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ABSTRACT

        This qualitative study explored the professional socialization experiences of doctoral students enrolled in the school of education at a public research university with emphasis on the graduate assistantship as a mechanism for doctoral students' professional socialization, and the effect of financial concerns on graduate students' socialization were addressed. The study analyzed a variety of data including students' written personal reflections about their experiences as graduate students, interviews with three students, a focus group discussion with six students, participant observation, and a review of written documents. The study identified certain benefits received by doctoral students with research assistantships such as the provision of structurally-based opportunities for doctoral students to interact with and learn from faculty and of a ready-made peer group and associated informal socialization experiences. Research assistantships were also found to reduce students' financial concerns. (Contains 71 references.) (PRW)

THE GRADUATE ASSISTANTSHIP:

FACILITATOR OF GRADUATE STUDENTS' PROFESSIONAL SOCIALIZATION[1]

Paper Presented at the Annual ASHE Conference

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This paper was presented at the annual meeting
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October 31 - November 3, 1996. This paper was
reviewed by ASHE and was judged to be of high
quality and of interest to others concerned with
higher education. It has therefore been selected
to be included in the ERIC collection of ASHE
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INTRODUCTION

One purpose of graduate and professional education programs is to socialize students to acquire the appropriate "professional identity" (Bragg, 1976; Katz, 1976) and become a member of the profession (Baird, 1972, 1990; Corcoran and Clark, 1984; Clark and Corcoran, 1986). The professional socialization process may be confounded by a number of factors, however, such as uncertain sources of financial support, employment outside of the department, absence of positive interactions with faculty, and demanding research assistantships. For example, in the current study, a first-year doctoral student, a single mother of three children, accepted a 50% assistantship, a twenty-hour per week job that also required enrollment in at least three courses, while working an additional part-time job. Not surprisingly, the responsibilities associated with simultaneously being a mother, an hourly employee, a graduate assistant, and a graduate student quickly became overwhelming and overshadowed the student's educational goals and objectives. As this woman reflected:

> [I]t took until the third week of September, weeks spent running a race with time, every minute planned with no time to sit and reflect. There was no time to do anything well... I was exhausted, too exhausted to seek people out for support, and began to hate my life. Graduate school didn't seem worth selling my soul for.

This woman was able to regain some sense of control over her life by persuading her mother to come to live with her. Although the particular roles a doctoral student must juggle may vary, this example raises an important question: In the context of intense personal demands and financial concerns, how does a doctoral student manage to become a full-fledged member of the new profession, a primary goal of attending graduate school?

The purpose of this paper is to explore the professional socialization experiences of doctoral students enrolled in one school of education at one public research university. Two aspects of their experiences are emphasized: 1) the role of the graduate assistantship as a mechanism for doctoral students' professional socialization; and 2) the effect of financial concerns on the socialization process. While previous studies generally relied upon survey data to investigate these issues (e.g., Girves and Wemmerus,

1988; Bowen and Rudenstine, 1992; Andrieu and St. John, 1993; Ethington and Pisani, 1993), this study uses the experiences of doctoral students, as described in the words and stories of the students themselves, in order to obtain more comprehensive understandings.

This paper is organized into four sections: 1) review of the literature and prior research on the socialization of graduate students and the effects of the graduate assistantship and financial support upon graduate students' experiences; 2) presentation of the research procedures and techniques used to conduct the study; 3) report of the research findings; and 4) discussion of implications and conclusions.

LITERATURE REVIEW

The purpose of this literature review is to provide a framework for interpreting the experiences of the doctoral students who participated in this study. The literature review is comprised of four sections: 1) the professional socialization of graduate students, including the purpose of graduate education programs and the role of faculty as socializing agents, role models, sponsors, and mentors; 2) the benefits of a graduate assistantship; 3) the financial aspects of attending graduate school; and 4) the limitations of prior research on graduate students' experiences.

Professional Socialization of Graduate Students

In order for a newcomer to become an accepted participant in a group, an individual must first learn the organizational culture, norms, and rules (Van Maanen, 1978; Van Maanen and Schein, 1979; Gerholm, 1990). A primary purpose of graduate and professional education programs is to socialize students to acquire the appropriate "professional identity" (Bragg, 1976; Katz, 1976) and become a member of the profession (Baird, 1972, 1990; Corcoran and Clark, 1984; Clark and Corcoran, 1986). Acquiring a professional identity involves learning not only the knowledge and skills required to perform particular job tasks, but also the attitudes, values, norms, language, and perspectives necessary to interpret experiences, interact with others, prioritize activities, and determine appropriate behavior (Bragg, 1976; Van Maanen,

3   5

1978; Van Maanen and Schein, 1979; Weiss, 1981; Clark and Corcoran, 1986; Turner and Thompson, 1993). This process may also be viewed as a psychological transition, in which a student loses one identity and develops another (Crothers, 1991).

Faculty as Socializing Agents

Interactions with faculty contribute to the professional socialization process (Bragg, 1976; Pascarella, 1980; Weiss, 1981; Girves and Wemmerus, 1988; Baird, 1990). Faculty serve as "socializing agents" who clarify goals, establish career plans, provide explanations for experiences, offer rewards and sanctions to encourage progress, evaluate performance, provide feedback and encouragement, and establish collegiality among faculty and students (Bragg, 1976; Weiss, 1981; Baird, 1990). Faculty may create positive environments for students by showing interest in students' work and welfare and engaging students in discussions about developmental issues (Bargar and Mayo-Chamberlain, 1983).

Some researchers (e.g., Weiss, 1981; Girves and Wemmerus, 1988) have shown the positive effects of student-faculty interactions. Among a nationally representative sample of students attending graduate and professional schools in 1969-70, Weiss (1981) found that "productivity" (a factor representing attend a professional meeting, pursue research with expectations to publish, present a paper at a meeting, and publish an article) and "self-concept" (a factor representing intrinsic interest in the field, self-image as a scholar or scientist rather than as a student, hope of making a significant contribution to the field, and regard for self as an intellectual) were strongly related to both the frequency of informal meetings with faculty and the perception of being treated as a "colleague" regardless of the student's year in graduate school, undergraduate grade point average, and academic discipline, as well as the prestige of the graduate school. About 31% of students who met with professors at least once each week were highly productive compared with 10% of those who met with a professor no more than once a year. About 28% of those who felt treated as colleagues were highly productive, compared with 19% of those felt they were apprentices, 12% of those who felt they were students, and 10% of those who had no faculty contact.

4

Using a sample of doctoral students who matriculated into one graduate school in fall 1977 and controlling for department characteristics, student characteristics, financial support, and faculty relationships, Girves and Wemmerus (1988) found that the variables with the largest direct effects on degree progress were being treated as a colleague by faculty and "involvement" in the program. "Involvement" was a composite representing participation in research projects, seminars, professional meetings, discussions with faculty outside the classroom, student study groups, and social activities.

Faculty as Role Models, Sponsors, and Mentors

In addition to "socializing agent," researchers have used various labels to describe faculty members' relationships with graduate students, including role model, sponsor, and mentor. According to Baird (1990), role models "exemplify the knowledge, skills, duties, attitudes, and values of the profession" (p. 368). Ideally, the faculty role model trains the student, establishes goals and monitors the student's progress, sets challenges, and provides feedback (Baird, 1990). From his review of prior research, Baird (1990) noted that not all faculty members serve as role models, primarily due to inadequate or unsatisfactory contact between the faculty and the student or to the absence of a "trusting" relationship.

As Becker and Strauss (1956) observed, one challenge facing newcomers to a field or profession is determining which skills and information are related to acceptance and advancement. A "sponsor" may assist the newcomer by providing opportunities to develop the necessary qualities and skills (Becker and Strauss, 1956), by coaching the individual through the informal norms of the profession (Clark and Corcoran, 1989), and by providing introductions, nominations, and recommendations (Reskin, 1979).

Based upon his review of prior research, Speizer (1981) concluded that the terms "sponsor" and "mentor" have been used interchangeably "to indicate older people in an organization or profession who take younger colleagues under their wings and encourage and support their career progress until they reach mid-life" (p. 708). "Mentor" has also been defined as someone of "superior rank, special achievements, and prestige" (Blackwell, 1989, p. 9) who coaches, instructs, advises, guides, and assists a protégé to accomplish

7

5

his or her goals and to develop intellectually and professionally (Blackwell, 1989; Sandler, 1989) and as "someone who takes a personal interest in providing apprenticeship opportunities for a given student" (Turner and Thompson, 1993, p. 361). Academic mentoring, a voluntary relationship, has been characterized as an "extended, trusting, and confidential relationship between two individuals who have mutual personal growth and academic progress as common goals" (Desjardins, 1993, p. 310). Mentors also focus upon enhancing students' career development in terms of productivity, leadership, rank, income, and satisfaction (Desjardins, 1993). Mentors are believed to perform a number of functions including: training the protégé to ask research questions, stimulating the acquisition of knowledge, providing educational information, supplying emotional support and encouragement, counseling the protégé to cope with stress and competing demands, fostering an understanding of the educational bureaucracy, inculcating appropriate attitudes, values, and ethics, furnishing informal instruction on interpersonal relations, offering unconditional acceptance, building self-esteem and motivation, monitoring performance, providing feedback, nominating the protégé for desirable positions and projects, and assigning projects that increase the protégé's exposure to influential colleagues (Blackwell, 1989; Desjardins, 1993). Mentors are also believed to provide experience, perspective, and distance (Desjardins, 1993). The relationship between the mentor and mentee is expected to be very close and often exclusive (Sandler, 1993).

Although some (e.g., Phillips, 1979; Baird, 1990) have assumed that having a mentor is a prerequisite to future career success, several researchers have concluded that prior research has not clearly defined or investigated the concept of "mentor" (Clark and Corcoran, 1986; Desjardins, 1993), the functions or benefits of mentors (Speizer, 1981; Merriam, 1983; Merriam, Thomas, and Zeph, 1987), or the most effective type of mentoring for graduate students (Merriam, et al., 1987). Research on mentoring is limited by the lack of a clear definition and conceptualization of "mentoring," reliance upon testimonials, opinions, and retrospectives as the source of data, use of small sample sizes, failure to examine potential negative outcomes of mentoring (e.g., exploitation, limited perspective, sexual aspects of cross-sex relationships),

8

and absence of evaluations of formal mentoring programs (Speizer, 1981; Merriam, 1983; Merriam, et al., 1987).

Benefits of Graduate Assistantships

One mechanism for socializing newcomers to a field is apprenticeship (Baird, 1990; Turner and Thompson, 1993). Several researchers have characterized graduate education in general (Baird, 1990; Anderson and Louis, 1994), and the research assistantship in particular (Roaden and Worthen, 1976; Worthen and Gardner, 1988), as an apprenticeship during which a student learns the necessary technical skills as well as the norms, standards, behaviors, and expectations of the field from faculty. Through observation of faculty and "at the bench" interactions students acquire the professional norms of academic research (Anderson and Louis, 1994).

