ISSUES IN TRAINING FAMILY SCIENTISTS.

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Abstract:
Issues related to graduate education in family science, especially at the doctoral level, are explored in this article. Using Boyer's 4 types of scholarship ('i.e., discovery, integration, application, teaching) as a framework, we discuss the competencies family scientists should have, as well as the experiences necessary to help students acquire them. We propose ideas for a core curriculum for family science doctoral study. Controversies and unresolved issues are identified, and the training of family scientists for the future is examined.

Key Words:
curriculum, family science, graduate education.

Article:
In this article we explore several issues related to educating doctoral students to become family scientists. We begin the article by briefly addressing what a family scientist is. Then we identify competencies we believe a family scientist should possess. Following that, we outline the kinds of academic experiences we think are necessary to achieve those competencies, and we discuss other kinds of activities that should be provided as part of the training for family scientists. The next section of the article includes a discussion of controversies and unresolved issues in the education of family scientists. The article concludes with some speculations regarding the future of graduate education for family scientists.

We want to note at the outset that there is little literature on the topic of training family scientists. There is more written about educating undergraduate students in family studies than there is about educating graduate students to become family scientists. Therefore, much of what is contained in this article reflects our collective wisdom and biases regarding graduate education.

What is a Family Scientist?
The three co-authors of this article clearly personify the difficulties in defining what a family scientist is. We have graduate degrees in counseling psychology, family studies, child development, and sociology. Two of us have doctorates in family studies (Ganong and Demo), and one has a doctorate in special education (Coleman), yet all three of us wear the mantle of family scientist. In addition, we identify ourselves with labels of other professions, such as sociologist, mediator, and counselor. Two things make us typical of family scientists: (a) the diversity of educational backgrounds and (b) the fact that we hold multiple professional identities. None of us has had the same graduate training, although there obviously was some overlap, and yet we are all family scientists.

There are broad and narrow definitions of family scientists. The broad definition is any social or behavioral scientist who studies families, a definition which includes family psychologists, sociologists, family life educators, family therapists, family policy analysts, family nurses, psychiatrists, communications scholars, anthropologists, and others. The narrow definition is that a family scientist is a person "who studies the

workings of the family as the foreground of their inquiry" (R. D. Day, e-mail communication, December, 1994). In this narrower view, family scientists may draw upon knowledge from other disciplines, but the knowledge is focused upon the internal dynamics of families and the ways families interact with their ecosystems (Keim, 1995). The broad definition includes scholars and practitioners who study and work with families part of the time, although they may also focus on individuals and on nonfamily groups. The narrow definition includes only those scholars and practitioners whose primary focus is on families. According to this narrow definition, family scientists conceptualize their study or practice within a familial context, even when they study or work with individuals.

Defining family science is difficult; there is controversy over whether a family science discipline exists and, if it does, what distinguishes it from other social and behavioral sciences that incorporate the study of families (Beutler, Burr, Bahr,& Herrin, 1989; Burr & Leigh, 1983; Edwards, 1989; Jurich, 1989; Menaghan, 1989; NCFR Task Force on the Development of the Family Discipline, 1988). Our purpose is not to debate the existence of family science as a unique profession, nor is it to bog down in controversies regarding who can legitimately be called a family scientist. Obviously, those calling themselves family scientists are a diverse group, and their training is also diverse. In this article we will use the broad view of family science, but we will limit our comments regarding educational and training issues to academic programs that focus primarily on preparing individuals for professional careers that emphasize families.

What Competencies Should a Family Scientist Have?

Having established the diversity of family scientists, it may seem to be impossible to identify competencies that all family scientists should possess. After all, the broad definition of family scientist includes researchers and practitioners, as well as persons trained in various academic departments. Students applying to family science programs have a variety of career goals in mind: college teaching and research; individual, marital, and family therapy; child-care administration; administration of agencies serving families, children, and the elderly; Cooperative Extension; public policy; public school administration and teaching; and other careers (Day, Quick, Leigh, & McKenry, 1988). These students bring with them expectations about what they will be taught and what skills and knowledge they will acquire as a result of their graduate training. Although this diversity would seem to mitigate against being able to identify general competencies that family science graduates should have, we think it is possible, using Boyer's (1990) model of scholarship as a guide, to identify in general the types of competencies graduates should have when they complete their doctorates.

