A segment of the socialization process of graduate students seeking advanced degrees in education is explored in order to discover how the students are socialized to the norm of cognitive rationality. The correlates of graduate student participation in certain scholarly activities with the students' perceptions of their academic program are investigated along three dimensions: support for scholarship, curriculum, and faculty encouragement. The mediating effects of gender, race, area of concentration, and level of graduate study on such scholarly participation by graduate students are discussed. Data for the research came from a survey of recent graduates (N=738) from a school of education in a state-funded, regional, research university. The survey's goal was the assessment of students' satisfaction with several dimensions of their student experiences. Results indicate women are apparently disadvantaged in comparison to their male counterparts when it comes to participation in scholarly activities as graduate students, even in the field of education where there are plenty of opportunities for women to earn the doctorate. Contains 17 references. (SM)
GRADUATE STUDENT SCHOLARLY ACTIVITIES:
GENDER AND PERCEIVED PROGRAM SUPPORT*

by

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It is generally accepted that educational preparation of students for any of the learned professions involves not only the acquisition of knowledge and skills, but the adoption as well of the norms and values of that profession. Socialization in this sense, may be defined as "the process by which persons acquire the knowledge, skills, and dispositions that make them more or less able members of a society" (Brim and Wheeler, 1966, p.3). In this definition "society" may be interpreted as a profession or community of scholars which is consistent with the view of Goode. (1969). Since a crucial aspect of a profession is adherence to a set of professional norms (Parsons, 1954), the socialization process into the professions is of particular importance. This study assumes that the dominant norm of graduate education is cognitive rationality (Parsons and Platt, 1975) and that socialization to this norm can be observed in the performance of certain scholarly activities.

The purpose of this paper is to explore a segment of the socialization process of graduate students seeking advanced degrees in education in order to discover how they are socialized to the norm of cognitive rationality. Specifically, this paper investigates the correlates of student participation in certain scholarly activities with the graduate students' perceptions of their academic program along three dimensions: support for scholarship, curriculum, and faculty encouragement. In addition, attention is
paid to the mediating effects of gender, race, area of concentration, and level of graduate study on such scholarly participation by graduate students.

THEORETICAL BACKGROUND

There are a number of conceptual and empirical works on professional socialization. Rosen and Bates (1967) use a structural approach when looking at the organizations in which socialization occurs and at the role-players (students and faculty) within the organization. For them, professional socialization is reproductive, a process in which, in addition to transmitting knowledge, the faculty member is a model "embodying, representing and dramatizing--the goal toward which the neophyte is moving" (p. 74). The students learn professional behavior by imitating faculty and by being rewarded by the faculty for that imitation.

In Scholars in the Making, Katz and Hartnett (1976) discuss several elements about academic departments which affect socialization of graduate students. Included among them are the student-faculty relationship, the importance of teaching to the faculty, the curriculum, and the sense of "community". The latter can be interpreted as the department's having a clearly defined and accepted organizational structure, with mutually acceptable norms and values. Such a community optimizes the socialization experience for students.

Bargar and Mayo-Chamberlain (1983) stress that the student's perception that an advisor is providing realistic encouragement and
advice is a critical component of the graduate school experience. Once again, the assumption is made that a "good" experience is one which optimizes achievement of the direct outcomes of graduate school, the socialized scholar.

Merton, Reaider, and Kendall (1957) use a structural-functional perspective when, in the Student Physician they defined socialization as a "process through which individuals are inducted into their culture. It involves the acquisition of attitudes and values, of skills, and behavior patterns making up social roles established in the social structure" (p. 40). They stress that students, in this case student physicians, "learn a professional role by so combining its component knowledge and skills, attitudes and values as to be motivated and able to perform this role in a professionally and socially acceptable fashion" (p. 41). The students' perceptions of organizational support for particular role behaviors are important agents of socialization.

