phrases being eliminated that occurred only a few times across the 615 participants. A total of 29 dominant themes were identified as characteristics of effective principals.

Once the 29 dominant themes had been extracted, 29 additional columns were created in SPSS for each participant, with each additional column representing a dominant theme. For each of these columns, either a 1 was typed if the participant's written response represented that theme, or a 0 was typed if the participant's written response did not represent that theme. As such, the first set of 10 columns was used to determine the themes that were present across all participants, whereas this set of 29 columns was used to note the presence or absence of themes for individual participants. These themes are described in Table 2, with their frequencies depicted in Table 3.

Table 2
Themes and Illustrative Student Comments

Theme	Description
Leader	Leads, team leader, leadership skills, authoritative, supports staff, backs staff, supervisor, leads by example, position, know what is going on, stays in charge, authoritative figure, commanding, manages resources, management skills, manage budget, manager, and empower.
Communication	Good communication skills, communicative, communicates, responsive, straight-forward, good communication between teacher & student/teacher & parent/principal & teacher/principal & parents/teacher & staff, provides tools to communicate with students, can clarify, language/verbal skills, informative, talkative, direct, well spoken, reads body language, and provides feedback.
Caring	Compassion, giving, kind, affection, warm, thoughtful, gentle, sensitive, considerate, concerned, careful, appreciative, heart, and nurturing.
Understanding	Sympathetic, understands students, and comprehend.
Knowledgeable	Has knowledge, knows subject, knows new changes in education, knowledge of developmental stages, knowledge of student needs, knowledgeable about events outside classroom, and informed.
Fair	Reasonable, impartial, non-judgmental, equal to employees, treats students equally, not partial, objective, not prejudicial, and not political.
Works Well With Others	People focused, people oriented, cooperative, social skills, teamwork, works well with teachers/students/parents, personable, social, manageable, collaborative, and looking for democracy.
Listening	Good listening skills, listen to teachers, listen to students, and listen to parents.
Service	Serves, student centered, loyal, conscientious, hard-worker, wants to make a difference, commitment, go extra mile, wants to teach, involved, useful, and handy.
Organized	Structure, providing structure, and being organized.
Disciplinarian	Enforces rules, strict, tough, firm, focus on safety, discipline, effective consequences for students, provides sense of security, and safe & secure class.
Good Attitude	Optimistic, happy, positive, good personality, enthusiastic, charisma, nice, energetic, personable, constructive, likeable, and animated.
Patience	Being patient; patience in dealing with others.
Respectful	Respect, respect teachers, respect students, doesn't stereotype, values opinions, polite, not rude, treats students as adults, doesn't embarrass, values people, and respect cultures.
Helping	Helps others, helps others succeed, helpful, helps out, supportive, and willing to work with you.
Open-Mindedness	Open to suggestions, openness, try new things, open to change, experimental, liberal, and open to criticism.

Table 2 (continued)

Theme	Description
Motivating	Motivation, encouraging, and gives praise.
Professional	High standards, integrity, professionalism, ethics, good appearance, and conviction.
Flexible	Easy-going, adaptable, agreeable, can improvise, easy to work with, and versatile.
Being Visible	Available, around when needed, flexible hours, available for contact, reachable, and open-door policy.
Honest	Tells the truth, speaks truth to others/power, not afraid to offer criticism, and sincere.
Good Role Model	Inspiring, influences, significant to student, someone to look up to, good morals, good values, help students love teachers, guide, and persuasive.
Responsible	Accepts responsibility, has responsibility, and accountability.
Builds Relationships	Mentor, establishes relationship with student, learns about the student, interest in student, spends time with student, provides one on one time with student, and involved with students.
Involving	Involves students, engaging, including, involves parents, active, gets students involved, hands-on, involvement, asks involving questions, and interactive.
Consistent	Being consistent, consistency, and counting on person to respond in the same manner.
Friendly	Outgoing, friend, approachable, and personable.
Focus on Schools	Knowledgeable about school, knowledgeable about on-goings at school, active in school, promotes school, knows what works best for school, has vision/mission for school, and explains issues in school.
Experience in the Classrooms	Remembers teaching experience, experience in education, experience in field, and experience in school system.