The research assistantship has been characterized as "the most effective component of training programs" (Roaden and Worthen, 1976) and "the primary vehicle through which students in the sciences and social sciences obtain research preparation" (Heiss, 1970, p. 214). A research assistantship may provide a graduate student with opportunities to expand research knowledge and skills under the supervision of a faculty mentor, to work with and make contacts with other researchers, and to identify a dissertation topic (Heiss, 1970). Graduate assistantships have been found to facilitate the socialization process by increasing the frequency of student-faculty interactions and reducing the amount of time spent in environments with competing socialization processes (e.g., off-campus employment) (Girves and Wemmerus, 1988; Nettles, 1990). Using a sample of doctoral students who were attending one of four institutions in fall 1986 and controlling for background characteristics, characteristics of the undergraduate education, and graduate school experiences, Nettles (1990) found that graduate assistantships facilitated the development of personal and collaborative relationships with faculty, provided students and faculty with common professional interests, and reduced competing demands that limited the development of student-faculty relationships.

9

The beneficial effects of graduate assistantships upon professional socialization likely explain the positive effects of graduate assistantships upon doctoral program completion (Cook and Swanson, 1979), time to degree (Sheridan and Pyke, 1994), and scholarly productivity (Reskin, 1979; Wong and Sanders, 1983; Ethington and Pisani, 1993) found in prior research. But, the nature of the research assistantship experience has been shown to be related to career research productivity (Roaden and Worthen, 1976). Using a national sample of education professionals who once held research assistantships and controlling for sex, recency of degree, and academic ability, Roaden and Worthen found that professionals with higher levels of career productivity were those whose assistantship had been with just one faculty member. Career productivity was also higher for those whose assistantships included orientation, supervision, and instruction and more "intense" professional interactions with their supervisors (e.g., attended meetings together, discussed professional matters not directly related to work, and collaborated on research tasks). Career productivity increased with the individual's perceptions of the supervisor's evaluation of the assistant's competence, the quality of the project on which the assistant worked, and the conduciveness of the environment for research.

Moreover, Roaden and Worthen (1976) have shown that career productivity depended upon the tasks performed as a research assistant, with higher productivity levels for research assistants who conducted conceptual aspects of the research process, used a computer as a research tool, constructed research instruments, interpreted data, used a variety of statistical techniques for analyzing data, and designed statistical analyses. Those who performed secretarial tasks as part of the research assistantship had lower levels of career productivity (Roaden and Worthen, 1976).

But, not all research assistants engage in productivity-enhancing tasks. Among a sample of graduate students at five universities who held research assistantships, Worthen and Gardner (1988) concluded that although the research assistants engaged in "research activities" (e.g., reviewed literature, conceptualized research problems, and collected, coded, and interpreted data), they generally did not receive "a complete

8

10

package" of research instruction. Specifically, few research assistants drafted research proposals, designed statistical analyses, wrote research articles, or presented research papers (Worthen and Gardner, 1988).

The manner in which the faculty member and the student define the assistantship likely determines the quality of learning that occurs. Van Maanen and Schein (1979) noted that the success of "individualized socialization tactics," such as a graduate assistantship, largely depends upon the existence of an "affective relationship" between the faculty member and the student. From their retrospective interviews with faculty at one institution, Corcoran and Clark (1984) found that, compared to "representative" faculty, highly productive faculty generally described their graduate school advisors with "greater affect."

Financial Aspects of Graduate School

According to one survey of faculty, perceived barriers to the timely completion of dissertations, as well as to the quality of dissertations, include lack of student stipend, lack of financial support for faculty research in which students can participate, and holding full-time employment (Isaac, Quinlan, and Walker, 1992). Several researchers (e.g., Girves and Wemmerus, 1988; Bowen and Rudenstine, 1992; Sheridan and Pyke, 1994) have shown that students who receive financial support from their institutions (e.g., assistantships) are more likely to complete their educational programs and earn their degrees. Although the sample size was small (n=79), Sheridan and Pyke (1994) found that time-to-degree was shorter for those who received a higher amount of financial support and a graduate assistantship after controlling for demographic and academic characteristics. After controlling for student characteristics, perceptions of faculty, grades, satisfaction with their department, and departmental characteristics, Girves and Wemmerus (1988) found that "financial support" increased progress toward degree indirectly by increasing students' involvement in their programs. While Girves and Wemmerus did not separate the effects of fellowships, teaching assistantships, and research assistantships, they did find that personal resources, other employment, and loans were not related to involvement or degree progress.

11 [9]

In their study of the influence of financial support on completion rates and time-to-degree among graduate students in six academic disciplines (English, history, political science, economics, mathematics, and physics) at ten universities between 1958 and 1988, Bowen and Rudenstine (1992) found that students who received assistantships or fellowships during the first two years of the program were more likely than others to achieve "All But Dissertation" status (ABD) and to complete their doctoral degrees. Time-to-degree was 10% to 20% longer for those who relied primarily upon personal resources. A comparison between the effects of assistantships and fellowships among graduate students in English, history, and political science at one university showed that, on average, fellowships decreased time-to-degree by about one-half year but were unrelated to completion rates (Bowen and Rudenstine, 1992). Students enrolled between 1972 and 1986 who held teaching assistantships were more likely to achieve ABD status than students who received fellowships.

In contrast, using a national sample of graduate and first-professional students who attended public institutions in 1987-88 and controlling for background characteristics, characteristics of the graduate experience, educational aspirations, expected future earnings, and tuition, Andrieu and St. John (1993) found that the probability of persisting from the fall to the spring term decreased as the amount of the stipend attached to the graduate assistantship increased. Specifically, a $1,000 increase in assistantship aid decreased the probability of persisting by 0.55 percentage points. Neither the amount of loans nor the amount of grants received was associated with persistence. Andrieu and St. John concluded that the negative relationship between assistantships and persistence may indicate that holding assistantships reduces students' ability to complete their academic work.

Other researchers (Gillingham, Seneca, and Taussig, 1991) have found that financial support was not related to the amount of time students expected they would require to complete their degrees. Among American doctoral students who attended one research university in spring 1988, Gillingham, et al. found that expected time-to-degree was not related to the amount of financial aid received or to whether the student held a research or teaching assistantship after controlling for sex, age, actual time in program, hours

spent studying, enrollment status, and amount borrowed. Among foreign students, expected time-to-degree was longer for those who held teaching assistantships but shorter for those who held research assistantships. The absence of a relationship between financial support and time to degree among United States citizens may be attributable to the use of a cross-sectional database to examine persistence.

Limitations of prior research

The research reviewed in this paper is subject to four limitations: 1) absence of research using socialization as the conceptual framework for examining the effects of financial support upon graduate students' experiences, 2) the lack of relevance of the findings to today's graduate students, 3) methodological problems, and 4) the reliance upon data gathered from surveys.

Several researchers (e.g., Bragg, 1976; Pascarella, 1980; Weiss, 1981; Baird, 1990) have explored faculty-student interactions and have speculated upon the importance of mentors in the professional socialization process. But, with the exception of Girves and Wemmerus (1988), few have explicitly examined the effects of financial support upon the professional socialization process. As a tuition waiver and stipend are typically included, graduate assistantships may facilitate socialization not only by providing opportunities for students to interact informally with faculty but also by reducing the amount of time spent working outside the department and by alleviating the stress and anxiety associated with uncertain financial support.

A second limitation of prior research pertains to the relevance of the findings to today's graduate students. A number of the studies reviewed in this section involved samples of graduate students who were enrolled many years ago. For example, Reskin (1979) examined students who earned doctoral degrees between 1955 and 1961, Cook and Swanson (1978) included individuals who matriculated into one doctoral program between 1964 and the early 1970's, Bargar and Mayo-Chamberlain (1983) examined doctoral students who were enrolled between 1968 and 1975, Wong and Sanders (1983) examined those who received their doctorate between 1972 and 1978, Girves and Wemmerus (1988) examined students who first

13

11

enrolled in fall 1977, Weiss (1981) used a national sample of graduate students who were enrolled in 1969, and Hartnett (1981) used a sample of students who were enrolled in 1975. Nonetheless, Hauptman (1986) reported that between 1974 and 1984 the types and sources of financial support awarded to graduate students changed. Between 1974 and 1984 the percent of aid awarded as institutional assistantships fell from 25% to 20% while the percent of aid awarded as federal loans increased from 14% to 44%. The share of financial aid awarded by the federal government increased from 50% in 1974 to 60% 1984 while the share awarded by institutions decreased from 32% to 26% (Hauptman, 1986). Similarly, Stark, Lowther, and Austin (1985) found that, among a sample of doctoral recipients in education at one research university, the percent of students enrolled full-time with an assistantship during the course work portion of the program declined from 28% of women who received their doctorates between 1964 and 1970 to 18% of women who received their doctorates between 1974 and 1980. For men the decline was from 24% to 15% (Stark, et al., 1985). Therefore, research that employs more recent samples of graduate students is required in order to determine if the trends and relationships identified in prior studies remain valid.

Third, prior research is limited by methodological problems. A number of studies used descriptive statistics only (e.g., Baird, 1972; Hartnett, 1981; Bargar and Mayo-Chamberlain, 1983; Berg and Ferber, 1983; Worthen and Gardner, 1988; Isaac, et al., 1992), ignoring the possibility that other factors explained the observed relationships between financial support and/or the graduate assistantship and educational outcomes. Some studies that utilized multivariate analyses relied upon imperfect proxies for some variables and omitted some other potential explanatory variables, most notably ability (e.g., Roaden and Worthen, 1976; Reskin, 1979; Gillingham, et al., 1991). Additionally, a few studies used cross sectional data to examine longitudinal processes such as persistence (Andrieu and St. John, 1993).

A fourth limitation of previous research is the predominance of studies that relied upon surveys as the source of data on students' experiences (e.g., Girves and Wemmerus, 1988; Bowen and Rudenstine, 1992; Sawyer and Wilson, 1992; Andrieu and St. John, 1993; Ethington and Pisani, 1993). The representativeness of samples in some studies that utilized survey data is limited by low response rates (e.g.,

12

14

28% in the survey used by Gillingham, et al., 1991, and 39% in the survey used by Berg and Ferber, 1983).
While non-respondents and respondents may be comparable in terms of demographic characteristics, non-respondents likely differ from respondents in ways important to the study's purpose, particularly in terms of the characteristics of students' experiences.

Finally, the value of survey data depends upon researchers' ability to ask the "right" questions, to provide respondents with the "correct" set of possible answers, and to ensure that respondents and researchers share the same definitions and interpretations of the questions and answers. Descriptive analyses of survey responses do not reveal how, why, or to what extent various factors interact to influence students' experiences. Furthermore, students' experiences may be too complex to be adequately modeled using survey data and regression analyses. As Lipschutz (1993) noted, experiences ought to be examined from the perspectives of the doctoral students' themselves. Therefore, we cannot rely exclusively upon quantitative methods and survey data to fully understand the nature of doctoral students' experiences.