John Pease (1967) agrees that the students' observation of faculty behavior and the interactions between student and faculty are significant components of the socialization process. Pease asserts that faculty act as socializing agents by formally introducing students to the norms and values of professional behavior and by informally acting as role-models. Pease claims that through interaction with a role-model, a student becomes committed to and begins to perform activities which are an expression of the professional role to which he is being socialized. In a sample of approximately 350 graduate students, Pease
found a strong positive relationship between informal student-faculty interaction and the student's attendance at, and presenting of papers to professional meetings, as well as the publication of articles in professional journals. He concluded that the more informal and frequent, and in the student's view satisfactory, the student-faculty interactions are the greater will be a student's participation in these activities.

Hite (1985) concluded from his study of the socialization experiences of 538 graduate students in 27 fields that female students perceived less faculty support than their male counterparts, even in traditional fields of study. Hite also found a conflict between the graduate student role and the scholar role which, she theorized, may be exacerbated by the lack of female mentors and role models.

Finally, Bucher and Stelling in Becoming Professional (1977) gathered evidence to support their theory that socialization to a profession results in students' anticipating while still in graduate school the expected behavior of a profession and concluded that this behavior reflected a commitment to the norms and values of the profession. Thus a professional identify was established prior to actual assumption of the professional status through a process of anticipatory socialization.

This would support the assertion of Cresswell (1985) who found that one of the best predictors of scholarly productivity among faculty is demonstrated scholarly productivity while still in graduate school. Therefore, it would seem reasonable that looking
at students' behavior while in graduate school would be a reasonable means of assessing the extent to which norms have been incorporated into behavior that can be expected to predict professional behavior after graduation.

In summary, the literature supports the conceptual notions of socialization which the present study adopts. These conceptual notions are: first, professional socialization has components which are formal and informal as well as structural (organizational) and interpersonal; second, that the students' perceptions of and satisfaction with organizational and faculty support of scholarly behavior (that is, socialized behavior) are reasonable measures of the socializing experiences; and, finally, that the amount of pre-degree scholarly activities is a reliable indicator of anticipatory socialization to the educational professions. Consequently a student's scholarly activities while in graduate school may be construed as a measure of his professional socialization.

A major shortcoming of the research on these issues is that there are few recent studies of actual scholarly behavior while students were enrolled in their graduate degree programs. Hence, it is difficult to relate students' perceptions of the climate in graduate school to actual non-classroom scholarly behavior while enrolled. Furthermore, there are few studies that deal with gender differences or that focus exclusively on education, the academic field in which the largest number of graduate degrees are earned on an annual basis.
This study looks at the effect of certain program, faculty, and attitudinal variables on the participation of education graduate students in scholarly activities. It is expected that a student's perception of an satisfaction with institutional and faculty support for and orientation toward scholarly activities socialize a student to the norm of cognitive rationality which will then be manifested in the student's participation in scholarly activities. The mentoring literature also anticipates that women and non-white students will participate in fewer scholarly activities than white men.

DATA SOURCE AND METHODS

The data for the research come from a survey of recent graduates from a School of Education in a state-funded, regional, research university. While the data comes from a single institution, it is typical of the type of institution from which the great majority of education doctoral degrees are earned. The survey, conducted in conjunction with an accreditation review, had as one of its primary goals the assessment of students' satisfaction with several dimensions of their student experience. The sample for the present research includes 738 respondents who had earned a graduate (masters or doctoral) degree during the 10-year period preceding the survey. Slightly less than a third of these graduates receive doctorates. The mean age of the respondents was 36, 67% were women, and 5% were black.

Data analysis was done using the SPSS-X statistical package
of the university's mainframe computer. Data reduction was accomplished by scaling sets of conceptually related items and computing composite scale scores for each dimension.

The dependent variable, participation in scholarly activities, was an 8-item Guttman scale with a reliability of .756 (Lambda). Respondents were asked to indicate by "yes" or "no" whether they had done any of the following while they were enrolled in their graduate program: held membership in a professional organization; presented a paper at a conference or convention; participated in a research project; performed research on their own (not part of a course); authored, alone or with others, a paper submitted for publication; authored, alone or with others, a paper accepted for publication; and work in a setting providing direct professional experience (e.g., internship, consulting).

