DOCUMENT RESUME

ED 318 755 TM 014 778

AUTHOR Papalewis, Rosemary
TITLE Interpretation of Student Data: Contextual and Sociocultural Variables.
PUB DATE Apr 90
NOTE 28p.; Paper presented at the Annual Meeting of the American Educational Research Association (Boston, MA, April 16-20, 1990).
PUB TYPE Information Analyses (070) -- Reports - Evaluative/Feasibility (142) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS College Students; *Data Interpretation; Ethnic Groups; Evaluation Methods; Higher Education; Predictor Variables; *Professors; Racial Bias; Sex Stereotypes; Social Differences; Socialization; *Sociocultural Patterns; Student Attitudes; *Student Evaluation of Teacher Performance; *Teacher Effectiveness; Teacher Stereotypes

ABSTRACT

Common elements identified as context variables that may affect student evaluation of instruction are explored, and the literature on student ratings of teacher effectiveness is reviewed. Sociocultural context variables (gender, race, ethnicity, and social class variables) are discussed in terms of stereotyping and prejudice found with non-dominant groups. Dimensions of the context variables identified in the literature encompass: (1) course variables; (2) instructor variables; (3) student variables; (4) administration variables; and (5) instrument of measurement variables. Student bias about faculty gender has been found to affect evaluation of instruction. Students appear to notice gender communication pattern differences, and these differences are related to specific evaluation items. Differences in socialization affect student evaluation of instruction; sociocultural stereotyping is a field requiring a great deal of study. The implications for future research are: teacher evaluation instruments should be analyzed for gender and race differences in communication patterns; general university-wide, or faculty-wide, norms should not be established; a useful evaluation system should include common contextual variable norms; and research is needed in sociocultural contexts to ensure that instruments for measuring student evaluation of instruction are not based on stereotypes. Five tables summarize the discussion. A 49-item list of references is included. (SLD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
[✓] This document has been reproduced as received from the person or organization originating it
[ ] Minor changes have been made to improve reproduction quality
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
ROSEMARY PAPALEWIS
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

ED318755

INTERPRETATION OF STUDENT DATA:

CONTEXTUAL AND SOCIOCULTURAL VARIABLES

by

Rosemary Papalewis, Ed.D.
Professor, Educational Administration
California State University, Fresno

A contributed research paper presented at the meeting of the American Educational Research Association, Boston, MA., April, 1990.

FM014778

INTERPRETATION OF STUDENT DATA: CONTEXTUAL AND SOCIOCULTURAL VARIABLES

Speech communication theories share a similarity with the interpretation of student evaluation of instruction contextual variables. The field of speech communication has identified two types of theories: a general theory of human communication and style specific theory (Baker, 1984; Bormann, 1980). The general theory of human communication is a set of generalizations about communication that hold regardless of any specific context. The style specific theory is based on the assumption that communication styles may differ: among specific groups of pecple, common language usage reflects cultural values, different verbal and nonverbal communication norms, stereotyping and prejudice.

The similarity of research is found with interpretation of student evaluation of instruction when the question is asked, "Can generalizations about teaching effectiveness as evaluated by student ratings of instruction hold regardless of any specific context

variable?" Meta-analysis, a quantitative method used to convert individual study outcomes to a common denominator, has attempted to determine what context variables may effect student ratings of teacher effectiveness characteristics.

The presentation today will explore the common elements identified as context variables that may effect student evaluation of instruction and present literature from sociology, anthropology, and linguistics, that seeks renewed challenges to researchers in this area. These I have called the sociocultural context variables which are: gender, race, ethnicity, and social class variables. The Sociocultural context variables will be discussed in terms of stereotyping and prejudice found with non-dominant groups.

According to Braskamp, Brandenburg & Ory (1984) students are viewed as appropriate sources of describing and judging, such as: 1. student-instructor relationships, 2. their views of the instructors' professional and ethical behavior, 3. their workload, 4. what they have learned in the course, 5. fairness of grading, and 6. the instructors'

ability to communicate clearly. Dimensions of commonality (Brandenburg, Derry & Hengstler, 1978; Centra,1980; Doyle, 1983; Mckeachie, 1979) in questionnaire items have identified the following areas: communication skill, rapport with students, course organization, student self-rated accomplishments, course difficulty, and grading and examinations.

