GROUP DIFFERENCES IN GRADUATE STUDENTS’ CONCEPTS OF THE IDEAL MENTOR

Gail L. Rose* **

Graduate students differ in their conceptualizations of mentoring. This study examined the relationship between students’ demographic and academic characteristics (age, gender, citizenship, academic discipline, and stage of persistence) and their preferences for three styles of mentoring assessed by the Ideal Mentor Scale (IMS): Integrity, Guidance, and Relationship. Students enrolled in Ph.D. programs at one of two Midwestern Research I Universities (n = 537) completed the IMS, rating the importance of each of 34 mentor attributes on a 5-point likert type scale. MANCOVA yielded significant differences for demographic but not academic variables: women scored higher than men on Integrity, international students scored higher than domestic on Relationship, and age was inversely related to Relationship scores. No group differences were found on the Guidance scale. These findings indicate that graduate students’ perceptions of the ideal mentor are influenced somewhat by major socio-cultural factors, but also suggest that individual differences may play a larger role.

KEY WORDS: mentor, graduate students, gender differences, age differences, foreign students, questionnaires.

Mentoring is a key element of graduate education (Phillips and Pugh, 2000; Roberts and Sprague, 1995). Mentors provide sponsorship, protection, challenge, exposure, visibility, counseling, acceptance, confirmation, and/or coaching to their graduate students (Green and Bauer, 1995), and can have a large impact on students’ perceptions of the quality of their graduate experience (Katz and Hartnett, 1976; Luna and Cullen, 1998). Overall, the two most important things mentors can do for graduate students are to communicate clearly and effectively, and to provide honest feedback (Rose, 2003). Beyond these two central components, the qualities

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that make someone an ideal mentor will differ depending upon the graduate student asked. While it is known that mentoring means different things to different people (Rose, 2003; Wilde and Schau, 1991), it is unclear to what extent the definition of the ideal mentor also varies according to demographic or academic variables relevant to graduate study. These potential group differences will be examined here, with the aim of expanding upon existing mentoring theory.

**GRADUATE EDUCATION, DEVELOPMENT, AND MENTORING**

Graduate education is a developmental process. Doctoral students are a diverse group whose needs and motivations change appreciably through three distinct stages of doctoral persistence: transition and adjustment, attaining candidacy, and completing the dissertation (Tinto, 1993). The transition stage encompasses the first year of doctoral training during which the student’s task is to establish membership in the social and academic communities of the university (Tinto). To achieve this, the student develops personal affiliations with other students and faculty within the department and determines how well the norms of those communities fit her own. Tinto’s second stage of doctoral persistence encompasses the time until comprehensive exams and the attainment of candidacy when the primary task is the acquisition of knowledge and the development of competencies deemed necessary for doctoral research. Community membership is of secondary importance at this stage. Tinto’s final stage begins with attainment of candidacy and ends with the defense of the dissertation. Persistence throughout the dissertation process reflects the nature of individual abilities and the specific relationship between student and primary advisor or committee. In the final stage of graduate school, “it is the faculty–mentor relationship that is most likely to shape completion” (Tinto, p. 241).

As Tinto (1993) suggests, mentoring is an aspect of professional and personal development. Levinson et al. (1978) also emphasized the importance of forming a mentor relationship in early adulthood. “The mentor relationship is one of the most complex, and developmentally important, a man can have in early adulthood” (Levinson et al., p. 97). The mentor is typically male, older than the protégé, and of more senior status in the world the protégé is entering. The process ideally involves being a teacher, advisor, sponsor, counselor, guru “and more” (p. 97), and is defined according to the character of the relationship between the two people, not by formal roles such as teacher–student or employer–employee. The mentor is a composite of parent and peer, “experienced as a responsible, admirable older sibling” (p. 99). The mentor sees the
man’s potential, believes in him, and supports and assists him in realizing his vision for the type of life he wants to lead.

There is wide variability in the specific functions performed by mentors and the level of intimacy within the relationship (Levinson et al., 1978). The usual course of a mentor–protégé relationship, however, is fairly consistent. The protégé initially thinks of himself as a naive novice compared to the worldly mentor. In this phase, the mentor plays the role of the authoritative adult or parent figure and the protégé still feels like a child in comparison. Under the mentor’s wing, the protégé gradually develops a sense of his own autonomy and power. Increasingly, the mentor and protégé relate to each other as peers. It is through the mentor–protégé relationship at this crucial stage of life that the protégé transitions to adulthood and develops his own identity. According to the theory, men without mentoring will have difficulty entering the adult world and continued problems of individuation in mid-life.

A decade later, Anderson and Shannon (1988) expanded on Levinson, et al. (1978) theory regarding the responsibilities of a mentor, but in the context of developing new classroom teachers. Their model offered a clearer conceptualization of the specific act of mentoring, as illustrated in their formal definition:

Mentoring can be defined as a nurturing process in which a more skilled or more experienced person, serving as a role model, teaches, sponsors, encourages, counsels and befriends a less skilled or less experienced person for the purpose of promoting the latter’s professional and/or personal development. Mentoring functions are carried out within the context of an ongoing, caring relationship between the mentor and protégé. (p. 40)

Their comprehensive model encompasses dispositions of a mentor, attributes of the relationship, specific functions of mentoring, and concrete mentoring activities.

Kram (1985) reported the results of her research in the corporate setting, also describing mentoring as a developmental process. She found that mentors enhance both career and psychosocial development of protégés. To promote protégés’ careers, mentors provide sponsorship, exposure, visibility, coaching, protection, and challenging assignments. To support protégés psychosocially, mentors provide role modeling, acceptance, confirmation, counseling, and friendship. Levinson et al. (1978), Anderson and Shannon (1988), and Kram all have made substantial contributions to an understanding of the qualitative experience of mentoring in their respective employment sectors. As Kram acknowledged, however, context is an important factor influencing the nature of a mentoring relationship.
Doctoral education is a unique context because every doctoral student has a dissertation supervisor or advisor. How is this person different from a mentor? Winston and Polkosnik (1984) argued that a successful graduate advisor must fulfill five essential roles and functions: reliable information source, departmental socializer, advocate, role model, and occupational socializer. The roles of mentor and friend, they assert, may be desirable in an advisor, “but cannot reasonably be ‘required’ ” (p. 300). Friendship with advisees is difficult because of the positions of power and authority advisors hold in the lives of graduate students. Mentoring relationships, while encompassing many of the functions of advising relationships, are distinguished by a mutual emotional investment that develops naturally and spontaneously and cannot be legislated. Cusano-vich and Gilliland (1991) also cite the personal and collegial nature of the relationship as the distinguishing characteristic between advising and mentoring.