RESEARCH DESIGN

In order to obtain a more accurate and comprehensive understanding of their experiences, we collected first-hand experiences of doctoral students who were enrolled full-time in one school of education at one public research university in the spring 1995 semester. We gathered data from a variety of sources, including students' written personal reflections about their experiences as graduate students, one-on-one interviews, a focus group discussion, participant observation, and a review of written documents. We combined these multiple sources of data in order to confirm and revise our interpretations and to ensure that our conclusions were appropriate.

Research Method

As part of one graduate class in one school of education, the professor required students to write a one to two page personal reflection about a "Memorable Experience" as a student in the school. The

professor also required students to interview other graduate students in order to collect additional "Memorable Experiences." Although students were free to relate any "Memorable Experience," many described their experiences as graduate assistants, their interactions with faculty, and their financial concerns and funding issues. Approximately fifty pages of data were generated, and about 25 pages were relevant to this study.

In order to obtain a better understanding of doctoral students' perceptions of their experiences, we also conducted one-on-one interviews, led a focus group discussion on financial issues, and engaged in participant observation. Two of the three students who were interviewed specifically about financial concerns were in the second year of their doctoral programs (both men) and one was in the third year (a woman). The focus group was comprised of six, white, first-year doctoral students (three men and three women). For the examination of the effects of assistantships on students' experiences, informants were second, third, and fourth year doctoral students who had held assistantships throughout their enrollment in the school of education. Two were female and one was male. The interviews and focus group discussion were tape-recorded and transcribed.

Content analysis was used to reduce the data and identify salient themes. Since qualitative researchers are interested in understanding how people make sense of their lives, their experiences, and the structures of their environment (Creswell, 1994), content analyses were conducted from the students' point of view.

Limitations of this Study

This study is subject to five limitations. First, this examination of the socialization of doctoral students is necessarily limited by the perspectives of the students selected for the study. In order to minimize interactions by department, discipline, and enrollment status, this study includes only full-time doctoral students enrolled in one school of education at one public research university. In addition, since students masked all references to their individual identities and personal characteristics in their "Memorable

14
16

Experiences," this paper does not examine differences in the experiences of students in terms of their sex, race, enrollment status, or citizenship.

Third, all students who contributed a written "Memorable Experience" were in the first stage of their graduate studies. Bowen and Rudenstine (1992) observed that, in almost all doctoral programs, students progress through three distinct stages. The first stage, which lasts two to three years, focuses upon completion of required course work. During the second stage, additional degree requirements (e.g., qualifying examinations, foreign language requirements, dissertation topic and committee selection) are satisfied. The third stage involves researching, writing, and defending the dissertation. While the students who were interviewed represented all three stages, a relatively small number were in the second and third stages.

Prior research (e.g., Bowen and Rudenstine, 1992) suggests that the salient aspects of students' experiences change as students progress through their doctoral programs. Consequently, some (e.g., Kerlin, 1995) have called for research on doctoral students who are at specific stages in their doctoral studies (e.g., completed the first year of course work, completed comprehensive examinations, during the dissertation). Nonetheless, in the current study we do not attempt to identify variations in the experiences of students who are at different stages in their doctoral studies.

Fourth, in the current study "assistantship" refers almost exclusively to a research assistantship. Most new full-time doctoral students in this school of education receive a ten-hour per week assistantship (a 25% appointment) with an assigned faculty member. The assistantship includes a tuition waiver and a stipend and is for the first-year of full-time doctoral study only. Few students who participated in the current study held teaching assistantships since one of the programs in this school of education offers no undergraduate courses or degrees.

The fifth limitation of the current study pertains to the authors' dual roles as researchers and doctoral students in the school being studied. While being members of the school facilitated the process of soliciting willing informants, informants may not have been completely candid about the more personal and sensitive

17

aspects of their experiences. On the other hand, while students may have been cautious in their speech, we were able to compare what they said with what we actually saw happening.

Contribution to Existing Research on Doctoral Students' Experiences

Despite these limitations, the current study contributes to existing research on doctoral students' experiences in four respects. First, by focusing upon one group of doctoral students in one school of education at one institution, the findings are not confounded by differences across departments, disciplines, or institutions. Second, by relying upon interviews, written personal statements, and focus group discussions, the data contribute to more in-depth and comprehensive understandings of the professional socialization process for a small group of students. The findings from the current study can be compared with the experiences of students in other disciplines and at other institutions. Third, this study provides an assessment of the effects of current financial aid policies and practices upon the experiences of a recent group of doctoral students. Fourth, unlike prior research, this study interprets the effects of financial support and the graduate assistantship upon students' experiences within the context of the professional socialization process.

FINDINGS

The findings are organized into six sections: 1) psychological aspects; 2) interactions with faculty; 3) interactions with the peer group; 4) academic experiences; 5) financial concerns; and 6) progress toward degree.

Psychological Aspects

One developmental task facing graduate students is to adopt a professional identity that is consistent with the new field (Lozoff, 1976; Crothers, 1991). This process may be stressful, as the individual may question the benefits from and the appropriateness of the chosen occupation (Halleck, 1976; Lozoff, 1976).

Role Definition

Based upon their analyses of surveys and interviews with graduate students, Hartnett and Katz (1976) found that one of the "root problems" associated with graduate school is that:

> [Students] expect the joy and excitement that comes with creative work and the pursuit of intellect. Instead, they find their lives crammed, their moods serious if not grim, and their energies beset by relentless requirements and even busywork, all of which make graduate school at times more resemble military drill than the exercise of man's most intellectual and imaginative capacities (Hartnett and Katz, 1976, p. 5).

The continued validity of this conclusion was substantiated by the experiences of students in the current study. A third-year doctoral student who was working on her dissertation reflected that:

> I have not enjoyed graduate school. It has been perfectly miserable most of the time. I'm not doing anything I enjoy. I enjoy school, but when you do school to the exclusion of everything else, it loses any enjoyment. While I was doing it, I was such a machine that I didn't even realize that I was unhappy.... I was a task master -- I'd do task after task, write paper after paper, do project after project.... I didn't even know what was going on around me.... When I've had time to slow done, I've thought, I was not very happy -- I didn't do things that I really liked, I missed all sorts of opportunities that were great -- to keep up this pace, to survive with these pressures.

Several researchers (e.g., Katz and Hartnett, 1976; Baird, 1990) concluded that inadequate role definition and uncertainty about performance expectations may cause stress, psychological withdrawal, and dissatisfaction for the graduate student. Role conflicts represent a particular aspect of role definition. In the current study, several research assistants explained the challenges associated with trying to simultaneously satisfy both academic course requirements and assistantship requirements. One graduate assistant described the conflict between academic and assistantship responsibilities as trying "to satisfy two, sometimes conflicting, masters." Another student expressed frustration with the faculty advisor's "inflexible" deadlines. Several research assistants felt that faculty demands were both excessive and unfair. One student described the situation as a "race with time that was almost beyond endurance." In a personal reflection, one student articulated the anxiety created by conflicting demands with the following words:

> It did not take me long to realize that even if I did not sleep I would not be able to accomplish the tasks being asked of me. I looked around and often wondered if my circumstances were just unusual, or did I just not manage my time well, [or I was] not cut out for this life.

Students who did not have graduate assistantships were struggling to balance the demands associated with employment outside the department with the need to engage in career development activities. One doctoral student was frustrated because the economic need to work outside of the program limited the amount of time available for pursuing personal research interests and developing research skills. Because of the hours spent working a part-time job and completing required course work as rapidly as possible (in order to minimize tuition expenditures), this student regretted that she was unable to volunteer time assisting a faculty member on a project of shared interest.

Status of Graduate Assistants

In his description of role groups within a sociology department, Crothers (1991) observed little structural or systematic support that facilitated students' efforts to acquire a professional identity or the skills required for self-directed (as opposed to directed-student) research. One structural mechanism that may facilitate acquisition of the professional identity is the assignment of office space within the department to doctoral students. In the current study, only doctoral students who held research or teaching assistantships were provided office space. An excerpt from the letter sent by the department chair to new research and teaching assistants documented the department's intended use of this space:

> Offices in the School of Education are at a premium and regularly reassigned by the Dean's office. Please, regard your office as a professional work space and use it accordingly. They are not to be used as general student study or meeting areas... The phones in your office are to be used for [related] business only and are monitored by the Dean's office.

In addition to providing assistants with a place to complete job-related duties, having office space within the school facilitated the professional socialization process for students in the current study. For example, the assignment of office space to students increased the frequency and quality of their interactions with faculty. For at least one research assistant, the assistant's office was a place where the faculty advisor could come to find the student and was frequently used to discuss project-related issues.

Moreover, for the students in current study, the assignment of office space reduced some of the uncertainty associated with defining their new roles. In one personal reflection, a graduate student recalled

the first few weeks of graduate school and noted that the office offered a haven from some of the initial

uncertainties:

> I'd just finished setting up my desk space in my new office and spent a few moments looking over
> my organizational handiwork. Once again, I marveled at my need to set-up the 'space around me,'
> making it comfortable and neat, especially my work space... [After running errands around campus]
> I escaped as soon as possible to the quiet of my new office and the comfort of organizing.

Valuation of Skills and Abilities

One recurring source of dissatisfaction among doctoral students interviewed for the current study

was the perception that the institution "under-valued" the skills and knowledge they brought to the

institution. These graduate students believed that they had valuable real-world experience and that the

institution ought to utilize their expertise. The students in the current study, particularly those whose source

of financial support for the balance of the doctoral program was uncertain, argued that a more equitable

relationship could be created in which graduate students contributed their skills and experience to the

institution while the institution funded the costs of their education. When students perceived that the

institution had not adequately compensated them for their skills and experience, the students' self-esteem, as

well as their satisfaction with the institution, suffered. As one second-year doctoral student explained:

> After having worked for six years administering a program and obtaining grant money of $1.5
> million over five years, I have skills that the University can use. I feel like somewhere there's got to
> be a place for me at the University where in exchange for my skills and my effort, I can get my
> tuition taken care of. And that's not happening. And so, I feel like I'm being treated like an
> unskilled master's student all over again.... I didn't think that I would have to sacrifice my life
> savings for an education that I believe that I have enough skills to exchange for.

Similarly, a first-year doctoral student lamented that:

> I'm looking for work that's basically paying me half of what I was earning six months ago. I keep
> thinking that I hoped that I would have gone up on the investment scale.... My colleagues have said,
> "Once you become a doctoral student they think you're an idiot all of a sudden. Six months ago they
> would have been paying you $100 an hour to come be a consultant for them."