Context variables identified with affecting student evaluation of instruction are numerous and somewhat inconsistent. Discrepancy in conclusions according to Abrami, Cohen & d'Apollonia (1988) are partly attributable to methodology and interpretation discrepancies. The use of meta-analysis versus the traditional narrative review, has discrepancies in the interpretation by reviewers of collective findings.

Common context variables as identified in the literature (Brady, 1989; Braskamp, et al, 1984; Cranton & Smith, 1986; Hoffman, 1978; Marsh, 1980, 1984; Marsh, Overall & Kesler, 1979) encompass the following broad dimensions: (See Table 1)

course variables, such as, required/elective, day or evening, course level, lecture v discussion, learning value, organization, exams/grades, assignments, workload difficulty, class size, and academic discipline;

instructor variables, such as, rank, gender, full-time v. part-time, individual rapport, years teaching, and personality characteristics (i.e., warmth, enthusiasm);

student variables, such as, full-time v. part-time, expected grade, prior interest, academic major v. minor, grade point average, group interaction, gender, and personality characteristics;

administration variables, such as, student anonymity, direction giving, instructor remains in classroom, when in semester evaluations are given, etc.; and,

instrument variables, such as, placement of items, number of response alternatives, negative wording of items, and the labeling of all scale points versus labeling only end points.

Cashin (1988) has stated that the multidimensionality of factors when discussed in terms of reliability (consistency, stability and generalizability) concluded that no single rating item or set of related items can be useful for all purposes.

Now we will explore the communicator aspect. According to Norton (1977) teaching effectiveness is a function of ones' perceived communicator style. Communicator style is the way one verbally and paraverbally interacts to signal how literal meaning should be taken, interpreted, or understood: dominant, dramatic, animated, open, contentious, relaxed, friendly, attentive, impression leaving, or precise.

Babad, Bernieri, and Rosenthal (1989) found that students' social class and ethnicity serve as major variables in the formation of teachers' expectations for students' intellectual performance. Highly biased teachers are those susceptible to stereotypically biasing information manifesting a strong self-fulfilling prophecy. In their study, biased teachers showed a highly differential pattern towards either the Pygmalion effect, which is

positive treatment of high expectancy students, or the Golom effect, which is negative treatment of low expectancy students. Bias towards teachers has also been found.

Gender Stereotyping

Student bias regarding female faculty has been found to affect student evaluations of instruction (Basow & Distenfeld, 1985; Basow & Howe, 1987; Bennett, 1982; Harris, 1976; Kaschak, 1978, 1981). Researchers have found that depending on the methodology, the sex-typing of the field discussed, the sex-typed characteristics of the instructors, and the types of questions asked, female professors sometimes receive lower ratings than male professors, especially from male students.

Martin (1984) felt that students have ambivalent expectations of female faculty. Women are supposed to be warm, friendly, supportive, and deferential, yet professionals are supposed to be objective, authoritarian, and critical. She believed that female faculty have to walk a fine line between feminine warmth and masculine

professionalism: straying on either side might result in lower ratings.

Bennett (1982) found that women are more negatively evaluated than men if they fail to meet gender-appropriate expectations with regard to student contact and support. Among the personal characteristics associated with high ratings for female but not male instructors were confidence and decisiveness. It seemed to Martin (1984) that female faculty must try harder than their male colleagues to convince students that they are both well prepared and likeable. Similarly, Bennetts' data (1982) revealed students are less tolerant of female instructors in a number of respects, expecting more of them than their male colleagues in both educational and interpersonal aspects of teaching.

Wheeless & Potori (1989), and Schein (1975) postulated that sex role congruency hypothesis advocates behavior that is consistent with sex role stereotypes produces more positive outcomes than behavior that is inconsistent. Hence, when men and women communicate and behave in ways congruent with societal definitions of dominant/masculine and expressive/feminine behaviors,

positive outcomes will occur. Masculine qualities of teaching effectiveness are decisiveness and deliberateness (Kearney & McCroskey, 1980) and the maintaining of control (Deshpande, Webb & Marks, 1970). Feminine qualities of teaching effectiveness are immediacy (Andersen, 1979) non dominant behavior (Norton, 1977), and caring and understanding (Rubin, 1981).