Roberts and Sprague (1995), on the other hand, assert that, “Mentoring is the primary model used to train graduate students in the United States” (p. 1). Although it is not always referred to as “mentoring,” the close relationship between a faculty member and graduate student forms the foundation for much of graduate education (Sprague, Roberts, and Kavussanu, 1996). The majority of department heads, faculty and graduate students surveyed at one large Midwestern University agreed that mentoring is an expected function of doctoral program advisors (Green and Bauer, 1995). Specifically, respondents agreed that faculty advisors were expected to perform the following functions for doctoral students: sponsorship, protection, challenge, providing exposure and visibility, counseling, acceptance, confirmation and coaching. Furthermore, graduate students regard their relationships with faculty as the single most important aspect determining the quality of their graduate experience (Katz and Hartnett, 1976; Luna and Cullen, 1998).

Certainly, most of the literature on mentoring in graduate education assumes that the student’s primary research advisor or major professor is the one with whom the mentor–protégé relationship would or should be formed. While it is true that many programs use the master-apprentice training model and some programs even use the mentor–protégé terminology to describe the nature of the relationship between the graduate student and his or her advisor, not all graduate students consider their advisor to be a mentor. It is not even clear that all graduate students want their advisor to be a mentor. If a graduate student were to have a mentor, it might be most efficient for the mentor to also be the advisor. On the other hand, students might prefer a mentors who are not in the position to formally evaluate them. Others may prefer a mentor employed in a
non-academic capacity. In a survey of the mentoring experiences of graduate students, Luna and Cullen (1998) found that while advisors represented the largest role category of mentors, they only made up 21% of the mentors graduate students reported having during graduate school. Other categories included professor, friend, employer, spouse, co-worker, father, mother, and other relative.

Mentoring is a relevant concern in the training of doctoral students. A mentoring or master-apprentice model may be the archetype for graduate training in the US, and is a model valued by students and doctoral programs alike. While such developmental relationships appear to be beneficial, it is not clear that they are experienced in the same way by different groups of individuals (e.g., men vs. women, older vs. younger). Such groups may prefer some functions of mentoring over others. Methods of measuring such preferences would help those involved in doctoral education to understand students’ ideas of what constitutes the ideal mentor. The Ideal Mentor Scale (IMS; Rose, 2003) is a tool available for this purpose.

MEASURING MENTORING

The Ideal Mentor Scale (Rose, 2003) is a brief self-report instrument grounded in Levinson et al. (1978) theory of adult development and also informed by Anderson and Shannon’s (1988) comprehensive model of mentoring. It was developed for the purpose of clarifying more precisely what a mentor is and does in the context of doctoral education, from the perspective of the student. Items all begin with the stem, “My ideal mentor would...” and respondents are instructed to rate on a scale of 1–5 the importance of several behaviors and attributes a potential mentor might engage in or possess.

The IMS has three sub-scales that were determined via factor analysis: Integrity, Guidance, and Relationship. The Integrity sub-scale describes a mentor who exhibits virtue and principled action and can be emulated as a role model. Sample items include, “… be a role model,” “… value me as a person,” and “… advocate for my needs and interests.” Guidance represents a mentor who provides practical assistance with the tasks and activities typical of graduate study. Sample items include, “… provide information to help me understand the subject matter I am researching,” “… give me specific assignments related to my research problem,” and “… meet with me on a regular basis.” Finally, the Relationship sub-scale represents a mentor with whom students can form a personal relationship that might involve sharing personal concerns, social activities, and life vision or worldview. Sample items include, “… relate to me as if he/she is
a responsible, admirable older sibling,” “... talk to me about his/her personal problems,” and “... have coffee or lunch with me on occasion.” The instrument is valuable in its ability to help determine an individual doctoral student’s personal viewpoint on what matters most about mentoring. Graduate students, researchers and educators can use the IMS to assess specifically how any given student conceptualizes the term.

That a factor analysis of the instrument yielded three discrete factors rather than a large single factor means there are individual differences in students’ perspectives about what makes a good mentor; i.e., certain attributes or functions that are important to some students may not be to others, and vice versa. It is important to know that the definition of “ideal mentor” is idiosyncratic; however, our understanding of student perspectives on mentoring could be enhanced further by an examination of group differences. In other words, is it possible to identify subgroups of graduate students with similar conceptualizations of mentoring? For example, do women in science, international students, or non-traditional aged students show similar definitions of mentoring in relation to other groups of students? Identification of such group differences in preference for different aspects of mentoring might enable potential mentors to better understand the nuances of this role, from the perspective of the graduate student.

DEFINING MENTORING IN GRADUATE STUDENT SUBGROUPS

Gender

The few published empirical examinations of gender differences in the incidence of mentoring have been unanimous in their conclusions that no differences exist (Erkut and Mokros, 1984; Fried et al., 1996; Kelly, 1982; Palepu et al., 1998, plus three unpublished works cited in Aguilar-Gaxiola, Norris and Carter, 1984, Baugh, Lankau and Scandura, 1996 and Merriam, 1983). Men and women are equally likely to report that they have had a mentor, they report having prior mentor relationships of equivalent number and duration, and they cite similar reasons for terminating prior mentor relationships (Ragins and Scandura, 1997).

While the rates of mentoring do not differ for men and women, the qualitative experience of mentoring appears to be quite different for women and men. In a study of male and female educators participating in an assigned mentor program, Noe (1988) found that female protégés received more psychosocial functions (acceptance, confirmation, role modeling and counseling) from their mentors than men did. In fact, female gender accounted for more variance in psychosocial functions obtained from the mentoring relationship than did time spent with the mentor,
mentor’s rating of the quality of the relationship, protégé’s job involvement, or protégé’s career planning.

In a survey of academic medical faculty, men were significantly more likely than women to report that their mentor had facilitated their external visibility by, for example, inviting them to chair conferences or participate in invited manuscripts (Fried et al., 1996). Women, on the other hand, were significantly more likely to report that their mentors used the protégé’s work to benefit the mentor and not the protégé. In a later study of medical school junior faculty protégés, no gender differences were found for most variables, including level of psychosocial support received and invitations to sit on journals’ editorial boards, chair conferences, collaborate on research, and co-author papers (Palepu, 1998). A significant gender difference was found, however, for an index of informal networking: more men than women reported greater than five invitations to “work-related sporting events” (p. 320).