Table 3
Frequency and Percentage of Participants' Themes for Effective
School Principals

Theme	Present n	Present %
Leader	159	25.9
Communication	134	21.8
Caring	122	19.8
Understanding	95	15.4
Knowledgeable	92	15.0
Fair	88	14.3
Works Well With Others	74	12.0
Listening	72	11.7
Service	70	11.4
Organized	69	11.2
Disciplinarian	66	10.7
Good Attitude	58	9.4
Patience	56	9.1
Respectful	55	8.9
Helping	50	8.1
Open-Mindedness	48	7.8
Motivating	48	7.8
Professional	45	7.3
Flexible	41	6.7
Being Visible	40	6.5
Honest	38	6.2
Good Role Model	38	6.2
Responsible	37	6.0
Builds Relationships	37	6.0
Involving	36	5.9
Consistent	34	5.5
Friendly	34	5.5
Focus on Schools	33	5.4
Experience in the Classroom	31	5.0

Mixing the qualitative data. Historically, once qualitative analyses have been conducted and themes identified and articulated and linked to existing knowledge, literature, and/or theory, the study is typically finished. This process of developing a qualitative research question, gathering qualitative data, and conducting qualitative analyses of these data constitutes what may be termed as a monomethod research design (Johnson & Onwuegbuzie, 2004). A similar question-collection-analysis sequence would apply to quantitative studies. That is, purely quantitative studies and purely qualitative studies use monomethod research designs. The present study, however, represents a mixed research design. "Mixed-method designs are similar to conducting a quantitative mini-study and a qualitative mini-study in one overall research study" (p. 20).

Inherent in this mixed research study was the use of Onwuegbuzie and Teddlie's (2003) conceptualization of the mixed data analysis process. Thus far, the qualitative data have been reduced from the many words and phrases used by students to describe effective school principals to 29 dominant themes.

Previously depicted have been the 29 themes and illustrative comments that reflect the first two stages of data reduction and data display, respectively. Now comes what Onwuegbuzie and Teddlie call the data transformation stage "wherein qualitative data are converted into numerical codes that can be represented statistically" (p. 22, i.e., *quantitized*, Tashakkori & Teddlie, 1998). Teddlie and Tashakkori (2006) also referred to this process as a conversion mixed design where data have been transformed or converted from one type of data into the other type of data and then analyzed.

At this point, the qualitative themes had been converted into either a 1 (theme present for that participant) or into a 0 (theme not present for that participant). Each participant, therefore, had a series of 1s and 0s for each of the 29 themes present in the qualitative data for effective school principals, thereby yielding an inter-respondent matrix (Onwuegbuzie & Teddlie, 2003). This inter-respondent matrix was subjected to the statistical analyses discussed below.

To ascertain the number of factors that might be underlying or emerge from the 29 dominant themes in this study, an exploratory factor analysis was conducted. Anticipated findings were that the themes would cluster together into several larger meta-themes. As such, the purpose of this analysis was to determine whether meta-themes would emerge from the existing themes rather than using a prescriptive approach based on existing literature. To conduct the exploratory factor analysis, a maximum likelihood factor analysis procedure was used because of its ability to provide better estimates (Bickel & Doksum, 1977) than the most commonly used factor analytic method, principal factor analysis (Lawley & Maxwell, 1971). A Varimax (i.e., orthogonal) factor analysis, used because of the anticipated low relationships among the 20 dominant themes, extracted latent constructs, or as conceptualized by On-wuegbuzie (2003), meta-themes.