A highly structured instructional approach as described by students as communicating greater professionalism was found to be consistently more important for females' performance ratings than for males (Bennett, 1982). This was especially true for students' ratings of instructors organization, clarity and coherence in classroom presentation, command of material for classroom presentation, and overall evaluation. Bennett (1982) found that students are clearly more tolerant of what they perceive as a lack of formal professionalism in the conduct of teaching from male professors, demanding of women a higher standard of formal preparation and organization. Research (Harris, 1976) on sex-role stereotyping has suggested that both males and females

tend to perceive male stereotyped behaviors as superior to and healthier than female-stereotyped behaviors.

Sufficient research and documentation (Baird & Bradley, 1979; Kahn, 1984; Kotthoff, 1984; Shakeshaft, 1987) has defined perceived differences and behavioral differences pertaining to gender patterns of communication. This documentation show that two distinct language patterns exist, one for women and one for men. (See Tables 2 and 3) Examples of these distinct language patterns are:

Female Patterns	Male Patterns
Correct speech forms	More frequent use of joking
Dynamic intonations, wide range of pitch	Hostile verbs
Polite, cheerful intonation	Interruptions in conversation with females
Use of expressive intensifiers	Greater amount of talking
Use of questions to express opinions	Lower pitch levels

In two studies by Papalewis & Brown (1989, 1990) of 35 faculty (17 male and 18 female), with 729 students (240 male and 499 female), across 30 different graduate and undergraduate classes in Education, the following results (see Table 4) were found: In terms of communication patterns used by university faculty, as predicted from the literature, significant differences were found between female and male faculty, such that,

Females, more than males, were rated significantly higher on items regarding:

*used personal examples in elaborating course content,

*were emotionally involved at times with course topics

*used a wide range of rate and pitch when speaking

*pointed out content areas of personal uncertainty

In terms of student evaluation of instruction, significant differences were found between male and female faculty, such that:

Males, more than females, were rated significantly higher on items regarding:

*course clarity,

*stating objectives, and

*organization

Females, more than males, were rated significantly higher on items regarding:

*enthusiasm, and

*interest.

In terms of relationships between gender communication patterns and student evaluation of instruction, small to moderate positive correlations were found between:

*the use of personal examples and all evaluation items,

*emotional involvement and items reflecting enthusiasm and interest, and

*the use of wide range of rate and pitch, when speaking with items concerning enthusiasm and interest.

An inverse relationship was found between the pointing out of areas of personal uncertainty and items regarding course clarity, stating of objectives, and organization.

Papalewis and Brown (1989, 1990) concluded that students do notice gender communication pattern differences and such differences are related to specific evaluation items.

Sociocultural Stereotyping

As was found with gender, intercultural factors affecting interaction and outcomes of conversation based on cultural differences requires focused research attention. Differences in socialization not only affect how others perceive and behave, but also how ones' own perception and behavior may contribute to others perception and behavior.

Schnell (1987) defined communication as the transmission of information, ideas, attitudes, or emotions from one person to another, by conveying those ideas through written or spoken symbols or other verbal or nonverbal signs. Perceptions, Schnell (1987) stated, are information based on inputs from our senses and interpretation of this data on past and present experiences. Hence, verbal and nonverbal symbols influence interracial, interpersonal, and intercultural communication in negative and positive ways. Some of the negative effects include

racist language and excluding behavior. Prejudice often exemplifies itself within these negative effects.

As cited by Booth-Butterfield & Jordan (1989) other researchers have identified these race differences: African Americans and whites differed in: how they reduced uncertainty in initial interactions; the question asking pattern and talk time varied by race and gender; African American communicators appear to use eye contact differently than do white communicators; African American communicators exhibit more assertive behavior; and, African American communicators displayed a heightened emotional expressiveness. Hence, African American communicator style is characterized as more outgoing, assertive, and expressive than white communicator style.

Foeman and Pressley (1987) found that African Americans tend to confront individuals immediately when dealing with conflict. As cited by Foeman and Pressley (1987), Royce (1982) stated that an African American must fairly consistently deal with stereotypes of African Americans, and whites, though they tend to think of each other as individuals, think of blacks in more sweeping terms.

Booth-Butterfield and Jordan (1989) stated that in order to elicit favorable evaluations, African American communicators often find they need to emulate white communication style in educational settings. Citing Rubins' study (1986), African American communication effectiveness suggested that adaptation to predominantly white standards must occur for African Americans to be perceived as effective communicators in racially heterogeneous classrooms.