Wilde and Schau (1991) administered a mentoring instrument to graduate students and examined gender differences in their experiences of mentoring by performing separate principal components analyses of the data obtained from men and women. The components resulting from the analyses were different for men and women, suggesting that male and female students experienced the structure of their mentoring relationships somewhat differently. The major difference between the two structures was that the females’ included a component that reflected a friendship-type relationship that may involve extra-curricular socialization (“Comprehensiveness,” e.g., “Professor discusses personal dilemmas with student”), whereas the males’ conception included a component of career support provided to the mentor, which reflected support of the mentor’s professional concerns (the authors provided two sample items: “My mentor discusses his/her professional dilemmas with me” and “We discuss my mentor’s career goals”).

Men and women may derive different benefits from a mentoring relationship. Collins (1983, p. 99) summarizes her survey of over 400 professionals: mentors primarily help men to develop leadership and the ability to take risks, they give men direction, and provide information about what is going on. On the other hand, women found mentors most helpful in giving encouragement and support, instilling confidence, providing growth opportunities and opening doors, and giving visibility within the organization. Similarly, Erkut and Mokros (1984) reported sex differences in students’ preferences for mentoring functions (even though they found no difference in actual support provided): males preferred a mentor with status and power who could provide direct assistance with career development, and females preferred a role model who could
demonstrate the successful integration of professional and personal life. A later study found that professional female protégés perceived psychosocial support as the most meaningful aspect of their mentoring relationships (Brown, 1996). Role modeling is an aspect of mentoring that women particularly value, according to several authors (Bolton, 1980; Gilbert, 1985; Speizer, 1981; Vartuli, 1982). In selecting a role model, personal attributes and lifestyle/values were rated as more important by female graduate students than male (Gilbert).

The research available on gender differences in preferred mentor attributes supports the idea that women tend to be drawn to mentors who model an integrated lifestyle and offer psychosocial support, while men tend to prefer powerful mentors who hold a position of status in the organization and who provide essential information. While men and women are being mentored at equal rates, protégés of different genders appear to hold different ideals about the mentoring relationship.

Hypothesis 1a: A mentor’s role modeling and encouragement (Integrity) will be more important to women than men. Hypothesis 1b: A mentor’s practical assistance and providing information (Guidance) will be more important to men than women.

Citizenship

International graduate students often have different educational experiences than American students because they have the added challenge of adjusting to a new environment and culture. Compared with American students, international students may exhibit different learning styles, face differences in sociopolitical factors, have different acculturation experiences, report higher stress pertaining to environmental adjustment, perceive greater prejudice, be more affiliated with their own international groups, use less English, and encounter greater language barriers compared with domestic students (Jacob and Greggo, 2001; Mallinckrodt and Leong, 1992; Naidoo, 1991; Ramburuth, 2000; Smith, 1991; Wan, Chapman, and Biggs, 1992). The consequences of social isolation may be professional as well as personal, as student involvement an academic department contributes to their internalization of traditional scientific norms (Anderson and Louis, 1994). Anderson and Louis found that international graduate students, who participated less actively than domestic students in department culture, were far less likely to subscribe to the traditional norms of science. International students comprise a growing proportion of graduate students in science fields; their enculturation into the academic community of their departments and institutions is critical.
International students and their academic advisors may have different perceptions of the ideal role of the advisor (Hung, 1986; Khabiri, 1985). Specifically, Khabri found that advisors had more favorable impressions than did their students in the following areas: perceived interest of the advisor in the student; the student’s satisfaction with the advisement process, and the extent to which both parties had performed their duties and obligations. Little else is known about the specific mentoring preferences of international graduate students. However, the unique personal and academic issues confronted by this population might suggest that their mentoring needs would be different. Student development theory and needs assessment surveys allow some limited speculations.

International students may encounter unique social barriers that make it difficult for them to form relationships (Jacob and Greggo, 2001; Naidoo, 1991). Such social barriers can contribute to academic difficulties because, as reported by Wan et al. (1992), social support networks play an important role in international graduate students’ ability to cope with academic stress. International students might be specifically interested in a mentor who can help them develop their social skills or perhaps become a part of their personal relationship network (Naidoo; Wan et al.).

International students require visas to study in the US, and may be dependent upon their advisors to renew or maintain their visa status. In addition, they often have fewer American or institutional contacts and resources than their US counterparts, and have less to fall back on in the event that the relationship with their supervisor is not a productive one. International graduate students anticipate the need for continued contact with professional colleagues after returning home (Naidoo, 1991). This need reflects not only the desire for intellectual fulfillment but also the practical need for career promotion and enhancement (Maher, 2001).

Because English is not the native language for many international students, concerns about English proficiency and inter-cultural communication are extremely common, and can hinder a student’s relationship with his or her advisor (Hung, 1986; Jacob and Greggo, 2001; Khabiri, 1985; Naidoo, 1991; Parson, 1992; Roongrattanakool, 1999; Wan et al., 1992). Thus, these students face a double-bind: they may perceive a strong need for a mentor who can help them develop language skills, but the very thing they need assistance with may be a barrier to getting that help. As a result, international graduate students may especially need a mentor who demonstrates cultural sensitivity and patience with those struggling to master the English language.

Many universities have recognized, formally or informally, that enculturation is a developmental task faced by international students, and that mentoring may be an appropriate educational tool to assist this
development. For example, Kilburg (1992) described a peer collaborative mentoring program in place at one university that paired international Teaching Assistants with American TAs to enhance mutual cross-cultural communication skills. Likewise, Jacob and Greggo (2001) described an effort to increase the cultural competency of their graduate students in counseling. They recommended that university counseling offices establish peer mentoring and role model programs, and that they be instrumental in developing networks of resource people on campus who have demonstrated cross-cultural sensitivity and an interest in international students.

The existing literature on international student development, needs, and perceptions of advising suggests that these students may have general and specific interest in mentoring. Generally, their dependence on institutional support to maintain their visa status and enhance their future careers may make it essential for them to form positive relationships with powerful others who can promote their interests. More specifically, the language barrier and relative social isolation of many of these students may make them particularly interested in a mentor who would befriend them and help them to develop social and communication skills.