In conducting the Varimax factor rotation, K1, or the eigenvalue-greater-than-one rule (Kaiser, 1958), was used to ascertain how many factors to retain. Using this rule, five factors or meta-themes were revealed to be present. The scree test, a plot of eigenvalues in descending order against the five factors, also supported keeping five factors (Cattell, 1966; Zwick & Velicer, 1986), which are depicted in Table 4. In determining the minimum value for structure/pattern coefficients, we used the recommended cutoff correlation of .3 (Lambert & Durand, 1975). Table 4 shows for the five-factor model that resulted from the analysis, the themes and their respective effect sizes in bold type. The following themes had large coefficients on the first factor: Caring, Leader, Patience, Responsible, and Understanding. For the second factor, themes with large effect sizes were Consistent, Fair, and Open-Mindedness. Having large coefficients on the third factor were Communication, Disciplinarian, Focus on School, and Honest. For the fourth factor, the themes of Helping, Professional, Service, and Involving had large effect sizes. Finally, the themes of Listening, Being Flexible, Good Role Model, Organized, and Works Well With Others contained large coefficients on Factor 5. Each of these factors is expanded on below.

Responsible and Supportive Leader (i.e., Factor 1) was the name given to the meta-theme that contained the dominant themes of Understanding, Caring,

Table 4
Summary of Themes and Factor Pattern/Structure Coefficients from
Maximum Likelihood (Varimax) Factor Analysis: Five-Factor Solution

Theme	1	2	3	4	5
Understanding	**.544**	−.043	.150	−.064	−.055
Caring	**.445**	−.015	−.001	.089	.098
Leader	**−.366**	−.168	.068	−.157	−.104
Patience	**.352**	−.224	.207	−.357	−.015
Responsible	**.323**	−.057	−.196	−.132	−.022
Consistent	−.055	**.667**	.073	−.111	.006
Fair	.098	**.604**	−.175	−.024	−.182
Open-Mindedness	−.114	**.403**	.037	.093	.090
Communication	−.225	−.028	**−.508**	.037	.019
Disciplinarian	−.123	.305	**.459**	−.173	.170
Focus on School	−.212	−.097	**.439**	.160	−.187
Honest	.256	.220	**−.429**	.189	−.060
Service	.071	.126	−.021	**.551**	−.034
Helping	.009	−.131	.248	**.446**	.201
Involving	.024	.022	.365	**.372**	−.180
Professional	−.094	−.061	−.165	**.326**	.327
Good Role Model	−.091	−.137	−.115	.089	**−.490**
Organized	−.209	−.046	−.285	.000	**.446**
Being Flexible	.016	−.089	.069	.127	**.397**
Listening	−.041	−.178	−.042	.120	**−.371**
Works Well With Others	−.115	−.135	.078	−.291	**.350**
Motivating	.078	−.011	−.107	.016	.212
Being Friendly	.111	.071	.023	−.267	.123
Knowledgeable	.263	.128	.059	−.040	−.066
Builds Relationships	−.270	.072	.090	.122	.080
Respectful	.201	.211	.045	.090	.063
Good Attitude	.247	−.146	−.005	.199	.069
Experience in the Classroom	−.182	−.080	−.209	−.111	−.141
Being Visible	−.272	.117	.078	.043	−.196
Trace	1.51	1.44	1.40	1.32	1.31
% Variance Explained	5.20	4.96	4.81	4.54	4.51

Coefficients in bold type represent pattern/structure coefficients with the largest effect size within each theme using a cutoff value of .3 recommended by Lambert and Durand (1975).

Leader, Patience, and Responsible. These two terms, of being responsible and supportive as an educational leader, expressed the essence of these five dominant themes.

For the Factor 2 meta-theme that contained the dominant themes of Consistent, Fair, and Open-Mindedness, the label of *Being Impartial* was given. As depicted in Table 1, the examples for each of the themes of Consistent, Fair, and Open-Mindedness are consistent with the meaning of impartiality; hence the reason for the label of *Being Impartial* being assigned to the clustering of these themes.