Boyer (1990) identified four types of scholarship: (a) discovery, (b) integration, (c) application, and (d) teaching. Although Boyer was writing about activities of the professorate, we contend that this framework provides a useful heuristic device for thinking about family scientists as scholars, regardless of their career path.

The scholarship of discovery refers to research and the acquisition of new knowledge. It is the lifeblood of faculty activities at research and doctorate-granting universities. The scholarship of discovery is at the core of family science-without research, we would be left with myths, biases, and folk tales about families and family relationships.

The scholarship of integration is defined as" . . making connections across the disciplines, placing the specialties in larger context, illuminating data in a revealing way ... The scholarship of integration also means interpretation, fitting one's own research-or the research of others-into larger intellectual patterns" (Boyer, 1990, pp. 18-19). This type of scholarship is clearly related to discovery, but the task here is not to generate new knowledge, but to make meaning out of what is known. Because the topic of "family" is of multidisciplinary interest, family scientists must do this type of scholarly work nearly every day.

The scholarship of application is concerned with applying knowledge to the solution of individual, familial, and social problems. In academe, it is often referred to as service, and it involves the serious application of scholarly knowledge to social issues and problems. Many family scientists enter the field out of a concern for others, and

it is probably safe to assume that most family scientists have a desire to make a contribution to society. There are many opportunities for family scientists to make a contribution.

The final domain of scholarship is teaching. Teaching as scholarly work involves not only transmitting knowledge, but transforming and extending it as well. Good teaching informs, inspires, and excites. The scholarship of teaching relies on instructors' abilities to incorporate the scholarships of discovery, integration, and application in developing the next generation of family scientists.

We think the broad goal of graduate education for family scientists should be to train students to achieve minimal competencies in all four of these areas. It is unreasonable to expect that all students will excel in all of these scholarship domains. Some students will not be motivated to develop knowledge and skills in all four areas, just as some faculty members are not motivated to engage in all types of scholarship. Nevertheless, those who educate future generations of family scientists should set ambitiousgoals for themselves while striving to help students achieve acceptable levels of mastery in research, teaching, integration, and application.

To prepare students for the multifaceted responsibilities of being a family scientist and to teach them the linkages among the four areas of scholarship, educators of family scientists should help students achieve the following competencies:

A sophisticated understanding of family dynamics and of the interrelationships between families and other social systems.

Knowledge of interrelationships between family systems and life span human development.

A broad understanding of family theories.

A broad understanding and appreciation of marginalized, disadvantaged, and oppressed families.

An understanding of the diversity of families (e.g., ethnic, racial, structural diversity).

Mastery of qualitative and quantitative research methods used to study families (including evaluation research).

Ability to communicate to lay audiences.

Ability to communicate to professional colleagues.

Leadership/administrative skills.

Ability to teach at the college level.

Ability to teach in community settings (e.g., adult education, workshops).

Knowledge of ethical standards affecting their interactions with families, as well as ethics involved in research and publishing.

In addition to these competencies, some programs may have specific skills and knowledge that they want their graduates to have mastered. For example, family mediation or family therapy programs would specify desired competencies that would match the professional demands made upon family mediators and family therapists.

Content about families as the basis for scholarship. We think that most students begin their graduate training expecting that graduate education consists primarily of learning more content about family dynamics, about the interface between families and other social systems, and about other domains of knowledge that strike them as

relevant to the understanding of families in society. Faculty generally believe that graduate education is much more than this, but there is no denying that all of the forms of scholarship outlined by Boyer are predicated on the assumption that knowledge about the subject matter is important and relevant.

The scholarship of discovery and research skills. Doctoral students quickly learn that research skills are highly valued by their faculty. Students are sometimes surprised to find that faculty emphasize the acquisition of research skills and an understanding of research methods as much as they do learning new content about families. In our work as educators of future family scientists, we tell students that because facts change, the content they are learning eventually will be outdated. We also assure them that, by acquiring the skills necessary to master the methods of learning new knowledge, they themselves will not become outdated as family experts.