Hypothesis 2a: A mentor’s interpersonal involvement in the student’s life (Relationship) will be more important to international students than domestic students
Hypothesis 2b: Regular meetings with the mentor that focus on specific academic tasks (Guidance) will be more important to international students than domestic students.

Academic Discipline

Overall, approximately 50–60% of doctoral students report having a mentor (Cronan-Hillix et al., 1986; Golde and Dore, 2001; LeCluyse, Tollefson, and Borges, 1985; Rose, 2000; Sands, Parson, and Duane, 1991). However, the likelihood of having a mentor varies by academic discipline (Golde and Dore). In a recent survey of more than 4000 doctoral students in 11 disciplines at 27 universities, Golde and Dore found that approximately 70% of students in history, sociology, and art history could identify a faculty mentor other than the advisor, while the rate was approximately 40% for students in mathematics and chemistry.

The actual rates of mentoring may not follow the discipline-related pattern observed by Golde and Dore (2001) when the definition of mentor includes the advisor, i.e., if the definition of “mentor” is not restricted to a second faculty member. Furthermore, the observed pattern of received mentoring between students of different disciplines may or may not be related to student ideals or preferences for mentoring style. An examination of such patterns has not been reported in the literature.
The larger structural differences between doctoral programs in different academic disciplines have been highlighted by several authors (Bowen and Rudenstine, 1992; Nerad and Cerny, 1991; Tinto, 1993). For example, in the sciences research is typically externally funded and is conducted in a relatively structured laboratory-based apprenticeship mode that entails frequent student–faculty interactions. Conversely, in the arts and humanities research is typically conducted with fewer resources, and is less structured and more often individualistic and solitary.

These field-specific differences in structure are putatively related to important graduate student outcomes such as time-to-degree, completion rates, and career aspirations. That is, students in the natural sciences have more favorable time-to-degree and completion rates than do students in the humanities, with students in social sciences falling in between (Bowen and Rudenstine, 1992; Nerad and Cerny, 1991; Zwick, 1991). Students in the humanities are more likely to be interested in academic careers than are students in the sciences, and have less contact with advisors (Golde and Dore, 2001). Bowen and Rudenstine’s interpretation of these disciplinary differences is echoed by others in the field (e.g., Nerad and Cerny, 1991; Tinto, 1993): “These deep-seated differences in completion rates [and time-to-degree] reflect, we believe, fundamental aspects of the content and organization of graduate work in the various fields of study” (p. 127).

The literature on disciplinary differences focuses primarily on structural aspects and very little on mentoring. In light of the existing literature, one might predict that the field-specific variations in the demands of graduate study would translate into field-specific needs, expectations and desires for mentoring. These differences may influence students’ perceptions of the qualities of an ideal mentor. Students in the sciences may need more practical guidance with their research because the work is more hands-on and technique-based. By the nature of their respective choices of discipline, students in the humanities and social sciences may be most interested in mentors with humanistic and social/relationship orientations, respectively.

Hypothesis 3a: A mentor’s humanistic expression of care and concern for the protégé (Integrity) will be more important to students in the humanities and arts than students in other disciplines. Hypothesis 3b: A mentor’s practical assistance with skill acquisition (Guidance) will be more important to students in the natural sciences than students in other disciplines. Hypothesis 3c: Interpersonal sharing and personal interactions with the mentor (Relationship) will be more important to students in the social sciences and education than students in other disciplines.

Age

According to the 1992–1993 National Postsecondary Student Aid Study conducted by the National Center for Education Statistics, the
mean age of US doctoral students is 33 years (Syverson, 1996). An increasing number of students are older persons returning to school after some period of non-academic life experience such as employment, travel, or childrearing; their age and prior life experiences can impact their graduate school experience. Specifically, Phillips and Pugh (2000) identified the following issues faced by older students: re-adjustment to the role of student; need to juggle and balance a number of adult roles and obligations; generation gap with their traditional-aged classmates and peers, and navigation of age-related dynamics with faculty members who may be younger than the student, or who may assume such students are more competent and have less need for support than do traditional students.

Levinson et al.’s (1978) theory would predict that mentors are not particularly relevant to older students, as mentor relationships purportedly wane in importance after the “Age 30 Transition.” Consistent with this interpretation, a study of mentoring received by psychology graduate students who were grouped by age according to Levinson et al.’s categories found a non-significant trend toward lower scores (less mentoring) for older students (ages 41–58; Aguilar-Gaxiola et al., 1984). Similarly, a survey of graduate students identified as protégés by faculty in a department of education indicated that the age of the protégé was negatively related to the degree to which the relationship included a focus on the protégé’s professional development (Wilde and Schau, 1991). Older protégés’ relationships were less likely to involve professional development activities such as: helping to get fellowships, assistance with a first job, working together in a formal graduate assistant role (e.g., TA or RA), and nomination of the student for professional positions. The authors speculate that such assistance is less relevant to older students who perhaps already are established in their careers, have developed professional networks, and are seeking the advanced degree as a credential. Because this was a study of mentoring received not mentoring desired, however, it remains unclear whether the age effect was due to protégé preferences, mentor bias, or both.

There is evidence that older students have different graduate school experiences than younger students, and that these differences include the mentoring received by those who are identified as protégés by faculty. It is expected that the importance graduate students place on mentoring of any type will decrease as age increases.

*Hypothesis 4*: The importance of mentoring in general (all IMS scales) will be negatively associated with age.
Stage of Persistence

The pursuit of a doctoral degree is a process requiring different skills or abilities at different points in time (Tinto, 1993). That is, the first year of graduate study involves a period of adjustment to a new intellectual community, the second year emphasizes knowledge acquisition, and the last year requires sustained independent focus on dissertation writing. The idea that a mentoring relationship would change as the protégé develops and acquires specific skills and confidences has been recognized by many writers and theorists. For example, Phillips and Pugh (2000) suggested a 3-part paradigm for adjusting supervisory style as students progress through their programs: Early direction, intermediate weaning, then later separation. In the early direction phase, the supervisor sets short-term goals, assigns specific tasks, and provides detailed feedback. In the intermediate weaning phase, the supervisor provides general support and guidance, and works with the student to make joint decisions about tasks and timelines and to evaluate the work completed. Finally, the later separation phase involves the exchanging of ideas, but the student’s work and critical analysis is self-directed. In this phase, the mentor functions primarily as a consultant.