Communication, Disciplinarian, Focus on School, and Honest comprised the meta-theme of *Straightforward, Task-Oriented, and Communicative* (i.e., Factor 3). The Factor 4 meta-theme, containing the themes of Helping, Professional, Service, and Involving, was called *Professional and Facilitator*. Finally, the meta-

Table 5
Meta-Themes Found in Participants' Characteristics of Effective
School Principals

Factor	Themes	Meta-Themes	Meta-Theme Descriptors	Relative Manifest Effect Size[a] (%)	Absolute Manifest Effect Size[b] (%)
1	Understanding, caring, leader, patience, and responsible	Responsible and supportive leader	Considerate, supports staff, is patient, and accepts responsibility	29.09	76.26
2	Consistent, fair, and open-mindedness	Being impartial	Open to suggestions, is consistent in his actions and is impartial	10.54	27.64
3	Communication, disciplinarian, focus on school, and honest	Straightforward, task-oriented, and communicative	Communicative, provides sense of security, knowledgeable about ongoings at school, and speaks truth to others/power	16.81	44.06
4	Helping, professional, service, and involving	Professional and facilitator	Helps others succeed, high standards, wants to make a difference, and involves others	12.47	32.68
5	Good role model, organized, being flexible, listening, and works well with others	Collaborative, organized, and inclusive role model	Someone to look up to, adaptable, provides structure, listens to others, and people focused	18.24	47.80

[a]Relative manifest effect sizes represent the number of times the themes contained within a meta-theme are endorsed divided by the total number of times all 29 dominant themes are endorsed.
[b]Absolute manifest effect sizes represent the number of times the themes contained within a meta-theme are endorsed divided by the total number of participants.

theme of *Collaborative, Organized, and Inclusive Role Model* (i.e., Factor 5) was assigned to the five dominant themes of Good Role Model, Organized, Being Flexible, Listening, and Works Well With Others. See Table 2 for exemplars of each of the individual themes that underlie the meta-themes. We interpreted the meanings for participants' responses for each of the individual themes in arriving at our determination of the meta-theme label.

Table 5 provides a description of each meta-theme and presents the dominant themes contained in each meta-theme. Table 5 also contains what Onwuegbuzie (2003) referred to as manifest frequency effect sizes for each meta-theme, which represented the combined frequency effect size for the themes in it. It can be seen here the Responsible and Supportive Leader meta-theme contained the largest absolute manifest effect size (i.e., 76.26%), followed by the *Collaborative, Organized*, and *Inclusive Role Model* meta-theme (i.e.,

47.80%). The *Being Impartial* meta-theme had the smallest manifest effect size (i.e., 27.64%), although this effect size is still notable.

In examining the proportion of the variance explained, or the eigenvalue after rotation (trace, Hetzel, 1996), it can be seen that Factor 1 accounted for 5.20% of the total variance, Factor 2 explained 4.96% of the variance, Factor 3 accounted for 4.81% of the total variance, Factor 4 explained 4.54% of the variance, and Factor 5 accounted for 4.51% of the total variance. These five meta-themes combined to account for 24.01% of the total variance. As indicated by several researchers (Henson, Capraro, & Capraro, 2004; Henson & Roberts, 2006), the proportion of explained variance in this study is within the range noted in many factor-analytic studies.

Confirmatory Phases

To determine whether the endorsement rate of the 29 dominant themes differed as a function of participants' sex, ethnicity, college status, and whether participants were first-generation college students, a series of *All Possible Subsets* canonical discriminant analysis procedures were conducted. Each of the above variables served as independent variables in separate analyses with the themes as the dependent variables in the analysis. All possible models involving some or all of the thematic variables were examined. Indeed, in APS discriminant analyses, separate discriminant functions are computed for all thematic variables singly, all possible pairs of thematic variables, all possible trios of thematic variables, and so forth, until the best subset of thematic variables is identified according to some criteria. For this investigation, the criteria used were Wilk's lambda, the probability level, the canonical correlation, the standardized canonical discriminant function coefficients, the structure coefficients, and the odds ratio (primary effect-size measure). The APS discriminant analysis is different from stepwise discriminant analysis, in which the order of entry of variables is based solely on the probability level. In fact, stepwise discriminant analysis is not guaranteed to find the optimal model, and thus many statisticians strongly criticize this type of analysis, preferring some form of canonical discriminant analysis (Onwuegbuzie & Daniel, 2003). Those results are discussed below.