We think students should learn as much as possible about both quantitative and qualitative approaches to studying families. They should be able to critique and evaluate research, design studies, and conduct research. The latter may include knowing how to collect data through a variety of approaches, how to analyze secondary data sets, or how to conduct meta-analyses of primary studies. Because of the applied nature of many family science careers, it is critical that students learn research techniques related to intervention and program evaluation. Statistics and computer skills are included in this competency area, as are techniques of qualitative data analysis. The quantitative bias in contemporary family science makes it important that we strengthen our efforts to enhance students' qualitative research skills.

The scholarship of integration. Family scientists must have a broad understanding of the field and the ability to integrate material from a wide range of disciplines and research traditions. In our opinion, families are among the most challenging foci of study, primarily because of their complexity and the multidisciplinary nature of the field. A good family scientist reads broadly and is able to comprehend and apply theories and methods from several disciplines. The scholarship of integration also demands that family scientists be able to communicate effectively to the public and to other scholars. This involves the ability to write clearly and concisely and to explain difficult and complex phenomena without oversimplifying or trivializing. Integration also requires effective oral communication, whether answering a reporter's questions or delivering a speech to colleagues at a professional conference.

The scholarship of application. The range of scholarly applications in which family scientists can engage is broad. In general, however, regardless of the venue for application, family scientists-in-training should become familiar with the ethics of their specific professions (e.g., family therapy, family mediation), as well as with the ethics of conducting research with families and especially with children in families.

In addition, we include leadership skills as part of the competencies we think doctorally-prepared family scientists should possess in order to participate in the scholarship of application. Whether justified or not, the public presumes persons with doctorates to be experts. Family scientists are called upon to have content expertise, evaluation skills, and perhaps even organizational or administrative skills. For these reasons, we expect graduates to show evidence of ability to lead others.

The scholarship of teaching. Although not all students want to become instructors, the scholarship of teaching encompasses more than what traditionally comes to mind. It is, in essence, the ability to communicate and interpret research findings and theory to others. Conceived in those broad terms, all family scientists have opportunities to engage in the scholarship of teaching. Nonetheless, two venues are most common: college and university instruction, and teaching in other settings such as in-service training for other professionals, community workshops, or parent education programs. College teaching involves learning such skills as planning course objectives; developing syllabi; planning course assignments; grading and giving performance feedback to students; preparing, delivering, and revising lectures; leading discussions; selecting readings and textbooks; conducting self-evaluations and course evaluations; writing class materials; designing self-direct-ed and group activities that promote critical thinking; and dealing with difficult students (For an excellent resource

on these topics, see McKeachie, 1994). Preparing students to be good faculty members also involves teaching them about the expectations placed upon university faculty by administrators, the public, faculty peers, and students. Committee work (Smelser, 1993), service to the academic department, to the institution, to family science as a field, and to the community as a whole are all part of faculty responsibility that should be communicated to graduate students wishing to pursue higher education as a career path.

Teaching in other (i.e., non-university) settings involves many of the skills mentioned above: planning, setting objectives, conducting evaluations of self and the program, and preparing and delivering lectures. Both types of instruction require learning how to develop handout materials, how to gauge students' readiness to handle new material, and pacing instruction to match students' abilities. Although there is much to learn if one is to be adept at the scholarship of teaching, these competencies are often slighted by graduate educators.

Educational Experiences Necessary to Achieve Competencies

What kinds of academic experiences do graduate students need to help them achieve the competencies we have identified? There is little evidence that widespread agreement exists regarding family science curricula (Day et al., 1988; Touliatos, 1994; Touliatos & Lindholm, 1991). Certification or licensure requirements influence curricula for some types of family science program options and, in some cases, dictate coursework requirements (e.g., family therapy, family mediation). Although different programs are likely to have different areas of emphasis and expertise, in the absence of uniform standards, we propose what we think should comprise a core family science curriculum.