Based upon her examination of graduate students and faculty in twelve departments at ten

institutions in 1967, Heiss (1970) observed that students who did not receive research assistantships had

lower self-images and experienced greater psychological stress than students with assistantships. Similarly,

in the current study a second-year doctoral student reported feeling rejected by the program and the faculty

when the financial aid package the student had received during the first year of the program was not

renewed for the second year. Although this student received a research assistantship, stipend, and a

fellowship for the first year of the program, the student received no institutional financial support for the

second year. This student categorized the experience as "symbolic rejection," explaining that:

> If I do a psychological analysis, it's the depression, and the anger, and the anguish of not being
> loved. And love is in the form of the support. There's this discrepancy for me. I was recruited to
> come here. And I was treated as a valuable, contributing member of the academic community for
> eight or nine months. After that, everything changed. Now, it's like, well, maybe the faculty don't
> value me as much as they did before I came here.

Maintain Intellectual Independence

In his description of stages in graduate students' cognitive development, Katz (1976) noted that first-

year students typically struggle to master the knowledge base of the discipline, while second-year students

begin to critically evaluate some of the discipline's fundamental assumptions. Students' perceptions of

faculty as authority figures influence their cognitive development (Katz, 1976). For example, a student who

views the faculty member as a "father" may act to "please" the faculty member by modeling the faculty

member's theoretical approach or may "rebel" against him so that "conceptual explorations and assertions

can become surcharged with ambivalence and conflict" (Katz, 1976, p. 110). Students who are "terrified" of

the professor may be more likely to succumb to "intellectual submissiveness."

The stories told by the research assistants in the current study suggest that through repeated

interactions with faculty, students can overcome their "terror" and interact with faculty in ways that benefit

both the student and the faculty advisor. As one doctoral student explained:

> In the beginning I was scared to death of [the faculty advisor]. And now I can say more stuff. I
> can't say everything. And sometimes it's difficult to express my opinion when it's clearly counter to
> [the advisor's], but I feel like I can do it now and it doesn't threaten the relationship. I know [the
> advisor] trusts me to have my own opinion and [the advisor's] not necessarily going to throw me out
> of the room if it doesn't jive with [hers/his].

Research assistants typically spend substantial amounts of time and energy working with a given

faculty advisor. Nonetheless, the research assistants in the current study were generally uncomfortable with

and uninterested in discussing personal issues with their faculty advisors. One research assistant stated that, "I wouldn't go to [the faculty advisor] with a [big personal issue]." In the words of another research assistant:

> [S/he] doesn't know a lot about [my personal life]... only what I've chosen to share [which is basically] what I think [s/he] needs to know. [S/he's] not my best friend... and is not going to be. [S/he's] certainly somebody who cares about me personally and my career but there's a limit to what we share.

For at least one research assistant, the "personal" aspect of the advisor-student relationship was a source of stress, anxiety, and self-doubt. In the student's words:

> There are times when [the professor] asks me personal questions or says things that make me uncomfortable. I always tell myself that I am only imagining this, reading too much into it. I really hope so because I don't want or need anything like that to enter into this productive *working* relationship.

By limiting their relationships with faculty to the professional level, some of the students in the current study felt they were protecting their independence and preventing themselves from becoming the advisor's "clone." Based upon his analysis of interviews with faculty and graduate students, Katz (1976) concluded that, while a student may be intellectually stimulated by an assistantship, the student may also be pressured to adopt the professor's intellectual framework and perspective. One research assistant in the current study appeared to understand this danger noting that:

> I might have thought that relationship would be closer, more friendship-like than collaborator-like, but maybe this is the best way to do it. I don't feel beholden. I feel like at some point I'm going to go off on my own and do my own stuff and we'll always have a relationship.

According to Worthen and Gardner (1988), faculty can decide where the student is employed as well as the specific area of specialization, decisions that potentially influence the student's entire professional career. In the current study, one research assistant's comment that the professor had "influenced me but maybe not in the best way" because of the difference in their professional interests indicates that faculty may try to direct a student in a direction that is inconsistent with the student's personal goals and interests. While the student in the current study preferred an administrative professional position, the professor had been "pushing [the student] for a faculty position."

23

Emotional Health

In addition to the tasks associated with acquiring a new professional identity, graduate students are also struggling with other developmental tasks, such as maintaining autonomy and independence (Lozoff, 1976) and satisfying their need for "intimacy," (e.g., get married and start a family) (Halleck, 1976). Surveys and interviews with graduate students in the early 1970's revealed that graduate students were vulnerable to feelings of loneliness, isolation, anxiety, and role confusion (Lozoff, 1976).

In the current study, several students appeared to be experiencing high levels of stress and anxiety. One third-year student explained that, since she her enrollment in the doctoral program, she had been physically ill more than ever before. A first-year doctoral student reported that financial concerns had caused both marital and personal psychological stress.

Lozoff (1976) noted that dependence upon the institution or parents for financial support may increase graduate students' feelings of powerlessness. Limited resources constrain the ability of graduate students to have children, afford comfortable housing, purchase new cars, plan vacations, and eat in expensive restaurants (Lozoff, 1976). In the current study, one doctoral student reported becoming depressed when it became necessary to deplete a personal savings account in order to pay the second-year tuition bill. The student described himself as "living on the brink of financial disaster" and "one step away from being homeless" and further noted that:

> I'm ashamed of the fact that I feel as though I need to recycle beer cans for lunch money -- which is what I do.

Interviews with doctoral students in the current study revealed that the need to borrow to fund the costs of graduate school also contributed to their feelings of powerlessness. One first-year doctoral student was frustrated with his use of student loans because he and his wife were eager to buy a house and start a family. The student explained that:

> I think that it's when the debt comes. If it comes at a point when you're fairly young... you can kind of assume that your working life is likely to be a little longer and you're not likely to run into major life expenses. But at a certain age, perhaps, or if you've been married a certain amount of time, you may want to have a child or you may want to buy a house or something like that.

Interactions with Faculty

From their review of prior research, Bargar and Mayo-Chamberlain (1983) noted that successful personal intellectual and emotional development during graduate school requires good communication between the student and advisor. Features of good communication include opportunities for the student to ask questions of the faculty member, to discuss ways for the student to improve performance, to take responsibility for doctoral research, and to grow intellectually, as well as mutual trust (Bargar and Mayo-Chamberlain, 1983). Nonetheless, from their analysis of surveys and interviews with graduate students, Hartnett and Katz (1977) found that students' interactions with faculty were generally inadequate in terms of the feedback provided by faculty to students, the opportunities for the student to collaborate with faculty on research, and the extent to which faculty stimulated students' intellectual growth. Katz (1976) found, based upon his interviews with faculty and students, that although students sought autonomy to express their ideas freely and creatively, they were often uncertain about engaging in independent work.

In the current study, the amount of direction and guidance faculty provided to students was a recurring theme in both the written personal reflections and interviews. Most students felt that faculty provided little direction or guidance over their work. Some students viewed this positively and enjoyed the "freedom" to work independently, while others were uncomfortable with what they perceived to be a low level of faculty supervision and feedback. Students who were more enthusiastic about their interactions with faculty appeared to have found a comfortable balance between autonomy and direction. One graduate assistant noted that the professor "seems to be very willing to let me decide when to have him intervene or let him know what's going on." Another student valued the "available on a need to see basis" nature of the relationship with the professor, stating that:

> I think we work pretty well together because [the faculty advisory] doesn't give a lot of direction and I don't require it. When I need information, then I'll track [her/him] down and [s/he's] very available... I don't see [the faculty advisor] for weeks at a time... then I see [her/him] all of the time in a crisis situation.

<p style="text-align:center">25</p>

In contrast, other research assistants were frustrated by faculty's lack of guidance. The following comment evidences inadequate orientation, supervision, and feedback:

> I got the feeling that some distinct expectations exist for competencies as a research assistant that I don't possess yet. I felt as though I'm supposed to know a whole lot more about this whole project than I do. I didn't know what the expectations of my working relationship with Dr. Smith would be. Should I be more involved than all the hours I'm already putting in for this project?

According to surveys and interviews with graduate students in the early 1970's, the degree to which students were accepted by faculty and received guidance and feedback from faculty was the most important aspect of the graduate department climate (Hartnett, 1976; Hartnett and Katz, 1976). Nonetheless, Harnett and Katz (1976) also found that one of the "root problems" associated with graduate school was that students often had limited access to faculty and perceived faculty treatment to be demeaning. Graduate students were dissatisfied when faculty expected the students to approach them with "a sort of reverence" rather than to interact in a more informal and relaxed manner and when faculty did not treat the students as adults (Hartnett, 1976).

In the current study, a common theme in the written personal reflections pertained to faculty behaviors that were demeaning to the student or that raised serious questions about the student's relationship with a particular faculty member. In the words of one student:

> I was briefly introduced by name and as "a new doctoral student." No further introduction was offered, as if my life entailed no other significant history. The other doctoral students neither introduced themselves nor inquired about my background. All attention was focused on "the professor"... It was as if the professor was holding court, and we the doctoral students were the royal subjects.

A number of the written personal reflections in the current study described faculty who treated students in a condescending or degrading manner and faculty who inappropriately questioned students' skills, knowledge, and abilities. Both of these themes are summarized in the following excerpt:

> The faculty member kept me waiting for 25 minutes, before coming out to meet me, with no apology for the delay. During the interview, he admitted to not having read my resume closely when I dropped it off at his office the previous week. He asked me to briefly review my educational background, and when I identified a medium-sized public teaching university (rather than an Ivy League school) as my undergraduate alma mater, he raised his eyebrows. It was one of those things where as soon as it came out of my mouth, I knew there was going to be trouble. The next question he asked me was, "So, do you know ANYTHING about the subject of this research assistantship?"

24

The implication was clear. For the rest of the interview, he asked questions and made statements insinuating that I wasn't smart enough to do the job.

One measure of whether faculty treat students as adults is the extent to which faculty consider and respect students' ideas and treat students as competent professionals (Hartnett, 1976). The following excerpt from another written personal reflection suggests that, in the current study, some students perceived faculty to be uninterested in what doctoral students could contribute to a research project:

> When Al first came to the [department], he was given a research assistantship with a group of professors working on a project. He stayed with this group for two years, during which time he felt that he "did what he was told," contributing where he could but not feeling like he was making much impact on the project.

Mentor, Colleague, or Boss

Prior research indicates that although graduate students may be assigned to faculty who are labeled as "mentors," these faculty typically serve in task-oriented roles, such as advisor or instructor only, rather than as mentors in the "classical" sense who nurture, support, teach, and guide (Merriam, et al., 1987). The research assistants in the current study used a variety of labels to describe their faculty advisors, including mentor, patron, advocate, parent, older sibling, friend, colleague, and peer. But, several of the research assistants who described intense relationships with their faculty advisors seemed to consciously avoid using the term "mentor." Others included "mentor" among other labels but were quick to state that they would not use that word. In the words of a research assistant in the current study:

> I shy away from using "mentor" because I think of [a mentor] as protecting you. [Instead I think of the professor as a] facilitator... and enabler... [s/he's] gotten me through in several direct and indirect ways... A teacher. [S/he's] always there when I need [her/him] or want [her/him] but [s/he] doesn't force things upon me.