Even less cross-cultural research has been done with Hispanics, Native Americans, and Asian Americans. One study done by Meredith (1988) found that Japanese Americans and female students preferred a more "female" style of teaching, where the teacher exhibited openness, warmth, respect, and accessibility.

Acknowledging the complexity of contextual variables, and the implications of sociocultural variables, should lead us in the direction of future research. The sociocultural variables present another dimension required to accurately assess student evaluation of instruction. The macro approach of generalizability of findings in this research

area, needs to be balanced with a micro approach: until stereotypic dimensions inherent in human behavior are explored, we will continue to have research reflect the dominant culture.

Implications

As stated by Baker (1984) to avoid the trappings of ethnocentric bias, researchers must begin to focus on cultural values, different verbal and nonverbal communication norms, and stereotyping. Implications for future research are: (1) Teacher evaluation instruments in practice should be analyzed for gender and race differences in communication patterns; (2) General university-wide norms or even faculty-wide norms in a particular college/school or multi-program department, should not be established; (3) Possibly, the most useful evaluation system will include common contextual variable norms, and; (4) More research is needed in sociocultural contexts to ensure student evaluation of instruction instruments are not stereotypic biased.

TABLE 1 DIMENSIONS OF CONTEXT VARIABLES

COURSE VARIABLES

Required/elective, Day or evening, Course level, Lecture v discussion, Learning value, Organization, Exams/grades, Assignments, Workload difficulty, Class size, and Academic discipline

INSTRUCTOR VARIABLES

Rank, Gender, Full-time v. part-time, Individual rapport, Years teaching, and Personality characteristics (i.e., warmth, enthusiasm)

STUDENT VARIABLES

Full-time v. part-time, Expected grade, Prior interest, Academic major v. minor, Grade point average, Group interaction, Gender, and Personality characteristics

ADMINISTRATION VARIABLES

Student anonymity, Direction giving, Instructor remains in classroom, When in semester evaluations are given, etc.

INSTRUMENT VARIABLES

Placement of items, Number of response alternatives, Negative wording of items, and the Labeling of all scale points versus labeling only end points.

TABLE 2 GENDER PATTERNS OF COMMUNICATION

Male Patterns

More frequent use of joking
Shakeshaft,1987,

Aggressive Speech
Scott, 1979

Interruptions in conversations with females
Scott, 1979

Greater amounts of talking
Scott, 1979

Lower pitch levels
Scott, 1979

Demanding voice
Deep voice
Boastful speech
Quantifying modifiers
Use swear words
Dominating speech
Loud speech
Show anger
Straight to the point
Militant speech
Hostile verbs
Use slang
Authoritarian speech
Forceful speech
Lean back while talking
Aggressive speech
Blunt speech
Interrupt women
Humor in speech
Passive voice
Prefers impersonal
Generalizes, 3rd person
Evidence of fact rather than feeling
Scott, 1979;
Shakeshaft, 1987

TABLE 3 GENDER PATTERNS OF COMMUNICATION

Female Patterns

Correct speech forms Scott, 1979	Enunciate clearly
	High pitch
	Use hands and face to express ideas
	Gossip
Dynamic intonations, wide range of pitch Shakeshaft, 1987	Concern for listener
	Gentle speech
	Fast speech
	Use of intensifiers
	Talk about trivial topics
Polite, cheerful intonation Scott, 1979	Wide range of rate and pitch
	Friendly speech
	Talk a lot
	Emotional speech
	Use many details
	Smooth speech
Use of expressive intensifiers Scott, 1979; Lakoff, 1975;	Open, self-revealing speech
	Enthusiastic speech
	Smile a lot when talking
	Good grammar
	Polite speech
	Question intonation
Use of questions to express opinions Lakoff, 1975; Shakeshaft, 1987	Tag questions
	Use of qualifiers
	Superlatives, diminutives Scott, 1979; Shakeshaft, 1987

TABLE 4 COMMUNICATION PATTERNS AND STUDENT EVALUATION OF INSTRUCTION

Communication Pattern Differences

Females, more than males, were rated significantly higher on items regarding:

Used personal examples in elaborating course content,

Were emotionally involved at times with course topics

Used a wide range of rate and pitch when speaking

Pointed out content areas of personal uncertainty

Student Evaluation Of Instruction Differences

Males, more than females, were rated significantly higher on items regarding:

Course clarity,

Stating objectives, and

Organization

Females, more than males, were rated significantly higher on items regarding:

Enthusiasm, and

Interest.