A suggested core curriculum. All doctoral students should have courses on quantitative research methods, qualitative research methods, and statistics, including multivariate statistical techniques, in order to obtain a grounding in the scholarship of discovery. To be able to engage in the scholarships of discovery and integration, new family scientists must be capable of understanding a wide variety of research designs and analytic strategies.

Theory courses also should be included in the core. Doctoral students should have at least two courses in family theories, and most should have a third theories course, perhaps choosing from among human development theories, sociological theories, social psychological theories, family therapy theories, and feminist theories. Further, all substantive and research methods courses should incorporate theory.

Content included in the core should incorporate one or two courses on lifespan human development, a course on multicultural families, courses on internal family dynamics, and a course on application of family scholarship (e.g., family policy, family life education, or family mediation). An ethics course could also be included as part of the application section of the curriculum. Other content courses could reflect the skills and expertise of the faculty. For example, in the Department of Human Development and Family Studies at the University of Missouri, we have identified family diversity and multiculturalism as our focus of interest, and students are able to select from among several courses that emphasize various dimensions of family diversity and multiculturalism in American society and in other cultures.

Academic experiences. Regardless of the curriculum structure, students should be given many opportunities to develop the skills and competencies identified earlier in this article. For example, because we think research skills are best developed through experiences in conducting research, doctoral students in our program are required to take six credit hours of research practica, in which they work hand-in-hand with faculty designing projects; collecting, coding, and analyzing data; and preparing manuscripts. In any course, students can be required to evaluate relevant research (Ganong & Coleman, 1993). We hope it is obvious that the scholarship of discovery should be an integral part of every graduate course taken by a family scientist-in-training. As William James allegedly said, "research is to teaching as sin is to confession, without the former, you have nothing to say in the latter."

Many opportunities can be made available for students to integrate what they are learning and, more importantly, to integrate the state of the knowledge base in the field. For example, students could be asked to conduct integrative reviews of the research literature in theory or content courses, allowing them the chance to connect the knowledge base on a given subject with how that knowledge was acquired. Guides for writing reviews of family literature have been published (Benson, Sporakowski, & Stremmel, 1992), as have guidelines for integrative reviews in the social and behavioral sciences in general (Cooper, 1989).

One issue related to literature reviewing that is particularly relevant for family scientists concerns training students how to manage the volume and diversity of literature that confronts family scientists. The volume of published work in family research, theory, and application is growing exponentially. Family scholars find themselves struggling to stay abreast of the literature on hot topics such as divorce, work and family, and child abuse. We have observed that some scholars cope with this situation by narrowing their reading. Some narrow their reading by limiting the journals they regularly read; they may read only mainstream family journals (e.g., Journal of Marriage and the Family, Family Relations, Journal of Family Issues), or they may read family work within only a specific discipline (e.g., psychology, sociology; nursing). Other family scientists narrow their reading by keeping up with a limited range of content, regardless of the journals in which this work may appear. Ideally, a family scientist reads across disciplines and is able to stay current with the literature in several areas of family study. Students should be trained to try to achieve this ideal, but they should also be trained in how to cope with the burgeoning volume and range of published work they will encounter. Because achieving the ideal requires delving into many different types of literature, students need to be taught how to search across disciplines; how to understand different terminology, theories, and methods that may be used; and how to interpret what they read.

Just as research and theory should be a part of any course, the argument has been made that application should also be interwoven into content, research methods, and theory courses (Schumm, 1982; Sprenkle, 1976; Volk, 1989). This process apparently is easier to recommend than it is to do; for over two decades, family scientists have bemoaned the relative absence of integration between research and practice. Nevertheless, family science graduate students should be provided opportunities to think about the relationship between theory/research and practice. Ideally, they should be exposed to and learn from faculty role models who make efforts to bridge the discovery-ap-plication gap (Boyer, 1990). Internships and other types of applied practica experiences provide students with opportunities to use in real-life settings the scholarly knowledge they have gained in formal coursework.