Although they were generally more comfortable with using the word "friend" than the word "mentor" to characterize their relationships with their faculty advisors, the research assistants in the current study generally viewed their relationships as being limited to academic, professional, and career issues and not including personal or social issues. One student stated that:

> Maybe I wish that we had more similar senses of humor... that we were skipping down the block together, going out to dinner. [The faculty advisor] is not my pal... but our working relationship works.

Crothers (1991) noted that faculty may consider students to be colleagues in some instances, but students at other times. As students, they are "separated by a caste line from full departmental membership and colleagueship" (Crothers, 1991, p. 339). Phillips (1979) asserted that the relationship between the faculty advisor and the student is inherently unequal because the faculty member serves as the "guide and protector of the weaker party" (p. 340) and maker and enforcer of the rules. Some students in the current study appeared to sense this distinction. One research assistant noted that the faculty advisor thought of her more as a peer than as a student, but pointed out that, "Obviously [s/he's] my boss still and that's part of the relationship."

Treatment as Colleague Builds Self-Esteem

The stories told by the research assistants in the current study support Worthen and Gardner's (1988) assertion that faculty's treatment of students as colleagues enhances students' self-confidence and self-respect and encourages students to persevere. Bragg (1976) found that faculty treatment of students as colleagues in the department facilitates students' socialization to the professional identity by promoting students' sense of belonging and their identification of role models. Similarly, as one research assistant in the current study stated:

> I think [the professor] sees me as much more of a peer than I see myself. That's in some ways how it should be... because I still feel like I'm an apprentice. I can't do what [s/he] does. I'm amazed by what [s/he] does. But it helps to know [s/he] is confident in me. I'm always amazed to know how confident [s/he] is in me.

The following informal exchange between a second-year and a third-year student also evidences the role faculty can play in boosting students' self-image:

> *Second-year student*:   [The faculty advisor] never thinks there is anything outside of our ability. Sometimes I leave [the advisor's] office and want to beat my head against the wall... Why does [s/he] think I can do this?
> *Third-year student*:   Generally [the advisor] is right.

Nonetheless, students may not be immediately comfortable with faculty's high level of confidence. From their analysis of surveys and interviews of graduate students in various disciplines at different

institutions, Hartnett (1976) concluded that few graduate students "wanted to be regarded as co-equal members of the faculty... in terms of either authority or competence" (p. 66). Similarly, in the current study, one research assistant remarked:

> I think [the faculty advisor] considers me more of a colleague. I consider myself more of [a graduate assistant]. I still consider myself [the advisor's] peon. But, I don't necessarily think [the advisor] thinks of me that way. ·

Some researchers (Bragg, 1976; Van Maanen, 1983) have observed that socialization is a process that involves multiple interactions over time. The stories told by these research assistants illustrate the evolution of student-faculty relationships. One doctoral student was "not quite sure when [the professor's interest in both the student's academic and career progress] happened." And another student noted that:

> I think [the faculty advisor] thinks of me more as a peer than as a student. I think that has probably evolved [over the period of the assistantship].

The statements by research assistants in the current study are consistent with the four-stage framework Beeler (1991) proposed for describing the adjustment of full-time, first-year graduate students to academe. According to Beeler's paradigm, students progress from a stage that is marked by low levels of awareness of the knowledge and skills required to perform academic work and low levels of competency in these knowledge and skill areas to a stage that is characterized by high levels of confidence in their ability to perform the tasks and high levels of competency (Beeler, 1991).

One research assistant in the current study described the ways in which [his/her] relationship with the faculty advisor had gradually developed into a more productive relationship as follows:

> Over the course of [the semester] we sort of realized we were compatible. I knew what [s/he] was talking about. It seemed to go very smoothly. We're complementary. We don't always have the same opinion and I think the more I've developed as a student the further away we get. It has been a successful working relationship.

A story from still another graduate assistant in the current study suggests that both the student and the faculty advisor must recognize and adapt to changes in their relationship. The student described how the professor first encouraged the student to engage in more independent work: "Go off and be an independent

scholar -- you can do this!" But, after the student began to act more independently, the professor

complained that the student no longer asked for advice or guidance.

Acquisition of Research Skills

In his description of role groups within a sociology department, Crothers (1991) noted that a primary

goal of graduate education is to teach students the skills required to be a sociology researcher or teacher.

One mechanism for socializing graduate students to their professional role is "rehearsal" (Bragg, 1976;

Baird, 1990). While "rehearsal" may involve doing the "dirty work" of the profession, such activities not

only provide opportunities to practice various skills but also test students' commitment to the profession and

readiness for greater responsibilities.

The research assistants interviewed for the current study consistently referred to the "grunt work"

involved in their assistantships, or as one of the interviewees described, "Pretty much basic research

assistant go to the library and get me a bunch of cites and abstracts." Some of the research assistants had

accepted these basic duties as part of their jobs, as indicated by the following comment:

> I just kind of figured that was grunt work for graduate students. Sometimes I sit and churn out
> things for days on the computer.

A comment by another research assistant in the current study indicates that the assignment of low

level tasks may be a test of a student's commitment and readiness for greater responsibilities:

> And it's more than just my little RA xeroxing for me, which I do a lot of anyway... but [the
> professor] doesn't just see me as a xeroxer anymore.

A student who passes a faculty's test of commitment may be given greater autonomy and greater

responsibility. One graduate assistant who had worked with one faculty member on several projects over

the course of three years described this evolution in the following words:

> [The faculty advisor] sort of let me go on [the project]. [S/he] said do this. And told me what
> [was] wanted but [didn't] give me a whole lot of other [direction]... [S/he] gave me the broad
> parameters for the study which was really scary because I'd never done anything like that. And then
> [s/he] said, "Well, write the paper."... and so I spent my spring break writing the paper. And when
> it was done, [the professor] really thought it was great. It was exactly what [s/he] thought it was
> going to be.

30

The stories of several doctoral students in the current study confirm that graduate school in general, and the research assistantship in particular, has tested their commitment to the profession. One graduate assistant observed that her research assistantship required 20 to 30 hours per week, rather than the 10 hours per week that was indicated on the appointment letter. The following excerpt documents another assistant's frustration with, but acceptance of, the faculty advisor's demands and deadlines:

> Theoretically [the advisor's] in charge of the project, but I am the one that does most of the work... I've been frustrated on a daily basis trying to get something done thinking that [s/he] wants too much for a period of time and that it's unnecessary to do things that way. But, I think that's true for anybody you'd work for.

Although the specifics of the disagreement were not revealed, the following comments from another student in the current study indicate that not all graduate assistants pass a given faculty advisor's test of commitment:

> [The professor] is out of the picture. We had a falling out...about how I perceived that [s/he] was not very respectful of my needs and the professional boundaries as an employer/employee relationship. So, I've basically distanced myself from [her/him] for all intents and purposes, and I don't want to rely on [her/him].

Professional Development and Future Career

As Barritt (1979) argued, "Graduate education ought to change you and you should gravitate to those faculty members who can guide you best in those interests you're committed to." In the current study, the following excerpt from one student's personal reflection evidences that such positive student-faculty interactions are possible:

> My advisor quickly earned my respect. While [s/he] has an impressive background, including a wide variety of professional experiences, [s/he] also is genuinely concerned about understanding individual students' concerns, goals, and interests, and doing what [can be done] to enhance each student's educational experiences and career opportunities.

Although the research assistants in the current study consistently mentioned the "grunt work" associated with their assistantships, most also felt that they were receiving important professional preparation and training. The students described their faculty advisors as "interested both in my academic progress as well as my career" and as a source "of sound advice." One student noted that the advisor has

"definitely come up with some money." Another research assistant explained that the faculty advisor challenges him and promotes him to other members of the profession, "But, [the professor] doesn't coddle me." Still another student stated that:

> [The professor] has pushed me... has stuck up for me... talks about me with people. [S/he] would recommend me... [s/he] pays for me out of [her/his] own little purse.

The effect of students' relationships with faculty upon their professional socialization was illustrated most clearly by the statement from one graduate assistant that: "[The professor] has shown me the rewards of being a faculty member."

In the current study, benefits that accrued to students from their research assistantships included exposure to external funding organizations, opportunities to network with faculty at other institutions, recommendations from the faculty advisor, joint student-faculty publications, presentations at professional conferences, and development of research and other professional skills. Some of the students believed that their research assistantships would be particularly helpful in enabling them to obtain positions after their doctoral degrees were completed. A student who had both a research assistantship and a teaching assistantship described the value of having both experiences with the following statement:

> I'm good at research because [the faculty advisor] is good. I'll be a good undergraduate instructor because [a different faculty advisor's] so good. It's made me more marketable.

One of the interviewees believed that the assistantship had connected her with a professor who actively sought to teach her professional and career-development skills. As the student stated:

> In terms of publishing, [s/he] knew when it was the appropriate time to get me into the loop and facilitated that for me.

While the effect of a faculty member's "eminence" (see Reskin, 1979) was not specifically examined in the current study, the advantages that accrued to students who had faculty who would attest to their abilities were described. One research assistant attributed his success in obtaining various positions to both the faculty advisor's recommendation as well as to his own skills. As the student stated:

> I'm not sure if I would have even gotten an interview without [the professor] recommending me. I could tell the difference between last year and this year. This year, using [his/her] name probably put me at the front of the list... but it wasn't necessary. Last year I think the name carried a lot more

weight. Made the difference between being looked at immediately and only after the other candidates.

The current study also revealed the ways in which financial concerns negatively influenced students' professional development. For instance, when students were struggling just to pay the rent, put food on the table, and pay tuition costs, they had limited resources available to attend professional conferences. Although some funding was available from this university for students who were presenting papers at conferences, the amount of funding was limited and typically covered the costs of attending just one conference per year. Attending conferences offers graduate students an opportunity to meet colleagues from around the country, share information about common research projects, learn new research techniques, and keep abreast of current developments in particular areas of interest.

Interactions with the Peer Group

Interactions with the peer group, a collective socialization tactic, can contribute to students' professional socialization (Van Maanen, 1978; Van Maanen and Schein, 1979; Clark and Corcoran, 1986) by fostering common understandings and interpretations of experiences (Van Maanen, 1978). Peer groups can serve a variety of socialization functions including: establishing norms and performance standards; providing moral, social, and emotional support; offering advice, information and professional guidance; serving as "pacemakers" for progress through the program; providing intellectual challenges; increasing commitment to the field; and preparing students for future collegial relationships (Bragg, 1976; Clark and Corcoran, 1986; Aisenberg and Harrington, 1988; Baird, 1990).