Relationship Between Gender Communication Patterns And Student Evaluation Of Instruction small to moderate positive correlations were found between:

The use of personal examples and all evaluation items,

Emotional involvement and items reflecting enthusiasm and interest, and

The use of wide range of rate and pitch, when speaking with items concerning enthusiasm and interest.

TABLE 5 AFRICAN AMERICAN PATTERNS OF COMMUNICATION

Confront individuals immediately	Foeman & Pressley, 1987
Tentative	Booth-Butterfield & Jordan, 1989
Use Eye Contact	Aiello & Jones, 1970; Erikson, 1979, LaFrance & Mayo, 1976
High Emotional Expressiveness	Foeman & Pressley, 1987; Gumperz & Tannen, 1979
Assertiveness	Foeman & Pressley, 1987

References

Abrami, P. C., Cohen, P. A. & d'Apollonia, S. (1988). Review of Educational Research, 58 (2), 151-179.

Aiello, J. & Jones, S. (1971). Field study of the proxemic behavior of young school children in three subcultural groups. Journal of Personality and Social Psychology, 19, 351-356.

Anderson, J. F. (1979). Teacher immediacy as a predictor of teaching effectiveness. In D. Nimmo (Ed.), Communication Yearbook, 3. New Brunswick, N.J.: Transaction Books, 543-560.

Babad, E., Bernieri, F. & Rosenthal, R. (1989). Nonverbal communication and leakage in the behavior of biased and unbiased teachers. Journal of Personality and Social Psychology, 56 (1), 89-94.

Baird, J. E., & Bradley, P. H. (1979). Styles of management and communication: A comparative study of men and women. Communication Monographs, 46 (2), 101-111.

Baker, D. C. (1984). A new relationship: intercultural communication and discourse analysis. Paper presented at the meeting of Central States Speech Association, Chicago.

Basow, S. A. & Distenfeld, M. S. (1985). Teacher expressiveness: More important for male teachers than female teachers? Journal of Educational Psychology, 77 (1), 45-52.

Basow, S. A. & Howe, K. G. (1987). Evaluations of college professors: Effects of professors' sex-type, and sex, and students' sex. Psychological Reports, 60, 671-678.

Bennett, S. K. (1982). Student perceptions of and expectations for male and female instructors: Evidence relating to the question of gender bias in teaching evaluation. Journal of Educational Psychology, 74 (2), 170-179.

Booth-Butterfield, M. & Jordan, F. (1989). Communication adaptation among racially homogeneous and heterogeneousgroups. The Southern Communication Journal, 54, 253-272.

Bormann, E. G. (1980). Communication theory. New York: Holt, Rinehart and Winston.

Brady, P. J. (1989). Do students evaluate professors from a consumer-product standpoint? A paper presented at themeeting of the American Educational Research Association, San Francisco.

Brandenburg, D. C., Derry, S. & Hengstler, D. D. (1978). Validation of an item classification scheme for a student rating item catalog. Paper presented at National Council on Measurement in Education annual meeting, Toronto.

Braskamp, L. A., Brandenburg, D. C. & Ory, J. C. (1984). Evaluating teaching effectiveness. Beverly Hills: Sage Publishing.

Cashin, W. E. (1988). Student ratings of teaching: A summary of the research. Center for Faculty Evaluation and Development Kansas State University, Manhattan, KS.

Centra, J. A. (1979). Determining faculty effectiveness. San Francisco: Jossey-Bass.

Cranton, P. A. & Smith, R. A. (1986). A new look at the effect of course characteristics on student ratings of instruction. American Educational Research Journal, 23 (1), 117-128.

Deshpande, A S., Webb, S. C. & Marks, E. (1970). Student perceptions of engineering instructor behaviors. American Educational Research Journal, 7 (3), 289-305.

Doyle, K. O. Jr. (1983). Evaluating teaching. Lexington, MA: Lexington Books.

Erikson, F. (1979). Talking down: Some cultural sources of miscommunication in interracial interviews. In A. Wolf-gang (Ed.), Nonverbal Behavior Applications and Cultural Implications. New York: Academic Press, 99-126.

Foeman, A. K. & Pressley, G. (1987). Ethnic culture and corporate culture: Using black styles in organizations. Communication Quarterly, 35 (4), 293-307.