Finally, graduate students should be given opportunities and resources to develop teaching skills. These opportunities could range from group work in classes and class presentations to supervised responsibility for undergraduate courses. Many family science programs are using teaching assistantships not only as a way to financially support students, but as a way to help students develop teaching skills (Darling & Earhart, 1990).

Other Activities That Should be Provided as Part of Family Scientists' Training

It could be argued that much of the important work of doctoral training occurs outside of formal classroom situations. In fact, we could make a pedagogical case for considering doctoral students to be more like junior colleagues than students. Whether a degree program consists mainly of prescribed courses that nearly all students take or is little more than a menu of loosely related courses, family scientists-in-training will gain skills and much of their knowledge outside of class and independent of formal instruction by the faculty.

For example, students can engage in aspects of the scholarly process of discovery and integration through research assistantships, which are particularly effective when faculty supervisors are directly involved in the mentoring process. Informal collaborative arrangements between faculty and students also provide excellent opportunities for students to learn firsthand about the research process (Giles & Endsley, 1988; Stith, Jester, & Linn, 1992). In some programs, students are required to submit a grant proposal to fund their dissertation research or to submit a manuscript to a professional journal.

Although teaching assistantships are perhaps the most common example of opportunities to develop the scholarships of integration and teaching, there are many other venues for doctoral students to engage in the scholarship of teaching. They can give guest lectures in undergraduate classes, and opportunities for community teaching experiences are often available through Cooperative Extension for those at land grant universities or through continuing education programs. Some graduate programs require their students to submit proposals for presentations at regional and national conferences.

Students can become involved in applying their knowledge in a variety of nonacademic contexts, such as social service agencies and government agencies. Often, students gain experience in these settings while enrolled in practica courses, internships, or problems courses, but students may also seek opportunities to apply family scholarship on their own time through volunteer work.

Controversies and Unresolved Issues in the Training of Family Scientists

Defining family science. One controversy that we sidestepped earlier in this article is that of defining the field of family science, and consequently, defining who are family scientists. Although a complete discussion of this issue is beyond the scope of this article, the issue obviously has relevance for educating family scientists.

A core body of knowledge? One salient issue is whether or not there is a body of knowledge that should be included in the program of study of every family scientist-in-training. We have taken very limited steps toward identifying such a core in this article. To our knowledge, this issue has not been formally addressed in the literature, yet the notion that there is a substantive body of information that should be mastered by doctoral students is standard in many fields. In fact, licensure for psychologists, social workers, and counselors, and certification for family therapists and certain types of nursing specialties, are predicated on the idea that a specific body of knowledge should be mastered before people can practice and before they can attach a professional label to themselves. It could be argued that if family science is a separate discipline, then there is a core that should be taught in all graduate programs. This is clearly not the case at the present.

Because there are many different pathways to becoming a family scientist, it is unlikely that a core body of knowledge would find wide agreement. Some professionals would consider their family scientist identity as secondary. These individuals likely were trained in a "root" discipline such as sociology or psychology, or their doctorates were in an applied or practice discipline such as nursing, counseling psychology, social work, or education. These family scientists still maintain their primary professional identity with the fields in which they were originally trained and socialized, although some may gradually find themselves spending more and more of their time and effort engaged in family science work.

For others, family science is a primary professional identity, usually emerging from having been educated in programs that were specifically identified as family science or family studies. Scholars from such programs would be the logical ones to advocate for a core body of knowledge. Perhaps this issue is one that can only be addressed after other questions are answered. These questions include: Is family science a unique discipline? Is it a subdiscipline? If so, a sub-discipline of what? How does family science overlap with other social and behavioral sciences? These questions have been debated and analyzed in the literature, with no clear resolution (Beutler et al., 1989; Burr & Leigh, 1983; Edwards, 1989; Jurich, 1989; Keim, 1995; Menaghan, 1989).

An examination of the courses offered in the most recent review of graduate programs in marriage and the family (Touliatos, 1994) indicates that graduate programs are far from achieving any kind of consensus regarding courses made available to students. Although examining course listings is not definitive evidence of whether there is a standard body of knowledge being taught in these programs, the diversity of courses and the variability in the descriptions of degree emphases make such a possibility unlikely.