Baird (1990) noted that the peer group is a more common socialization mechanism for students in professional school than in graduate school, since graduate school generally places greater emphasis on individualized instruction. Nonetheless, for students in the current study, the administration's practice of assigning three to five research assistants to share one office facilitated the development of and increased the strength of peer groups. As one first-year research assistant described:

> The people in my office are my primary reference group. They have been people with whom I work pretty closely, particularly with the [research project]. Our wives get together and do things. In that

sense, it's been very, very helpful in a way to become acculturated to the program and become settled in [this town]... It would have been much, much more difficult not being grounded in that way to coming here, making friends, and having to become acquainted with people. Simply having a network of people to say, "What's going on in that class? I missed something." Or whatever it may be.

The peer group has been found to be an especially important socialization mechanism when students have less access to faculty role models (Bragg, 1976; Aisenberg and Harrington, 1988). Based upon his synthesis of prior research, Baird (1990) noted that when graduate students do not receive sufficient supervision or information from faculty, many rely upon other students for information and support. In the current study, one theme that was repeated in the written personal reflections pertained to students' feelings of being alone, isolated, and/or without support from faculty and the consequential importance of the peer group. For example, one student wrote that:

> What I've learned is that as a student, you have to more or less look out for yourself... So essentially, people, I think the grad students, it's word of mouth and you help each other.

One particularly valuable benefit of the peer group for graduate students in the current study was its role as a source of information about financial support. As one second-year student reported:

> I think I got the most realistic information from people I was officing with. It's like we kind of banded together. Anybody who had any kind of scoop would share that with the rest of the group. There was a perception that -- I think it's true to some extent, but I'm not sure that it's true to the total extent that we saw it -- that the faculty and the program directors were invested in almost giving us mis-information to keep us complacent and to not get us all excited about financial concerns.

After a long-year of struggling to piece together sources of funding to cover the costs of attending graduate school for the second year, one doctoral student stated that s/he had taken on the responsibility of filling in the gaps in information that faculty and staff provided to first-year students, particularly with regard to the availability of financial support.

> I found myself in the role of being naysayer -- Dr. No.... I would say [to the first-year students], "Okay this is what they said, this is what it means." ... What frustrates me is that I've got to be the one to tell students what the reality is. They're not getting that from [those] who have responsibility for disseminating information about it.

Crothers (1991) noted that individuals within a given role group, such as graduate students, may compete for resources such as office equipment, supplies, and space. Competition among peers may limit

32

34

the benefits of the peer group (Hartnett and Katz, 1976; Baird, 1990) by isolating students from each other and limiting the amount and quality of information shared (Bragg, 1976). Based upon their analysis of surveys and interviews of graduate students, Hartnett and Katz (1977) concluded that:

> [O]ne of the most blatant barriers to desirable interstudent cooperation and collegiality, was the unfortunate practice, in some departments, of placing first-year graduate students in the position of competing with one another for scarce financial assistance in the form of teaching and research assistantships to be made available during the second year of graduate training. In these departments, the graduate assistantship became a kind of trophy for which graduate students were compelled to compete. This practice got in the way of a free exchange of ideas and a genuine spirit of collegiality among the students and, instead, often led to feelings of distrust, jealousy, and cynicism, and interfered with the sharing of ideas, mental stimulation, and cooperation that is necessary for scientific and scholarly productivity (Hartnett and Katz, 1977, p. 653).

In the current study, competition among students for research assistantships was manifested most obviously in the value students placed upon having office space within the school. Most doctoral students in this school were awarded research assistantships for the first year of the program but not for the second year. Those who had to relinquish their offices at the end of the first year because their assistantships were not extended to the second year expressed feelings of frustration, disappointment, and rejection. At various points during the academic year, particularly during the winter months, it was not unusual to hear a student who did not have office space within the school complain that, "I wish *I* had some place to hang up my coat!" In their personal reflections, a number of students described those with office space as being in the "in crowd" and one student identified the "stigma" attached to those without office space.

Students who did not have research assistantships did not have access to the office's ready-made peer group. Students who relied upon employment outside the school for financial support were also less likely to develop and maintain strong peer group relations due to the competing demands for their time, since students who worked hourly jobs and attended school full-time generally felt that every moment of their day was tightly scheduled. Consequently, they did not have the time or energy required to establish and maintain close relationships with other students. In the words of one third-year doctoral student:

> In different parts of this program I could go weeks without talking to people because I don't have time. I just have to do school and I have to do work. At work it suffered because I didn't have time just to talk to people. I was like a robot at work. It was like, I have 30 hours here, I just can't be bothered to talk to you. I know you're trying to know me and I could be building professional networks with you, but I have to get this project done so that I can go home and then do my school

work.... I cut off all of these things that are really important, I think, because I had to focus. To balance so much work and so much school, you have to just block out everything else.

Students who held research assistantships also acknowledged the limited time and energy available for interacting socially with their peer group. Similarly, Hartnett and Katz (1976) concluded from their analysis of surveys and interviews with graduate students that students may have insufficient opportunities to engage in intellectually stimulating and collaborative activities, as well as insufficient time and energy to develop friendships and engage in social activities. In the words of a first-year doctoral student in the current study:

> I remember lots of Friday afternoons that I've said to the people that I see socially here that I've got to go home and do some work or even go home and go to bed after class on Friday. That ends up paying more dividends -- at least I can end up staying awake in class.

Academic Experiences

The data gathered for the current study showed that the factors that influenced a student's academic experiences depended upon whether the student held a research assistantship.

Research Assistants

In her examination of 1967 research assistants in twelve departments at ten institutions, Heiss (1970) found that, for many research assistants the "intellectual stimulation and the challenge posed by the give-and-take of the partnerships as they exchange or defend their ideas whets their appetite for research" (Heiss, 1970, p. 216). None of the research assistants in the current study described anything comparable to the "intellectual stimulation and challenge" Heiss (1970) reported. The interviews and personal reflections of students in the current study were more similar to the finding from the study by Hartnett and Katz (1976). Based upon their analysis of surveys and interviews of graduate students, Hartnett and Katz concluded that one of the "root problems" associated with graduate school is that students are often engaged in scholarly endeavors that reflect their professors' interests rather than their own.

In the current study, because administrators typically assign research assistants to faculty advisors prior to students' first day of attendance in the program, the designated research project is often unrelated to students' course work or areas of scholarly interest. In some instances, students take additional courses in an effort to better perform their assistantships. As one of the interviewees stated, "I did the course on [x]. It was something I felt I should take and know more about." But, the same student indicated that the assigned research project was unrelated to her long-term scholarly interests and stated that:

> On the academic side, [the assistantship] probably has had minimal impact in terms of thinking about what I might do when I leave here.

While that research assistant was able to maintain her own academic interests, others found that course work and assistantship work supplanted personal scholarly interests. As one student wrote:

> I had difficulty linking my required course work and the work I was to do for my assistantship to any of the original ideas and goals I had come here with. In fact, I forgot why I had come.

Another research assistant reported that he had increased her faculty advisor's regard for her personal area of interest and had used the research assistantship as a stepping stone to the dissertation. In the student's words:

> Without having the first experience, I wouldn't have focused on [my dissertation topic]... [The faculty advisor] has had direct and indirect impact on my academics. I think [s/he's] gotten more interested in my stuff as we've gone along.

Once again, the comments and stories of students in the current study illustrated the evolving nature of the student-faculty relationship. First-year doctoral students were more likely to stress the mismatch between their academic course work and their assistantship projects. In contrast, students who were further along in their degree programs were generally able to draw connections between their duties as research assistants and their course work or dissertation. This finding may also be related to the greater autonomy faculty tended to grant to more experienced research assistants.

Non-Research Assistants

One third-year doctoral student stated that, despite working several jobs and attending school full-time, academic activities have not suffered. This student succeeded by abandoning all other aspects of life in order to focus as much as possible on school work. In the words of the student:

> [Working] did not have an impact on school work. It had an impact on my physical health, emotional health and balance in life. But I put school work in front of everything.... That is my one priority. I sacrificed so much to come here, to be in this program, that there's no way I'd let anything affect that.

Nonetheless, most students stated that the time involved with working hourly jobs outside of the department had negatively affected their school work. For these students, working outside of the department meant that some school-related activities were just not done. These students regretted that they were getting less out of their classes and program because of financial-related pressures. In the words of one second-year student who was working fifteen to sixteen hours per week:

> One of the frustrating things is that after putting in eight hours at [the job] it's really difficult to go home and do school work. I just don't have the energy for it.

Additionally, the nagging worry about paying the cost of graduate education increased some students' determination to complete the program as quickly as possible, and, consequently caused them to focus more upon meeting minimum requirements than upon pursuing personal scholarly interests. A first-year doctoral student who had an assistantship for the first year but had not yet secured a source of funding for the second year stated that:

> I think that the day you enter, it really directs you and channels how you think about planning your courses and how many courses you plan on taking a term and all of that. From the day that I came here, it was almost like a race to candidacy. You're going to take 12 credits a term, you're going to reach candidacy as soon as possible.... That has a real impact on how you do academically and how you perceive yourself as a student.

Other students were struggling with whether they should take an hourly position that was unrelated to their career and professional interests but that paid a certain wage, whether they should wait to find a position that was more closely related to their interests, or whether they should pursue a position that was

closely related to their interests regardless of the wage and utilize additional student loans or further deplete savings accounts to pay educational costs. As one first-year doctoral student stated:

> It's that sense of, how much am I willing to violate my own set of values and what I want out of this time of my life. And I don't think I anticipated having to compromise myself in that way while I'm here. It's an interesting challenge.

Students who were employed at hourly jobs outside of their department regretted the influence such activities has had upon their scholarly interests. Some students asserted that they were forced to "follow the money" and "market" themselves to all potential funding sources, and, as a result, were not able to pursue their personal research agendas. In the words of a first-year doctoral student:

> It's funny how your interests broaden rapidly when you're staring down the barrel of an $18,000 tuition. Coming here I thought: I really know what I'm here for, I know what I'm preparing for, I'm going to be very focused, very disciplined. Then you begin to realize that you need to pursue a lot of different options and leads and they may have nothing related to what your research interests are, and what your dissertation is going to be, and what your course work is going to be. But every time you go in to a different [potential employer], you feel like you need to be able to say, "These are the reasons why I'm here. It's not just for money, it's that I'm really interested." And most of the time, or much of the time, that may not be true.

In an attempt to secure a position that included a tuition waiver and a stipend, one first-year doctoral student reported that he had shifted his scholarly activities to correspond to the interests of the potential funding source. The student was directing all course work and projects to coincide with the potential funding source's agenda, even though he had no guarantee that the funding source would actually provide a desired position.

On the other hand, another second-year doctoral student who described a similar dilemma resisted the temptation to shift her personal research agenda. This student turned down a research assistantship, a position that included a tuition waiver and a stipend, and was working an hourly job in another part of the university instead. The student explained that:

> My [employer] said that he'd be glad to turn my position into a research assistantship if I'd agree to do my dissertation on a subject of his choosing in exchange. So, it's that academic prostitution stuff. I wasn't able to do that because what he wanted me to do was a dissertation on [a topic] that I knew nothing about and I was not willing to make that distinct shift in academic fields to be able to do that. So I quit working for him.