Gender. Concerning the sex of students, the resulting discriminant function was statistically significant, $\chi^2(5)=27.45$, p=.0001, and accounted for 100.0% of the between-groups variance (canonical R=.210; Wilks's Λ=.956). The group centroids were –.42 for male students and .11 for female students. This discriminant function contained the following five themes: Responsible (Standardized Coefficient=0.51), Service (Standardized Coefficient=0.50), Caring (Standardized Coefficient=0.47), Leader (Standardized Coefficient=–0.45), and Honest (Standardized Coefficient=–0.44). An examination of the standardized coefficients revealed that using a cutoff coefficient of 0.3 (Lambert & Durand, 1975), all five items made an important contribution to the canonical function, with the themes of Responsible and Service making the largest contributions. The positive standardized coefficients indicate that female students were more likely than were male students to endorse the Responsible (7.2% vs. 1.6), Service (12.9% vs. 5.6%), and Caring (21.9% vs. 12.0%) themes. The negative standardized coefficients indicate that male students were more likely than

Table 6
Participants' Themes by Sex for Percent of Occurrence for Effective School Principals

Theme	Males (%)	Females (%)
Leader	35.2	23.5
Communication	27.2	20.4
Caring	12.0	21.9
Understanding	14.4	15.7
Knowledgeable	14.4	15.1
Fair	16.8	13.7
Works Well With Others	12.0	12.1
Listening	12.8	11.2
Service	5.6	12.9
Organized	10.4	11.5
Disciplinarian	11.2	10.6
Good Attitude	6.4	10.2
Patience	8.0	9.4
Respectful	7.2	9.4
Helping	6.4	8.6
Open-Mindedness	5.6	8.4
Motivating	12.0	6.7
Professional	6.4	7.6
Flexible	7.2	6.5
Being Visible	4.0	7.2
Honest	8.8	5.5
Good Role Model	8.0	5.7
Responsible	1.6	7.2
Builds Relationships	5.6	6.1
Involving	5.6	5.9
Consistent	6.4	5.3
Friendly	5.6	5.5
Focus on Schools	6.4	5.1
Experience in the Classroom	5.6	4.9

were female students to endorse the Leader (35.2% vs. 23.5%) and Honest (8.8% vs. 5.5%) themes.

Ethnicity. Concerning ethnic membership, the resulting discriminant function was statistically significant, $\chi^2(2)=12.17$, p=.002, and accounted for 100.0% of the between-group variance (canonical R=.145; Wilks's Λ=.979). The group centroids were –.08 for Hispanic students and .26 for White students. This discriminant function contained two themes: Works Well With Others (Standardized Coefficient=.77) and Responsible (Standardized Coefficient=–0.64). An examination of the standardized coefficients indicated that using a cutoff coefficient of 0.3 (Lambert & Durand, 1975), both items contributed to the canonical function, with the theme of Works Well With Others making the largest contribution. The positive standardized coefficient indicates that White students were more likely than were Hispanic students to endorse the Works Well With Others (18.0% vs. 9.6%) theme. For the negative standardized coefficient, Hispanic students were more likely than were White students to endorse the Responsible (7.3% vs. 2.2%) theme. For these themes and the remaining 27

Table 7
Participants' Themes by Ethnicity for Percent of Occurrence for Effective
School Principals by Ethnic Membership