Davis, Little and Thornton (1997) asserted that certain teaching interventions may be interpreted differently by beginning vs. advanced Psychiatry residents. For example, concrete exposure to basic rules and specific instruction may be interpreted by a beginning student as helpful and nurturing. An advanced student, however, might interpret this teaching intervention as condescending and authoritative. On the other hand, a more searching and questioning approach to teaching may inspire curiosity and autonomy in an advanced student, but might be interpreted by the beginning student as excessively speculative and abandoning. The concept was well articulated by Igartua (1997): “Faculty should realize that mentoring roles shift as protégés advance in their medical training. Initially, mentors may elucidate the clinical relevance of basic science and facilitate socialization into medicine. Later, they may function as advisors, supervisors, advocates, and networkers” (p. 3).

This theoretical “spectrum” view of teaching interventions reflects a common sense understanding of what may be an automatic and unconscious process among skilled mentors who match their teaching style to the individual student, and allows for predictions of student preferences according to their stage of advancement. Specifically, students in the first stage, who are adjusting to a new community, may conceptualize their ideal mentor as someone with whom they could form a personal relationship. Second-stage students, in their quest for knowledge of their academic discipline, are hypothesized to prefer a mentor who can provide practical
assistance. Students in the final stage of their doctoral work, as they transition to independence, are expected to prefer a mentor who views the student as a junior colleague and assists with networking.

*Hypothesis 5a:* A mentor’s interpersonal involvement in the student’s life (Relationship) will be more important to students in the first stage of persistence toward the doctoral degree than students in the second stage. *Hypothesis 5b:* A mentor’s practical assistance with skill acquisition (Guidance) will be more important to students in the second stage of persistence than students in stages one or three. *Hypothesis 5c:* A mentor’s humanistic expression of care and concern for the protégé (Integrity) will be more important to students in stage three than students in stage two.

**METHOD**

**Sample**

The sample consisted of 537 students enrolled with the Ph.D. objective at one of two Midwestern Research I Universities. This sample represents a subset of the 635 participants included in a larger study (Rose, 2000). Participants in the larger study who were missing data for any classification variable ($n = 98$) were dropped from the analysis in order to have a consistent sample throughout the entire analysis process. The sample of 98 subjects not included in the present analyses contained a higher proportion of males and was somewhat older, but otherwise was proportional to the sample of 537 students included in this analysis. Demographic characteristics of respondents are displayed in Table 1.

**Procedure**

From a list of all enrollees with the Ph.D. objective at two different Midwestern Research I Universities, an initial sample of 1400 students was randomly selected. Of these, 91 were excluded because they had completed their degrees, had permanently left their programs, or had moved and could not be reached at the address provided. The target sample consisted of the remaining 1309 doctoral students. Students were recruited by mail and were asked to complete a set of questionnaires, which are described below. Six hundred and thirty-five students returned questionnaires, for a 48% response rate.

**Instruments**

*Dependent Variables*

The primary outcome variable in this study was graduate student definitions of mentoring. This variable was operationalized as scores on
the Ideal Mentor Scale (IMS; Rose, 2003), an instrument assessing the importance of various attributes to each student’s concept of the ideal mentor. This instrument is applicable to all Ph.D. students, whether or not they are currently in a mentoring relationship. It inquires about a hypothetical “ideal mentor” in order to ascertain the qualities doctoral students deem important to their own individual ideas of what a mentor should be. Rather than providing a definition of mentoring for respondents, the scale is designed to evoke from respondents their own attitudes, beliefs, or feelings about what “mentor” means.

As described in Rose (2003), the IMS was developed using a rational-statistical process (Loevinger, 1957) whereby a pool of items was amassed that reflected a variety of definitions of the mentoring concept (e.g., Anderson and Shannon, 1988; Kram, 1985; Levinson et al., 1978) as well as nomologically proximal concepts (e.g., close personal relationships, professional conduct, and personality). These items were administered to three different samples of doctoral students. Statistical properties of the items were examined after each round of data collection and formed the basis for item retention or deletion in each subsequent administration of

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<th>Variable</th>
<th>Percentage of Sample</th>
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<td>Age [mean (SD)]</td>
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<td>Gender (% female)</td>
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<td>Citizenship (% non-US Citizens)</td>
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<td>CGS/GRE Discipline (%)</td>
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<tr>
<td>Tinto Stage (%)</td>
<td></td>
</tr>
<tr>
<td>Stage 1: Transition and Adjustment</td>
<td>19</td>
</tr>
<tr>
<td>Stage 2: Attaining Candidacy</td>
<td>32</td>
</tr>
<tr>
<td>Stage 3: Completing the Dissertation</td>
<td>49</td>
</tr>
</tbody>
</table>

a Ninety-eight respondents with missing data for any classification variable were dropped from analysis.
b The mean age of respondents omitted from analysis = 33.1 (SD = 7.8), [t(628) = 2.43, p = .015].
c The excluded sample was 35% female, X² (1, n = 633) = 11.95, p < .01.
Note: CGS/GRE Discipline is a taxonomy of academic fields (Council of Graduate Schools, 1998). Tinto Stage refers to stage of persistence toward the doctoral degree.
the scale. Items ultimately retained for the IMS were identified by their performance on factor analysis.

The IMS consists of 34 items, each of which describes an attribute or behavior of a potential mentor. Items begin with the stem, “Right now, at this stage of my program, my ideal mentor would...” Respondents indicate their perceived level of importance for each item by circling a number on the 5-point scale anchored by 1, “not at all important” and 5, “extremely important,” with 3 identified as “moderately important.” Each of the 34 items loads uniquely on one of three analytically-based sub-scales labeled Integrity, Guidance, and Relationship.

The Integrity sub-scale consists of 14 items that reflect a humanistic expression of care and concern. This scale measures a mentoring style characterized by respectfulness for self and others and empowerment of protégés to make deliberate, conscious choices about their lives. Sample items include: “... treat me as an adult who has a right to be involved in decisions that affect me,” “... value me as a person,” and “... respect the intellectual property rights of others.” Rose (2003) reported high internal consistency (alpha) coefficients for this scale (.90 in one sample and .89 in a second sample).