Several students who did not hold research assistantships felt that, because they were "paying their own bills," they were free to pursue their own research and scholarly agendas. Unlike students who were assigned to and were receiving funding from particular research projects, these students felt that they "called the shots." In the words of a second-year doctoral student:

> If I was in a research assistantship I'd feel compelled to do somebody else's agenda and do a dissertation on the project's data. And what would gnaw at me was that I had these other interests that are also very salient, but I don't feel like I could have done what I wanted to do. So, to a large extent, not getting funded has had a freeing effect on me. I'm accountable to nobody but me.... If I had support from somebody, then that would be the trade-off for working on a topic that I'm not totally thrilled with.

Financial Concerns

Three themes regarding financial concerns emerged from the data: 1) benefits of assistantships depended upon students' perspectives; 2) willingness to borrow; and 3) interactions with faculty regarding financial concerns.

Benefits of Assistantships Depended Upon Students' Perspectives

According to the school's catalog, the benefits of an assistantship include not only "valuable experience," but also a stipend, fringe benefits, and a tuition reduction. Prior surveys of graduate students (Heiss, 1970; Worthen and Gardner, 1988) have shown that the most common reason for accepting or seeking a research assistantship is to obtain financial support for the costs of attendance.

Nonetheless, the research assistants interviewed in the current study did not describe financial support as a primary benefit of their assistantships. Although they were not specifically asked to compare the financial benefits of the assistantship with the academic and/or professional benefits, the research assistants' stories suggest that they would conclude that the academic value was greater than the financial value. Similarly, doctoral recipients between 1966 and 1970 from eighteen departments at one institution reported that doing research in the department was more useful as a source of theory and concepts, research

techniques, and data and information than as a source of support for direct costs or living expenses (Toombs, 1977).

In the current study, research assistants indicated that the financial support that was attached to the assistantship had two primary, but conflicting, effects. First, because a tuition waiver was included, the assistantship provided students with the flexibility to pursue various research interests without worrying about how they would pay the costs of their doctoral education. But, at least one student believed that the assistantship had slowed her progress to degree. The student explained that, if the assistantship had not been available, she would have finished the degree more quickly in order to minimize the stresses associated with finding financial support outside of the department. Of course, such expediency may, in turn, have reduced the benefits the student had received from holding the research assistantship.

On the other hand, students who did not have assistantships or who had not secured assistantships for the second year stressed the importance of the financial support associated with assistantships. These students acknowledged that they could easily find part-time hourly employment and that they could take out loans through the university's financial aid office. Hourly employment and loans were not students' preferred sources of financial support, however. A "Brown Bag" discussion on "Funding for Graduate Students" showed that their top priority was to secure a position that included a tuition waiver.

Opportunities for students to obtain a position that included a tuition waiver (e.g., an assistantship) were limited for students in this school. In the words of one first-year student:

> People were saying, "Sure, everyone gets funding." But, what I needed to hear was, "Yes, everyone usually finds work. But you need to be very concerned about finding tuition remission."

The availability of research assistantships within the school beyond the first-year is dependent upon the number and amount of grants obtained by the school's faculty. Other departments across the university rarely employ students from outside of their own department, given each department's need to serve its own students first. As a second-year student described:

> I talked to [faculty] in [two disciplines] and they just laughed me out of the room. "We don't have enough money to cover our own students. Why are you coming over here?"

39

41

Because of the limited availability of positions that included tuition waivers, many students in the current study expended large amounts of time and energy struggling to piece together multiple sources of funding. As most positions did not last more than one academic year, many students were engaged in an almost continuous search for funding. As a student who enrolled in the program without any institutional aid described:

> My first year, I ended up getting lucky. I got a job through the housing division. Last minute, about a week before school started, they called me and asked me to come out. So that covered my housing and food. Then I took out the most I could get in loans, which was $12,000. Then I had to take on three or four jobs to try to make up the rest, because I still couldn't cover tuition. At least I had housing and food covered.

The students in the current study also invested substantial time and energy regularly re-evaluating their funding situation and searching for ways to cover the costs of their doctoral education. Here is one second-year student's "current" funding strategy:

> I plan to work full-time this summer. By my calculations, I should have enough to pay for the fall semester. I don't know what I'm going to do for winter term next year. Hopefully, the money I can earn working half-time at [an hourly job] next fall will pay for next winter.

In 1995-96 average tuition and fees were 127% higher for out-of-state graduate students ($7,045 on average) than for in-state graduate students ($3,107 on average) at public institutions nationwide (Peterson's, 1995). Therefore, it is not surprising that out-of-state students in the current study were particularly anxious about finding a position that covered the costs of their tuition. A third-year student explained that:

> The first semester I realized that no matter how many jobs I worked it was never going to be enough because the tuition was just too outrageously expensive for an out-of-state student here.

Similarly, a first-year student expressed that:

> I don't think there's any problem finding hourly positions to work ten hours a week here, ten hours a week there -- you can piece together a 40 hour a week job if you want. The problem is how do you pay for the tuition if you're an out-of-state person.

Willingness to Borrow

In addition to working part-time jobs, students can also utilize loans to finance the costs of their doctoral education. In the current study, students' willingness to borrow depended upon their prior

experience with student loans. One student who initially enrolled with no institutional financial support

planned to rely exclusively upon student loans. But, because the student's earnings in the year prior to

enrolling in graduate school exceeded a certain threshold, the amount the student could borrow was limited.

As the student explained:

> I guess I had never had a concern because I assumed it was like professional school, where people took out enormous amounts of loans. But then I couldn't get much in the way of loans.... I took out the most I could, which was $12,000.

One second-year student who had never had a student loan was very reluctant to borrow to pay the

costs of graduate school. The student was able to pay undergraduate educational costs by working while

attending high school and college. Although the student had repeatedly struggled to piece together multiple

sources of funding and had virtually exhausted all personal savings, the student was still reluctant to borrow.

In the student's words:

> I had it on my "to do" list to go to financial aid and get the loan forms and stuff. And I procrastinated that thing like crazy. It was just too painful for me to go there and take on that debt. And so I didn't do it. I went to this financial aid workshop where they handed out the forms there, so it makes it real easy. But I'm still reluctant to do it because I just don't want to have that debt hanging over my head.

Another second-year doctoral student who had not borrowed before enrolling in graduate school

determined that, despite receiving an assistantship, a tuition waiver, and a stipend, the student would still

need to utilize student loans in order to cover family-related living expenses. The student was able to justify

the use of student loans because most education-related expenses were covered by the financial aid award.

Nonetheless, although the second-year student received a tuition waiver and stipend for three of four terms,

worked an hourly job, and utilized student loans, covering educational costs and living expenses was still a

challenge. While these funding sources covered monthly expenses, the student has relied upon credit card

debt to pay for relocation costs, as well as "unforeseen emergencies," such as medical expenses and a family

emergency trip out-of-state.

Girves and Wemmerus (1988) hypothesized that students who relied upon their own resources to

finance the costs of their education may be more likely to continually evaluate the costs and benefits of

remaining enrolled. In the current study, some students evaluated the attractiveness of student loans by weighing the costs of borrowing against expected future earnings. As one first-year doctoral student described:

> My friends from undergraduate days have taken $50,000 to $60,000 in debt -- and I'm not there -- but they have much higher returns. They're going to be doctors and lawyers. So there's a good deal of debt there, but it's relative to what. And usually it's relative to much higher paying occupations.

Other students believed that borrowing to pay the costs of their education was a worthwhile investment -- up to a point. In the words of one first-year doctoral student:

> I have $20,000 [in loans] from undergrad. I have $10,000 from this year. I'm at $30,000, and I consider my ceiling not much higher than that. It seems like a lot of money but I do the math.... If you figure it out and say $3,000 over each year of education for ten years -- I don't consider that to be a lot of money. In the end, it is a lot of money. You'd be crazy if you think otherwise. But, I feel it's important if I want to advance myself to make that investment, because nobody else will ever take away the degree and the education I receive. You can lose your house, lose your car, lose all the little things [but not your education].

At least one student worried that the debt accumulated during graduate school would force a change in career paths. After completing graduate school this second-year doctoral student may search for a higher paying administrative job instead of a relatively lower paying, but more personally desirable, faculty position. The student stated that:

> If I don't get [institutional financial] support from now until I graduate, I walk out of here $30,000 to $40,000 in debt. And I want to be a faculty member. I look at those starting salaries. I'm not kidding anybody -- I'm an assistant professor. That's what I'm competing for. And what I'm seeing, and what I'm hearing is, somewhere between $30,000 and $40,000 a year.... And I'm just not sure if I can afford to take a lower paying job when I'm saddled with all this debt now.

Interactions with Faculty Regarding Financial Concerns

Students in the current study differed in their perceptions of faculty members' awareness of and understanding of their funding-related concerns. Some students believed that faculty members supported their search for financial support. For instance, one student reported that a faculty member had met with another individual at the university on the student's behalf regarding a potential funding opportunity. Another student was assisted by a faculty member in obtaining an hourly job on campus in an area in which

44

the student wanted to gain experience. In the following excerpt, a second-year doctoral student appreciated one faculty member who had tried (although as of yet unsuccessfully) to be helpful.

> There's one faculty member in this program who I really felt had some genuine concern, and is bending over -- I mean doing everything in [the faculty member's] power -- to find me information, _____ to be supportive, and to help.

Other students asserted that, while faculty may be aware of their funding-related concerns, the faculty's ability to provide meaningful assistance was limited. In the words of a second-year student:

> [One faculty member] has been extremely supportive in so far as [the faculty member] can be. But [the faculty member] really doesn't have any more information than I do as far as what's out there. In the cases where [the faculty member] might know somebody, [the faculty member] has offered to help and to give a recommendation but [the faculty member] doesn't necessarily know the people whom I'm applying to jobs to.

Another second-year student expressed similar sentiments in the following words:

> [One faculty member] knows the situation I'm in. And it's kind of this unspoken thing. [The faculty member] empathizes with me, but what the hell can they do. [The faculty member] is very good about keeping me posted about funding opportunities. [This faculty member] was how I found out about [a fellowship opportunity] and a possible teaching assistantship.

Many first-year doctoral students felt that faculty did not understand the magnitude of their funding concerns. One first-year student noted that faculty generally dismissed funding-related concerns with the "everything is okay, it all works out" speech. Some students were frustrated that faculty did not provide more realistic responses to their inquiries about funding. As one first-year student expressed:

> What I'm disappointed about is the clarity of the message that was communicated... Faculty have told me, "That's something you don't need to be worrying about. I don't know why you're uptight about it. Everything will work out okay." That's not what I needed to hear, when I needed to hear it. For me, it was a very inappropriate message. I almost felt like I was being treated as a child.