The items used in this scale were originally developed by Braxton and Toombs (1982) who separated the scholarly activities of faculty into two domains: External Disciplinary-Colleague and Institutional Local-Community. They found that faculty high in publishing had higher levels of performance in both domains than low publishers. However, they asserted that publication alone is not an indication of scholarly activity among faculty and that other activities should also be included. They defined "scholarly work" as "varied professional activities...which involves the application or use of knowledge and skill acquired through and certified by doctoral research training" (Braxton and Toombs, 1982, p. 267). They suggested that socialization results in developing
the ability to perform certain activities. The present study assumes that participation in scholarly activities indicates commitment to academic norms.

The independent variables, perceptions of the respondents' academic degree programs, were derived by factor analyzing a set of 24 items covering satisfaction with different aspects of the program environment. Each item was rated on a 7-point continuum. Three satisfaction factors emerged from the analysis: satisfaction with program curriculum and instruction (Eigenvalue = 13.0, 54.2% of explained variance), satisfaction with faculty support and guidance (Eigenvalue = 1.91, 7.0% of explained variance), and satisfaction with faculty and student orientation toward scholarly activity (Eigenvalue = 1.06, 4.4% of explained variance). Items were summed to form a single score for each factor.

Items include in satisfaction with program curriculum and instruction factor and their loadings (varimax rotation, Kaiser normalization) were: the level of difficulty of your major program (factor loading .77); the amount of structure in the curriculum (factor loading .66).

Items included in the satisfaction with faculty support and guidance factor and their loadings (varimax rotation, Kaiser normalization) were: the availability of enrichment activities offered in addition to regular classes (seminars, colloquia, social events, etc.) (factor loading .52); the orientation of the faculty toward student problems and concerns (factor loading .78); the orientation of the faculty to the importance of good teaching...
(factor loading .56); the accessibility of instructors for conferences outside of class (factor loading .83); the quality of academic guidance (factor loading .77); the quality of occupational/professional guidance (factor loading .69); the communication between faculty and students regarding student needs, concerns, suggestions (factor loading .85); the program support staff (secretarial, clerical, etc.) who deal directly with students (factor loading .58); and size of classes (factor loading .57).

Items included in the satisfaction with faculty and student orientation toward scholarly activity factor and their loadings (varimax rotation, Kaiser normalization) were: the orientation of the department toward scholarly activities (research, writing, etc.) by the faculty (factor loading .74); and the orientation of the department toward scholarly activities (research, writing, etc., other than thesis-dissertation) by the students (factor loading .64).

The score for graduate student scholarly activity was regressed on the three student perception scores, along with age, dummy variables for gender (female), degree earned (doctorate), and minority status (black).

THE RESULTS

Table 1 shows the regression results. Multiple R for the final equation was .526 (R-square = .277). Only two variables reached significance in the final regression equation, (a) having earned a doctoral degree and (b) being female. As would be
expected, graduate student scholarly activity was positively related to having earned a doctoral degree, net of all other variables in the equation. Also consistent with expectations, being female was negatively associated with graduate student scholarly activity, net of all other variables in the equation. None of the three perceived satisfaction factors reached significance.

(DISCUSSION OF THE RESULTS)

There are a number of alternative explanations for why none of the perceive satisfaction factors reached significance. Three possibilities are the weakness of satisfaction as a variable, role conflict experienced by students, and discrepancies between institutional and faculty goals and student aspirations.