Gumperz, J. & Tannen, D. (1979). Individual and social differences in language use. In W. Wang and C. Fillmore (Eds.), Individual differences in language ability and language behavior. New York: Academic Press.

Harris, M. B. (1976). The effects of sex, sex-stereotyped descriptions, and institution on evaluations of teachers. Sex Roles, 2 (1), 15-21.

Hoffman, R. G. (1978). Variables affecting university student ratings of instructor behavior. American Educational Research Journal, 15, 287-299.

Kahn, L. S. (1984). Group process and sex difference. Psychology of Women Quarterly, 8 (3), 261-281.

Kaschak, E. (1978). Sex Bias in student evaluations of college professors. Psychology of Women Quarterly, 2, 235-243.

Kaschak, E. (1981). Another look at sex bias in students' evaluations of professors: Do winners get the recognition that they have been given? Psychology of Women Quarterly, 5 (5), 767-772.

Kearney, P. & McCroskey, J. C. (1980). Communication apprehension and teacher effectiveness. In D. Nimmo (Ed.), Communication Yearbook, 4. New Brunswick, N. J.: Transaction Books, 533-552.

Kotthoff, H. (1984). Conversational humor: Observations of sex specific behavior. Women and Language, 8 (1/2), 14-15.

LaFrance, M. & Mayo, C. (1976). Racial differences in gaze behavior during conversation. Journal of Personality and Social Psychology, 33, 547-552.

Lakoff, R. (1975). Language and womans' place. Language and Society, 1 (2), 45-80.

Marsh, H. W. (1980). The influence of student, course, and instructor characteristics in the evaluations of teaching. American Educational Research Journal, 17, 219-237.

(1984). Students' evaluations of university teaching: Dimensionality, reliability, validity, potential bias, and utility. Journal of Educational Psychology, 76 (5), 707-754.

(1987). Students' evaluations of university teaching: Research findings, methodological issues, and directions for future research. Elmsford, New York: Pergamon Press.

Marsh, H., Overall, J. & Kesler, S. (1979). Class size, students' evaluations and instructional effectiveness. American Educational Research Journal, 16, 57-69.

Martin, E. (1984). Power and authority in the classroom: Sexist stereotypes in teaching evaluation. Journal of Women in Culture and Society, 9, 482-492.

Meredith, G. M. (1988). Ethnicity and sex differences in the concept of the ideal college teacher. Psychological Reports, 63, 332-334.

Norton, R. W. (1977). Teacher Effectiveness as a function of communicator style. In B. D. Ruben (Ed.), Communication Yearbook, 1. New Brunswick, N. J.: Transaction Books, 525-542.

Papalewis, R. & Brown, R. (1989). Gender Communication Patterns and student evaluation of instruction. A paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.

(1989). Communication style, student perception and teacher evaluation: The influence of Gender. A colloquium presented at the University of Sydney, Australia.

Papalewis, R. & Brown, R. (1990). Evaluating college teaching effectiveness: Issues of gender communication patterns. A paper presented at the meeting of the Association of Teacher Educators, Las Vegas, February.

Royce, A. P. (1982). Ethnic identity. Bloomington, Indiana: Indiana University Press.

Rubin, R. (1986). A response to ethnicity, communication competency and classroom success. Western Journal of Speech Communication, 50, 279-282.

Rubin R. B. (1981). Ideal traits and terms of address for male and female college professors. Journal of Personality and Social Psychology, 41 (5), 966-974.

Schein, V. E. (1975). Relationships between sex role stere types and requisite management characteristics among female managers. Journal of Applied Psychology, 60 (3), 340-344.

Schnell, J. A. (1987). Enhancement of cross-cultural communication within a multi-ethnic environment: The educational function of the U.S. Air Force Office of Social Action. Paper presented at the meeting of National Association for Ethnic Studies Conference, San Diego, CA.

Scott, K. P. (1979). Language and gender: Stereotypes revisited. Paper presented at the annual meeting of the American Educational Research Association, San Francisco.

Shakeshaft, C. (1987). Women in educational administration. Beverly Hills: Sage Publications.

Wheeless, V. E. & Potori, P. F. (1989). Student assessment of teacher masculinity and femininity: A test of the sex role congruency hypothesis on student attitudes toward learning. Journal of Educational Psychology, 81 (2), 259-262.