Theme	Hispanic (%)	White (%)
Leader	25.2	25.9
Communication	20.4	25.9
Caring	19.2	20.9
Understanding	16.9	12.2
Knowledgeable	15.1	16.5
Fair	15.1	10.8
Works Well With Others	9.6	18.0
Listening	10.5	15.8
Service	10.8	13.7
Organized	9.6	15.1
Disciplinarian	9.4	12.9
Good Attitude	9.2	11.5
Patience	9.6	7.9
Respectful	8.7	10.1
Helping	7.6	7.9
Open-Mindedness	8.7	5.8
Motivating	7.6	8.6
Professional	8.2	5.0
Flexible	6.2	7.9
Being Visible	6.4	7.2
Honest	6.9	4.3
Good Role Model	6.4	6.5
Responsible	7.3	2.2
Builds Relationships	5.3	7.9
Involving	5.5	7.2
Consistent	5.3	6.5
Friendly	6.4	2.9
Focus on Schools	5.3	5.8
Experience in the Classroom	4.6	7.2

dominant themes, refer to Table 7 for the percentages that each theme incurred for Hispanic and White participants in this study.

College status. The APS discriminant analysis, conducted to differentiate undergraduate from graduate students, yielded a statistically significant discriminant function, $\chi^2(6)=79.52$, $p=.0001$, and accounted for 100.0% of the between-group variance (canonical $R=.350$; Wilks's $\Lambda=.878$). The group centroids were –.31 for undergraduate students and .45 for graduate students. This discriminant function contained the following six themes: Communication (Standardized Coefficient=0.59), Knowledgeable (Standardized Coefficient=0.36), Leader (Standardized Coefficient=0.34), Motivating (Standardized Coefficient=0.36), Organized (Standardized Coefficient=0.41), and Works Well With Others (Standardized Coefficient=0.40). An examination of the standardized coefficients indicated that using a cutoff loading of 0.3 (Lambert & Durand, 1975), all six items made an important contribution to the canonical function, with the theme of Communication making the largest contribution. The positive standardized coefficients indicate that the graduate students were

Table 8
Participants' Themes by College Status for Percent of Occurrence for
Effective School Principals

Theme	Undergraduate (%)	Graduate (%)
Leader	21.8	31.9
Communication	14.6	32.3
Caring	21.2	17.9
Understanding	16.8	13.5
Knowledgeable	11.8	19.5
Fair	12.4	17.1
Works Well With Others	8.3	17.5
Listening	9.1	15.5
Service	11.3	11.6
Organized	7.2	17.1
Disciplinarian	14.0	6.0
Good Attitude	9.4	9.6
Patience	10.7	6.8
Respectful	9.9	7.6
Helping	8.0	8.4
Open-Mindedness	9.4	5.6
Motivating	5.0	12.0
Professional	6.3	8.8
Flexible	4.7	9.6
Being Visible	5.5	8.0
Honest	6.3	6.0
Good Role Model	6.3	6.0
Responsible	7.7	3.6
Builds Relationships	5.0	7.6
Involving	6.9	4.4
Consistent	3.9	8.0
Friendly	6.9	3.6
Focus on Schools	5.5	5.2
Experience in the Classroom	6.6	2.8

more likely than were the undergraduate students to endorse the Communication (32.3% vs. 14.6), Knowledgeable (19.5% vs. 11.8%), Leader (31.9% vs. 21.8), Motivating (12.0% vs. 5.0%), Organized (17.7% vs. 7.2%), and Works Well With Others (17.5% vs. 8.3%) themes. Table 8 contains the percentages that each theme incurred for undergraduate and for graduate college students in this study.

First-generation/non-first-generation status. The final APS, conducted to determine whether first-generation college students endorsed these 29 dominant themes differently than did non-first-generation college students, failed to yield a statistically significant discriminant function. Table 9 contains the percentages that each theme occurred for first-generation and for non-first-generation college students in this study.