First, satisfaction is known to be a weak variable. Response to the measurement instrument required first an assessment of the situation under consideration (a perception) and then a decision as to the level of satisfaction felt by the respondent with the perceived situation. This leads to satisfaction's being a weak variable. For example, a student may be satisfied with a program of study because the curriculum is undemanding. In other words the use of the level of student satisfaction with a perceived situation assumes that the student has aspirations for the graduate experience and professional performance which are congruent with the dependent variable. Some students, in fact, may be highly
satisfied with a program that requires research productivity, while others may express extreme dissatisfaction with the same. Consequently, experiences and perceptions of these experiences vary. In another example, one student may have encountered considerable academic difficulty and have been dissatisfied with the manner in which a professor provided assistance. Another student may not expect a professor to provide individual academic counseling. Again, because experiences and expectations vary, satisfaction will vary. Further, satisfaction with a course of study is not necessarily related to participation in scholarly activities. Although the graduate school experience is ostensibly planned with the intent of socializing students to professional norms and values, obviously, a student can move through a program of study and graduate (particularly at the masters degree level) without being socialized. A student's level of satisfaction can be related to his perception of his ability to out-maneuver the system.

Second, role conflict, as described by Getzels (1963) may result in diminished socialization to the norm of cognitive rationality. The majority of graduate students at the sampled institution are employed full-time and attend school on a part-time basis. The study fails to take into account the role expectations for more than one institution as well as the students' personal need dispositions. Getzels claims that both role expectations and needs dispositions are factors in social behavior. The independent variables in this study only operationalize the expectations of one
role and therefore are unable to adequately account for other types of social behavior.

Third, the possibility that the occupational goals of the students and the stated university goals are not congruent is great. Departmental policies and practices and institutional mission statements give strong emphasis to scholarly student outcomes and to research productivity on the part of the university faculty. However, stated institutional goals, faculty expectations, and actual student outcomes are not always congruent. It is entirely possible that the scale of scholarly activities devised for this study does not reflect the actual outcomes of socialization. In the sample institution, few graduates go on to positions in post-secondary education. If one accepts that college teaching and teaching in basic education reflect a different set of professional norms, the measuring of socialization outcomes only in terms of scholarly behavior will show poor socialization overall. Measuring the level of acceptance of the norms and values of public school administrators might show consistently high levels of socialization. If students are looking for occupational training rather than cognitive rationality, graduate satisfaction with an educational experience which resulted in scholarly behavior would be lower than satisfaction with an experience which provided for occupational certification.

Being female was found to be related to low socialization to scholarly activities. This result does not imply that the sampled females as a group were less committed to participating in
scholarly activities than males. Although measures of academic ability in the form of GRE scores, for instance, are not available for comparisons to be made between male and female graduate students in the present study, their abilities are generally believed to be comparable. Rather, the results probably reflect the greater proportion of women who received the masters rather than the doctoral degree and, therefore, would not be expected to be as socialized to cognitive rationality.

EDUCATIONAL IMPORTANCE

This study provides evidence that even in the field of education where opportunities for women to earn the doctorate abound, they are apparently disadvantaged in comparison to their male counterparts when it comes to participation in scholarly activities while graduate students. This finding is particularly troubling in the present research because there is no net relationship of any of the departmental satisfaction factors with graduate student scholarly activity. This suggests that female graduate students do not perceive themselves to be disadvantaged along any of the departmental support dimensions (curriculum and instruction, faculty guidance, or orientation to scholarly activity), even though their reported scholarly activities while enrolled are less than those of men. Hence, improving the scholarly career prospects of women in the field of education may be even more difficult than the literature suggests since differentials in patterns of preparation are apparently not always recognized by female graduate
students as they move through their degree programs.

Moreover, the actual numbers of females who are not socialized to the expected norms may be even greater than this study suggests when the attrition rate of women is taken into consideration. Hite (1985) suggests that the lack of institutional and faculty support may be a cause of female attrition from graduate school. A look at female dropouts might reveal that they were sufficiently aware of the situation to withdraw from school perhaps reflecting the failure to be socialized to expected norms. Hite claims that same-sex mentoring yields greater research productivity, one of the measures of scholarly activity. If this is the case, their institutional goals and policies, including faculty hiring and evaluation practices, may limit the number of female mentors available for graduate students and thus perpetuate a myth that women are less productive scholars than men.
REFERENCES


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\[(R^2 = .28)\]

* p < .05