The Guidance sub-scale (10 items) reflects a mentoring style characterized by practical, hands-on help with the tasks and activities typical of graduate study. Sample items include: “... provide information to help me understand the subject I'm researching,” and “... help me plan a timetable for my research.” Alpha coefficients for this scale were high (.88 in one sample and .87 in a second sample; Rose, 2003).

The Relationship sub-scale (10 items, such as “... relate to me as if he/she is a responsible, admirable older sibling,” and “... talk to me about his/her personal problems.”) reflects the importance of personal relationship and personality. The mentoring style represented by this scale is one characterized by the sharing of more personal aspects of oneself, such as social activities, personal concerns, and life vision or worldview, with one’s protégés. Alpha coefficients were .81 and .79 in two samples reported by Rose (2003).

Independent Variables

Respondents reported age, gender, country of citizenship, field of study, registration status, and extent of progress toward the degree on a demographic form. Descriptive statistics for these variables are shown in Table 1. Age and gender were assessed directly and were treated as a continuous and a dichotomous variable, respectively. The other indepen-
dent variables were created based on responses to the demographic questionnaire and were operationalized as follows:

Citizenship. Citizenship was ascertained with one open-ended question. Because the majority (73%) of respondents were US citizens, this variable was dichotomized as domestic (US citizens; \( n = 391 \)) vs. international (non-US citizens; \( n = 146 \)).

Academic Discipline. Discipline was ascertained with an open-ended question asking respondents to indicate their department, program, and major specialization in order to acquire sufficient information to correctly identify and classify the respondent’s field of study. Specific fields were then categorized according to the taxonomy of academic fields used by the joint survey conducted by the CGS/GRE Survey of Graduate Enrollment (Council of Graduate Schools, 1998). Of the 537 participants, 134 (25%) were in Social Science fields, 127 (24%) were in the Humanities and Arts, 105 (19%) in Education, 73 (14%) in Physical Sciences, 67 (12%) in Biological Sciences, and 31 (6%) in Health Sciences. In order to test hypotheses pertaining to field of study, these academic disciplines were combined into three broad categories: Humanities and Arts \( (n = 127, 24\%) \), Social Sciences and Education \( (n = 239, 44\%) \), and Natural Sciences \( (n = 171, 32\%) \).

Persistence. Questions about years of enrollment, expected graduation date, and completion of various milestones (e.g., comprehensive exams) enabled categorization of each student’s stage of persistence, approximated in accordance with Tinto’s (1993) theoretical classification. Students in their first year were categorized as Stage 1 [Tinto’s “Transition and Adjustment” stage; \( n = 102 (19\%) \)]. Students from second year through attainment of candidacy—usually the result of passing comprehensive exams or a qualifying paper—were classified as Stage 2 [Tinto’s “Attaining Candidacy;” \( n = 170 (32\%) \)]. Those who were between candidacy and defense of the dissertation were classified as Stage 3 [Tinto’s “Completing the Dissertation;” \( n = 265 (49\%) \)]. Means and standard deviations for the independent variables, dependent variables, and the covariate are presented in Table 2.

Statistical Analysis

Multivariate Analysis of Covariance (MANCOVA) was used to test the hypotheses that a graduate student’s age, gender, field of study, stage of persistence, and citizenship status would each be related to his or her identification of the attributes of a good mentor. Analysis of covariance includes both categorical and continuous independent variables, allowing the effects of each variable to be determined
TABLE 2. Unadjusted Group Means and Standard Deviations for the Covariate Age and for the Three Dependent Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Gender</th>
<th>Citizenship</th>
<th>Tinto Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>US</td>
</tr>
<tr>
<td>Age</td>
<td>30.84 (6.55)</td>
<td>31.44 (7.24)</td>
<td>31.38 (7.38)</td>
</tr>
<tr>
<td>Integrity</td>
<td>3.95 (0.56)</td>
<td>4.21 (0.53)</td>
<td>4.13 (0.51)</td>
</tr>
<tr>
<td>Guidance</td>
<td>3.78 (0.62)</td>
<td>3.84 (0.70)</td>
<td>3.81 (0.64)</td>
</tr>
<tr>
<td>Relationship</td>
<td>2.32 (0.62)</td>
<td>2.22 (0.63)</td>
<td>2.16 (0.58)</td>
</tr>
</tbody>
</table>

Academic Discipline

<table>
<thead>
<tr>
<th>Variables</th>
<th>Social sciences and education</th>
<th>(n = 239)</th>
<th>Humanities and arts</th>
<th>(n = 127)</th>
<th>Natural sciences</th>
<th>(n = 171)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>32.21 (7.71)</td>
<td>32.98 (6.74)</td>
<td>28.36 (4.78)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integrity</td>
<td>4.12 (0.54)</td>
<td>4.10 (0.56)</td>
<td>4.05 (0.58)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guidance</td>
<td>3.85 (0.65)</td>
<td>3.75 (0.69)</td>
<td>3.83 (0.66)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship</td>
<td>2.23 (0.62)</td>
<td>2.17 (0.61)</td>
<td>2.38 (0.64)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Integrity, Guidance, and Relationship are sub-scales of the Ideal Mentor Scale. Means are based on a 5-point response scale: 1, “not at all important”; 3, “moderately important”; 5, “extremely important.” Tinto Stage indicates stage of persistence toward the doctoral degree: 1, “Transition and adjustment”; 2, “Attaining Candidacy”; and 3, “completing the dissertation.”

\(^a\)Cohen’s \(d = 0.4\) for males vs. females on Integrity, \(p < .01\).

\(^b\)Cohen’s \(d = 0.6\) for US vs. non-US Citizens on Relationship, \(p < .01\).
RESULTS
Multivariate Effects

To examine the effects of the five academic and demographic variables on students’ scores on the IMS, an overall four-way multivariate analysis of covariance (MANCOVA) was performed with gender, citizenship, field of study, and stage of persistence as independent variables, age as a covariate, and the three factor-based IMS scales as dependent variables. This was a main effects model that also examined all two-way interaction effects. Three-way interactions were not included in the model, as such multivariate interactions are assumed to be negligible (due to the non-significant two-way interactions), and are difficult or impossible to interpret. All two-way multivariate interaction effects were not significant (p-values for Wilks’ lambda statistic > .01 for all six interactions). Significant multivariate main effects were found for gender (Wilks’ lambda = .97, $F(3,514) = 5.62; \ p < .01$) and for citizenship (Wilks’ lambda = .94, $F(3,514) = 11.70; \ p < .01$). The multivariate main effects for field of study and stage of persistence were not significant.