Total Themes
Finally, the number of themes endorsed by each participant was calculated by summing the rows in the inter-respondent matrix. This calculation resulted in a continuous variable that was then subjected to parametric statistical proce-

Table 9

Participants' Themes in Percent of Occurrence for Effective School Principals
by First-Generation/Non-First-Generation College Status

Theme	First-Generation College Student (%)	Non-First-Generation College Student (%)
Leader	22.7	27.7
Communication	21.1	22.0
Caring	17.4	21.7
Understanding	15.7	14.9
Knowledgeable	15.7	14.4
Fair	12.4	15.2
Works Well With Others	13.2	11.1
Listening	12.4	11.1
Service	7.9	13.6
Organized	9.9	12.2
Disciplinarian	8.3	12.5
Good Attitude	7.4	10.9
Patience	9.9	8.7
Respectful	7.9	9.5
Helping	6.6	9.2
Open-Mindedness	7.0	7.9
Motivating	7.0	8.4
Professional	7.0	7.3
Flexible	5.0	7.6
Being Visible	4.1	8.2
Honest	6.6	6.0
Good Role Model	8.3	4.9
Responsible	7.0	5.4
Builds Relationships	6.2	6.0
Involving	5.0	6.5
Consistent	3.7	6.8
Friendly	4.5	6.0
Focus on Schools	3.3	6.8
Experience in the Classroom	3.7	6.0

dures (i.e., analysis of variance). The average number of themes for participants was 2.93 (*SD*=1.49), with a range of 0 dominant themes present to a maximum of eight dominant themes. To ascertain the extent to which differences in the total number of themes written by students were present by sex, ethnicity, college status, and first-generation/non-first-generation status, a four-way analysis of variance (ANOVA) was conducted after recoding ethnicity to two groups (Hispanic and White, due to low sample sizes in the other categories). No statistically significant difference was present between males and females, $F(1, 553)=0.742$, $p=.389$; between Hispanics and Whites, $F(1, 553)=0.248$, $p=.619$; between first-generation/non-first-generation college status, $F(1, 553)=0.385$, $p=.535$; or between undergraduate and graduate students, $F(1, 553)=3.017$, $p=.083$.

Discussion

Consistency is present between the results of this study and the extant litera-ture. These respondents agreed that effective leadership was an important

attribute for a principal to possess. They highly endorsed themes that could be related to effective leadership. Responses, at least on an implicit level, also supported principal attributes required for school success in highly diverse communities as cited in the literature, including strong leadership, effective communication skills, and caring administrators (Ershler, 2007; Fullan, 2005; Hampton, 2005; Lopez et al., 2006; Merchant & Shoho, 2006). Absent from the results were more explicit expressions of transformative leadership and advocacy.

Present in the literature is the statement that effective leadership is a key to improving student performance (Wong & Nicotera, 2007). Waters et al. (2003) documented from a meta-analysis that there was a "substantial relationship between leadership and student achievement" (p. 3). In a review of successful schools in high-poverty areas, Fullan (2005) discovered a positive relationship between leadership and school success. These research findings are directly linked to our Factor 1, titled *Responsible and Supportive Leader*. This meta-theme contained the dominant themes of Understanding, Caring, Leader, Patience, and Responsible. In fact, the most frequently reported theme in this study was Leader (see Table 3). This result suggests that respondents from these Hispanic-serving institutions in the Southwest concur in the importance of leadership as cited in other work (Fullan; Waters et al., 2003; Wong & Nicotera, 2007). This finding supports a recognition by these participants that best leadership practice is an essential ingredient in the success of schools. As noted above, these respondents work in a unique setting of the country and may have endorsed other attributes more frequently.

Hampton (2005) reported that successful principals serving in demographically challenged areas used certain leadership strategies, namely, alignment of the curriculum, restructuring of schedules, and the establishment of remedial settings to assist students. Asserting that these leadership behaviors are compliant in nature, Merchant and Shoho (2006) suggested that leaders should put forth more effort in questioning the fairness of the accountability system, especially in terms of how it perpetuates disparities in students' learning experiences and related outcomes. Therefore, an examination of these findings and how they might relate to effective leadership in culturally, economically, and linguistically diverse regions is appropriate. To this end, themes were reviewed to determine relevance to the literature on this subject.

Caring was a theme identified as part of Factor 1, *Responsible and Supportive Leader*. When considering important issues in border communities, Lopez et al. (2006) argued that educators along the US-Mexico border must create "caring and/or emancipatory spaces for students" (p. 67). Caring ranked third among the various themes rank-ordered in Table 3, with 122 (19.8%) of our sample endorsing this theme. Therefore, there may be at least an implicit connection between the literature on what constitutes strong leadership along the border and the views of these participants.