The students in the current study generally interpreted faculty's optimistic responses to mean that they would easily locate institutional funding for the second and subsequent years of their doctoral studies. Consequently, some students were disappointed and felt misled when faculty did not pro-actively support their search for funding. As a first-year student described:

> What I find disillusioning is, I thought that when the time came [to find funding for next term], they would just be here helping you left and right. Telling you, "Go talk to this person. Let me pick up the phone and call so-and-so. I read that paper you wrote -- you have talent -- let me send you out to someone who could use the types of skills I've seen." ... I just expected a whole different attitude.

43

While talking about money is certainly not easy, some students believed that faculty members did not appreciate or understand the magnitude of their concerns. Consequently, students in the current study generally avoided raising funding concerns with the faculty. One first-year student explained that:

> [My advisor] made it very clear to me that it's entirely appropriate for students to pay for their own graduate education because [my advisor] had to. Unfortunately, what [my advisor] doesn't realize is that when [my advisor] paid for it, it was a lot cheaper. So, I don't even raise the subject with [my advisor]. There are just some things you don't talk about.

In the words of a third-year student:

> When I talk to my advisor, I don't get a sense that [my advisor] understands how expensive school is. Many times [my advisor] has shown insensitivity to funding issues. I get a sense it's because [my advisor] was fully funded during graduate school. So, [my advisor] does not fully understand what it's like for people who actually have to pay tuition.

And as a first-year student stated:

> I've had [faculty and staff] ask me, "How are you doing on the funding thing? Have you found work yet?"... I assume that it's not that they're offering me any opportunities, but that they're curious about what I'm doing on my own. So, it seems more like a conversational topic than one that reflects genuine concern about how I'm going to fund my education.

Other students in the current study believed that approaching faculty about funding issues would be unwise. For example, a second-year student feared that raising the possibility that financial concerns might lead him to withdraw from the program or reduce him enrollment status to part-time would jeopardize the student's relationships with various faculty members. The following statement evidences a first-year student's hesitations about discussing financial issues with faculty:

> The faculty I deal with most, I have no doubt would go to bat for me at any point. But, the relationship is not one in which I would ever ask. If I have something in hand, I would present it as, "I would like your advice." And, "Would you say a kind word?" I'm not always comfortable, it's kind of a personal thing, about asking that question directly. It puts more of a burden on me, I guess, to scout out whatever I can. It's not talked about directly. It may come to that point, probably fairly soon, but maybe not.

Another first-year student planned to exhaust all other sources of financial support before requesting assistance from faculty, even though the student had good relationships with several faculty members. The student explained that:

> I have done as much as I could outside the formal structure as possible on my own, going to different places on my own, approaching different people without talking to faculty here in the

44

46

program, because I want to keep my powder dry until a little later for them to begin making phone calls or whatever else. So, I'm kind of saving that.

The current study also demonstrates that faculty members may not realize how their actions influence students' expectations and behaviors. For instance, during the second term of one student's first-year in the program, the faculty member for whom the student was working as a research assistant submitted a grant proposal for additional funding. The faculty member indicated to the student, that in the event the grant was funded, the student's assistantship would be extended through the next academic year. Because the faculty member was "very optimistic" that the grant would be accepted, the student "didn't look real hard for funding." Although the student learned in May that the grant was not going to be funded, the student "still held out this naïve hope that there was going to be money available" from some other source to continue the project. Although the faculty member never explicitly said anything to keep the student's hopes alive, "They just didn't say 'No.'" As a result, this student did not begin searching for alternative funding sources until the end of July, about six weeks prior to the start of the fall semester. The student was unable to secure a position for the second-year of the program that included a tuition waiver, and at the time of the interview, was working a fifteen- to sixteen-hour per week job and relying upon personal savings to fund the costs of completing the doctoral degree.

Progress toward Degree

Since the current study examined doctoral students' experiences at one point in time, we do not know the effects of assistantships or financial concerns on students' completion rates or time-to-degree. Nonetheless, experiences that appear to be positively and negatively related to their persistence through the program can be identified. Bowen and Rudenstine (1992) noted that, regardless of the size and orientation of the program or the effectiveness of faculty advising, students' completion rates and time-to-degree are dependent upon sufficient financial support. Although the relationships are complex and likely depend upon students' characteristics, experiences, and priorities, the interviews in the current study show that funding is related to doctoral degree completion. But, the direction of the relationship is unclear. In an effort to

45

minimize tuition expenditures, a few students were carefully structuring their time and planning their schedules in order to complete their programs as quickly as possible. On the other hand, some first-year students felt that their anxiety about financial support and the realities associated with working jobs outside the program would limit their ability to focus upon school work, and, consequently, would slow their progress through the program. A third-year student indicated that she had seriously considered transferring to another institution when the prospect of obtaining funding at this institution for subsequent semesters appeared to be particularly hopeless. "Funding problems" may cause at least one student to "abort" the program prior to degree completion.

A third-year doctoral student reflected that second-year students who did not receive positions that included tuition waivers typically "have a really bad year." The student stated that:

> I've seen a lot of these people kind of floating out there, really grappling, and having a real hard time their second year. Some survive and some don't.... It's a year where some people fall way behind and it's a year where some people work something out.

Students who were unable to locate a position that included a tuition waiver for the second year appeared to be at particular risk for dropping out of the program or slowing their progress toward degree. As one second-year doctoral student explained:

> I know there are people in my cohort who have left because of financial reasons, or who have cut back to being part-time students, or have pulled out of the Ph.D. program and settled for a master's degree. I think the people in my cohort who have stayed who don't have any kind of [institutional] funding at all are in the minority.

The comments from one second-year doctoral student who received an assistantship, tuition waiver, and stipend in the first year but who had to piece together multiple sources of funding for the second year offered the following rationale for why some students drop out of graduate education programs:

> There are different realities about how tough you have it as a student. I think this is unrealistically difficult. And that's why I'm never surprised by the kind of attrition figures that I read about graduate education. Because I'm experiencing it. I'm living it. It's just because of my personal commitment to it that I just don't get up and leave. I feel like any other normal person who wasn't as driven or as compulsive as I am would say, "To hell with this." And go out and get a fairly decent job.

The experience of another second-year doctoral student illustrates how financial concerns and pressures can negatively influence completion rates. The student received an assistantship, which included a tuition waiver and stipend, during the first year of the program, but since then has continually struggled to obtain sufficient amounts of funding. Although "at the last minute," the student located an assistantship that covered tuition for the first semester of the second year, the student had not been able to locate a position that included a tuition waiver for subsequent semesters. After once again weighing the costs of debt against the potential value of the degree, including the types of jobs that will result from earning the degree and the future salary, the student concluded that accumulating additional debt to finance educational costs was unacceptable.

> For me, there are family considerations.... We had sources for additional loans and we had quite a bit of credit card allowances, but the interest payments on credit card debt, and just piling debt and loans on top of debt and loans -- we reached a threshold where we didn't feel comfortable with it any more...

At the time the study was conducted, the student was looking for full-time employment. Although the student hopes to find a full-time position at or near the university in order to be able to take one or two courses a term and complete the doctorate degree in a timely manner, the student had not yet located such a position. In the words of the student:

> I've given myself until the end of this term. If I can't find full-time employment and still be a student here then that's going to be too bad. That's basically what it's come down to. So, there is the potential that my program will be aborted for financial reasons. And I've had to basically look at that as a kind of worst case scenario and say, "That's the breaks." I have to be financially responsible in the way I view it.... Basically because of financial constraints, the education thing is taking a back burner. It's not what I planned.

CONCLUSIONS AND IMPLICATIONS

The current study has shown that at least three benefits accrue to doctoral students who hold research assistantships. First, research assistantships provide structurally-based opportunities for doctoral students to interact with and learn from faculty. As found in prior research (e.g., Bragg, 1976; Gerholm, 1990), such interactions can facilitate the professional socialization process by teaching students the culture and rules of their new profession.

47

Second, through the assignment of shared office space, research assistantships provided students in the current study with a ready-made peer group and the associated informal socialization experiences. Ironically, those who may benefit most from a peer group because they lack a structurally-based connection to a faculty member (i.e., those without research assistantships) do not have access to this informal professional socialization mechanism. Moreover, the socialization benefits of the peer group would likely be enhanced by policies that eliminated competition among first-year students for financial support for the second and subsequent years of their programs.

Third, research assistantships can reduce the negative effects of financial concerns upon the professional socialization process. As Bowen and Rudenstine (1992) concluded based upon their examination of graduate students' experiences in six academic disciplines at ten universities, "Money plainly matters" (p. 178). The current study revealed several negative effects of financial concerns upon students' professional socialization. For instance, some students without secure institutional support assumed multiple hourly jobs, thereby limiting the amount of time and energy available for academic and scholarly endeavors. In addition, financial concerns caused some students to change their personal research agendas to correspond with the agendas of potential funding sources, limited their opportunities for professional development, jeopardized their psychological and mental health, and reduced their satisfaction with their program and university.

This study also suggests at least three areas for further consideration and research. First, the interviews suggested that various structural factors, particularly practices related to faculty tenure, may restrict the benefits of the research assistantship. The comments of the research assistants in the current study indicate that tenured faculty are more likely to share authorship, especially first-authorship, of papers and presentations with their graduate assistants. Although not explored in this study, other aspects of research assistants' experiences may vary based upon characteristics of their faculty advisors. For instance, using a sample of full and associate professors of education at public institutions nationwide and controlling for sex and rank, Busch (1985) found that younger faculty tended to describe their mentor relationships as

involving reciprocal feelings and values ("mutuality"), whereas older faculty indicated their mentoring relationships spanned a broad range of interpersonal and role attributes. Busch concluded that younger faculty may be more likely than older faculty to require psychological support for themselves.

Second, the students in the current study felt very strongly that research assistantships offered important preparation for their future careers. Although some graduate assistants were frustrated by what they perceived to be a low level of supervision or guidance, most enjoyed their freedom to work independently. Given that the motivation to work independently has been identified as one of the most important predictors of doctoral dissertation completion (Tluczek, 1995), this is an encouraging finding. One unanswered question, however, pertains to the quality of skills and the extent of preparation students develop when working independently with little guidance from faculty. Specifically, are faculty advisors providing adequate orientation, supervision, and feedback? Do students have the frequency and quality of interactions with faculty that are necessary to facilitate their selection of dissertation topics and their success in obtaining funding to support their dissertation research, two consequences of student-faculty interactions identified by Bowen and Rudenstine (1992)? Are students interacting with faculty enough to acquire the values, skills, attitudes, and behaviors necessary to fully perform their roles after graduation?

Finally, the current study demonstrates the extent to which financial concerns test students' commitment to their new profession. The students in the current study repeatedly re-evaluate their decision to attend graduate school, weighing the costs of foregone earnings and loan repayment as well as the need to postpone buying a house, having children, and enjoying a social life, against an expected salary that, in many cases, is less than that received prior to starting their doctoral programs. Clearly, only those who are most committed would be willing to make such a trade-off. The question the findings in the current study raise for doctoral program administrators is whether a student's success in overcoming financial barriers is a relevant test of the student's readiness and qualifications for a career in academe.

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51

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56