Univariate Effects

Because the overall MANCOVA demonstrated significant effects, univariate factorial analyses of covariance (ANCOVA) with four between-groups factors and one covariate were then performed to examine the gender, citizenship, field of study, and stage of persistence hypotheses on the three individual factor-based IMS scales, with age as the covariate. Least squares means were used to examine differences in cell means, as all cells were of unequal sizes.

The IMS Scale 1 (Integrity) analysis revealed a significant main effect for gender, $F(1,516) = 8.87; \ p < .01$. Female students rated the Integrity scale as more important than did the male students (adjusted M = 4.2 vs. 4.0 on a 5-point scale; Cohen’s $d = .4$). Respondent gender accounted for 2% of the variance in scores on Scale 1. The remaining main effects, interaction effects, and the covariate on Scale 1 were not significant.

The IMS Scale 2 (Guidance) analysis revealed no significant main, interaction, or covariate effects. There were no group differences in students’ ratings of Guidance.
The IMS Scale 3 (Relationship) analysis revealed a significant main effect for citizenship, $F(1, 516) = 20.43; p < .01$. International students rated the Relationship scale as more important than did the US citizens (adjusted M = 2.5 vs. 2.2; Cohen’s $d = .6$). Citizenship accounted for 3% of the variance in scores on Scale 3.

In addition, there was a significant effect for the covariate age on Scale 3 importance ratings, $\beta = -.01$, $t[516] = -3.19, p < .01$. Age and Scale 3 score were significantly correlated ($r = -.18, p < .01$), indicating that with increasing age, the mean importance ratings on the Relationship scale decreased.

**DISCUSSION**

Researchers in the field of mentoring have struggled to define the concept in a precise yet encompassing manner. Existing theoretical definitions are broad and comprehensive, designed to apply to all possible mentoring situations. These global definitions have served to enhance communication within the field such that a general consensus exists about what is meant by the term. What is missing from the all-encompassing definitions is an understanding of the idiosyncratic nuances of meaning that exist between various groups of individuals. In this study, individual definitions of “ideal mentor” were ascertained, then grouped by age, gender, nationality, field of study, and stage of persistence. Comparisons of students within each subgroup were examined to see whether the umbrella definition of mentoring could be more precisely specified.

Differences between subgroups were observed for some variables. First, as age of the student increased, importance of the personal relationship aspect of mentoring decreased. Second, female students considered a mentor’s integrity or humanism to be more important to their definition of the ideal mentor than did male students. Finally, international students considered a mentor’s willingness to engage in a personal relationship with them to be more important to their definition of a mentor than did domestic students. Several other hypotheses were not supported, however. Overall, the observed group differences were fewer and weaker than predicted.

**Age**

As hypothesized, a significant inverse relationship was found between age and the Relationship scale of the IMS, a conceptualization of mentoring that includes close personal sharing. Predicted inverse relationships between age and the mentoring styles represented by the IMS
scales Integrity and Guidance were not observed, however. This result can be interpreted in the context of Levinson et al.’s (1978) theory of adult development, which posits that mentoring, an important aspect of development in early adulthood, wanes in importance during middle adulthood. It is possible that the Relationship scale is a better representation of Levinson’s definition of mentoring than are the Integrity or Guidance scales. Indeed, two of the items comprising the IMS Relationship scale were written specifically to reflect Levinson’s theory: “My ideal mentor would relate to me as if he/she is a responsible, admirable older sibling,” and “My ideal mentor would help me realize my life vision” (Rose, 2003). In contrast, none of the IMS Guidance items had been *a priori* classified as representing Levinson’s theory during the construction of the IMS. This interpretation is supported by Aguilar-Gaxiola et al. (1984) finding that older psychology graduate students (ages 41–58; age groupings were made in accordance with Levinson’s categories) tended to receive less mentoring than younger students.

However, the failure in this study to detect a significant relationship between age and the other IMS scales is inconsistent with Wilde and Schau’s (1991) findings. These authors reported inverse relationships between age and a mentoring style involving activities that might be considered “Guidance” or “Integrity” in IMS terminology (e.g., helping to get fellowships, working in a formal graduate assistant role as a TA or RA, assisting with a first job, or nominating the student for professional positions). Furthermore, these authors found no significant relationship between age and a “Relationship”-type mentoring style involving friendship and discussion of personal dilemmas. The findings reported here are essentially opposite to those reported by Wilde and Schau (1991). Two major differences between their study and the current one should be noted. First, the doctoral students in their sample were those who had been identified as “mentees” by professors in colleges of education; all the participants were involved in mentoring relationships. Second, their questionnaire ascertained characteristics of the existing relationship, not the student’s abstract preference for certain characteristics. The types of relationships that exist between education professors and the older students they have selected as mentees, therefore, may be opposite to the preferences held by a broader range of older doctoral students who may or may not be involved in current mentoring relationships. Further research is needed to better understand this discrepancy.

The findings of this and earlier studies suggest that relationships exist between student age and their experiences and/or ideals of mentoring. Conflicting findings do not allow for firm conclusions about these
relationships. However, the hypothesis that mentoring of all types is less important to older students was not supported in this study.

**Gender**

Hypotheses regarding graduate student gender were partially supported. Consistent with one hypothesis, the Integrity scale of the IMS, which includes role modeling and professional ethics, was rated as more important by female graduate students than it was by male students. However, the prediction that men would have higher ratings on the Guidance scale (reflecting practical assistance) was not supported. These results are consistent with Gilbert’s (1985) finding that female psychology graduate students rated role modeling relationships to be more important than did their male peers. In particular, Gilbert’s study found that women rated “Personal Attributes” (e.g., trustworthiness), and “Lifestyle and Values” (e.g., ability to combine career and marriage) as more important than men did. Role modeling, trustworthiness and other admirable personal attributes are aspects of mentoring that are similar to those represented by the IMS Integrity scale, but not in the other two scales. The IMS does not specifically address lifestyle concerns such as work/family balance.

Men’s vs. women’s scores on both the Guidance and Relationship subscales did not differ from one another. Thus, while men may be receiving more information and camaraderie from mentors (e.g., Collins, 1983; Fried et al., 1996; Wilde and Schau, 1991), women appear to value these dimensions of mentoring as much as men do.