Another attribute cited as important to effective educational leadership is an effective ability to communicate (Ershler, 2007). This skill is particularly useful in areas with high numbers of monolingual Spanish-speakers such as in the Southwest US. Greater numbers of limited or non-English-speakers are present in the region where this research was conducted (Texas Education

Agency, 2008). Communication, Disciplinarian, Focus on School, and Honest comprised Factor 3 of this study, which is was named *Straightforward, Task-Oriented, and Communicative*. Communication ranked second on the frequency chart, with 134 (21.8%) of our sample endorsing this theme, second only to the leadership response. Similar to the leadership and caring themes, participants in this study expressed views about the importance of communication that are consistent with the literature (Ershler, 2007).

Conspicuously absent in the findings were explicit responses indicating the importance of advocacy and activism related to unique issues associated with this region, particularly pertaining to questions of equity and equality. As noted, the survey region included greater numbers of students with limited English proficiency, more minority students, and higher percentages of economically disadvantaged children than the state average (Texas Education Agency, 2008). Students from these backgrounds are adversely affected by the current test-driven accountability policy (Goodlad, 1997; Merchant & Shoho, 2006; Popham, 1999; Valenzuela, 2005). Lezotte and Bancroft (1985) maintained that "An effective school is able to demonstrate both quality and equity in its program outcomes" (p. 27). Murphy (2002) contended that educational leaders must keep focused on organizational core values that are just and that maintain fairness. One could infer that traits cited in this work such as caring, understanding, fair, open-minded, honest, and responsible might be attributes inherent in advocacy and transformative leadership. However, the absence of more explicit indicators raises questions about the participants' actual views on this realm.

Effective campus leadership also involves the ability to facilitate shared decision-making and to build internal capacity (Lambert, 2003; Leithwood, 1992; Wehlage et al., 1987). An analysis of emerging factors and corresponding meta-themes indicates the presence of attributes that are consistent with this particular leadership domain. Factor 4 includes the meta-theme entitled *Professional and Facilitator. Collaborative, Organized, and Inclusive Role Model* is the emerging meta-theme under Factor 5. Therefore, these participants valued leadership behaviors supportive of shared decision-making and decentralization of authority and decision-making structures.

No statistically significant differences were present between the various subgroups, including males and females, Hispanics and Whites, first-generation and second-generation, college status and undergraduate and graduate students. Banks et al. (2007) offered that, "Learning is situated in broad socioeconomic and historical contexts and is mediated by local cultural practices and perspectives" (p. 15). It could be argued that the pervasiveness of local cultural beliefs and practices resulted in a common view expressed by the participants eliminating any significant differences between subgroups. This conjecture is not intended to suggest that all students are acculturated by college professors or other influential individuals to have the same perspectives. Rather, it is to emphasize the compelling nature of local beliefs, which are often shaped by the demographic realities of the community. In this case, special challenges were indicated, namely, large numbers of English-language-learners and economically disadvantaged students, which may drive viewpoints to a common ground.

This study revealed consistency between the literature on effective school leadership and the perspectives provided by education students in two Hispanic-serving institutions located in the Southwest region of the country. Nevertheless, many additional questions are raised by these findings. If being a good leader is important, then what particular kind of leader is best suited to this region? Are compliant leaders needed in view of the accountability system, or would transformative individuals who question the basic premises behind this test-driven system be needed? What specific communication and caring behaviors are conducive to successful leadership in demographically challenged areas? In addition to these questions, further examination of the views of this survey population about the importance of advocacy or transformative leadership might yield useful results. This study establishes a platform on which further research in the areas cited can build.

Further study is needed to determine views regarding the exact form of leadership that would be most effective in view of the unique characteristics of the student populations served. It would be beneficial in future research studies to peel away the many dimensions of communication as they apply to this distinct educational environment.

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