**Citizenship**

As hypothesized, international students showed a significantly greater preference for a mentor who is interpersonally involved in the student’s life (as represented by the Relationship scale of the IMS), compared with domestic students. Indeed, this finding was the most robust of all the comparisons examined in this study. In contrast, the hypothesis that specific academic assistance from a mentor (IMS Guidance) would be more important to international students was not supported. These findings are consistent with research highlighting social barriers faced by many international students, and the primacy of social support as a coping strategy (Jacob and Greggo, 2001; Naidoo, 1991; Wan et al., 1992). Close personal contact with a mentor may be desired as a way to meet these needs. International students may also recognize that close contact with a mentor can assist with their enculturation, a unique developmental task for this population of students (Jacob and Greggo; Kilburg, 1992). The
preference for IMS Relationship-type mentoring was the only unique finding in the comparison of international and domestic students. These two groups of students had similar importance ratings for both Integrity and Guidance sub-scales.

In the investigation reported here, the group of international students was quite heterogeneous, comprising citizens of 50 different countries with varied cultural backgrounds who may or may not have lived in the US prior to enrolling in their doctoral programs. That a strong effect of citizenship on the Relationship scale emerged in spite of the heterogeneity in country of origin among the international students suggests that this relatively crude dichotomization may be a useful way of conceptualizing graduate students with different needs for mentoring. A more refined classification of students might allow more specific distinctions to be drawn between and among students with more similar cultural backgrounds, and would further our understanding of the dynamics of the mentoring relationship across cultures.

Academic Discipline and Persistence

Contrary to expectation, no significant differences in ideal mentor ratings were observed between students in different fields of study or at different stages of progress toward the doctorate. These null results were surprising in light of the literature identifying the importance of discipline and stage in defining doctoral students’ experiences. Discipline-specific differences in doctoral degree requirements and program structure are associated with important graduate student outcomes such as time-to-degree and completion rates (Bowen and Rudenstine, 1992; Nerad and Cerny, 1991; Zwick, 1991). Likewise, the process of obtaining a doctoral degree requires different skills or abilities at different points in time, from the initial adjustment to a new intellectual community in the first year, to sustained independent focus on dissertation writing in the final period (Tinto, 1993). The findings reported here suggest that in spite of the varying structures and demands on doctoral students in different programs and at different times, there are not substantial differences in the conceptualization of mentoring between students of different academic disciplines and stages of persistence. A student’s categorization on these academic factors is not associated with a preference for a mentor exemplifying Integrity, Guidance, or Relationship. Preferences for the ideal mentor appear to have more to do with major socio-cultural factors than with academic factors.
Summary and Implications

The primary result of this study was that conceptualizations of the ideal mentor vary by age, gender, and citizenship, but not by academic discipline or stage of persistence. Demographic attributes, more so than academic classifications, seem to drive a student’s notions about the qualities of a person she might look to for assistance with the achievement of professional and personal aspirations. The demographic attributes may have larger influence because they are presumably more central to a student’s identity than are her immediate educational circumstances.

These findings can be interpreted in light of existing mentoring theory. Comprehensive theories of mentoring such as those advanced by Anderson and Shannon (1988), Kram (1985), and Levinson et al. (1978), have highlighted the broad range of functions a mentor might perform. Within this broad concept, mentoring means different things to different people. Rose’s (2003) factor analytic study demonstrated there are individual differences in doctoral students’ perceptions of mentoring. The current study took a deductive approach that enabled some clarification of the determinants of students’ preferences for mentoring, beyond individual differences. The findings presented here indicate a doctoral student’s perception of the importance of various mentor attributes and behaviors varies somewhat by age, gender, and citizenship status.

This study also demonstrated that group differences in mentoring ideals existed for the Integrity and Relationship scales of the IMS, but not for the Guidance scale. The importance of Guidance, which represents the most practical element of mentoring, appears relatively constant between groups of graduate students with various personal and academic attributes. That is, individual differences seem to play a larger role than demographic or academic attributes in students’ determinations of the importance of Guidance.

Limitations and Directions for Future Research

The absolute differences in mean IMS scores between subgroups of students in this study are generally of low magnitude. For example, the difference between men’s and women’s mean scores on the Integrity scale, though statistically significant, was modest (.2 on a 5-point scale). Gender accounted for just 2% of the variance in scores on this scale. The absolute difference between mean scores of international and domestic students on the Relationship scale was similarly modest (2.5 vs. 2.2), with citizenship accounting for just 3% of the variance in scores on this scale. Moderate effect sizes for these differences ($d_s = .4$ and .6 for gender and citizenship
mean differences, respectively) suggest that group differences contribute to the variability in students’ perceptions of mentoring (as measured by the IMS); however, it may be that group differences are less important than individual differences in explaining student perceptions.

Characteristics of the sample may limit generalizability. Participants were all enrolled in Ph.D. programs at Research I institutions which place a heavy emphasis on research productivity. Such institutions generate a large proportion of earned doctorates; however, many Ph.D. recipients obtain their degrees from other types of institutions. Extrapolation of findings to graduate students in other institutions and/or settings should be made cautiously.

Future research might refine and expand the range of predictors of mentoring style preference. For example, students’ definitions of the ideal mentor might vary according to who the mentor is, vis-à-vis the student. While the majority of students in Rose’s (2000) study (78%) stated their ideal mentor would be their faculty advisor, other students preferred mentors who played different roles in their lives, such as other professors in the department or university, or non-university professionals. The ideal attributes of academic vs. private-sector mentors may be different. Protégé variables such as citizenship could be refined further, and other variables such as personality, career aspirations, professional achievements (e.g., publications, teaching experience), or previous experience in mentoring relationships might also be explored as predictors of mentoring style preference. Examination of these more sophisticated variables might enable greater understanding of the mentoring construct and contribute to evolving theory.

Additional research is needed to further understand the implications of students’ preferences for ideal mentoring. For example, the relationship between mentoring desired and mentoring received needs clarification. Must a person meet a student’s definition of ideal in order to be considered a mentor? Are “ideal” mentors necessarily better able to help students achieve their individual goals? Do the qualities of an ideal mentor need to be found in one person, or can a smattering of important others collectively meet a student’s needs? Finally, might the notion of ideal mentor foster unrealistic over-idealization of the mentor and future disillusionment? Answers to these questions will further advance our understanding of the mentoring phenomenon in the context of graduate education.

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