The wide range of course offerings in these programs causes us to wonder if family science graduates possess the skills and knowledge needed by prospective employers. What skills and knowledge do employers expect of our students? The diversity of positions taken by beginning family scientists prohibits us from drawing a quick

and easy answer to this question, but this diversity should not be used as an excuse to ignore the question. A curriculum should not be based on employer interests alone, of course, but the content of a curriculum should be congruent with the demands that will be made upon graduates. If not, graduates will not succeed, and demand for family science education eventually will diminish.

Does a master's degree in family science represent a common core of knowledge? What are students expected to know when they earn master's degrees? It may be difficult, or even impossible, to achieve agreement on the answers to these questions, but some degree of consensus that certain topics or content should be mastered before a student begins a doctoral program would be both reasonable and beneficial to the field. For example, if there were some agreement on this, it would be easier to structure doctoral programs for students with master's degrees in family science, particularly for those who obtained their master's degrees from other universities.

Gaining some consensus regarding core family science knowledge would assist doctoral committees in advising students. Recognizing that the typical doctoral committee tries to allow enough latitude in the program of study that students can pursue some of their own interests, as well as be able to exploit faculty strengths, agreement on a minimum or common core of knowledge that all family scientists should possess would help doctoral advisors and committees, and would provide some consistency across universities and across degree programs.

We propose that it is time for family scientists to discuss what, if anything, constitutes the essential knowledge that family scientists-in-training need to master. It should be possible for those with family scientist as either their primary or secondary professional identity to engage in such scholarly dialogue or debate. Although it may be that multiple pathways to the identity will still be possible even after such discussion, it seems imperative for educators involved in the training of family scientists to embark on an effort to discuss core knowledge.

Previous training. A related issue that we think requires serious attention is the importance of students entering graduate programs in family science-and particularly those entering doctoral programs-having had prior education in family studies, psychology, sociology, or related fields. Many prospective graduate students who lack relevant course-work may assume, as the general public often does, that they understand families because of their own life experiences. We have talked with many graduate program applicants who believe that their interest in families and their personal experiences provide them with sufficient background for doctoral study. Further, the interdisciplinary nature of family science attracts students with diverse educational experiences and interests. Given the uneven training of students entering family science graduate pro-grants, how should doctoral programs be structured for students with different educational backgrounds? What minimum remedial or foundational work should be required when students without any prior coursework in family science, psychology, sociology, or related fields enroll in a family science program? Which academic areas of study constitute related fields for family science? Would a list of related fields include, or be restricted to, all other social and behavioral sciences? Should graduate programs be the same for students who majored in family science as undergraduates as for those with little coursework in family science, psychology, and/or sociology? Where do family scholars draw the line regarding how much prior coursework, and in what fields of study, is enough to have adequately prepared a student to begin family study? Although we are not arguing that there must be consensus on these issues, we contend that, at present, there is little agreement regarding what constitutes appropriate prior coursework for students entering graduate programs in family science, and that perhaps there should be more agreement.

One procedure could be to assess entering graduate students' knowledge of the field by administering a qualifying or entrance exam. This procedure, used in a small number of graduate family science programs, enables advisors and committees to determine what students know when they enroll, and to make informed decisions about the foundational coursework that students need before taking more advanced courses. For example, regardless of prior coursework or performance in those courses, if beginning doctoral students do not demonstrate competence in particular areas (e.g., general family science, research methods, family theory, and statistics) on an entrance exam, they would be required to take undergraduate or less advanced graduate courses in those areas prior to enrolling in more advanced courses.

Breadth of preparation. As is true in many fields, doctoral students in family science are typically required to take coursework in outside or collateral areas. This work is essential to learning and advancing the interdisciplinary terrain of family science, yet these collateral areas vary considerably. This variance exists in part because there are so many related fields, including the parent disciplines of psychology and sociology, as well as history, anthropology, women's studies, Black studies, educational and counseling psychology, and economics. Students typically have a great deal of input in structuring the coursework in their chosen collateral field. Although these arrangements often serve the purpose of expanding students' knowledge base, a negative consequence is that students may not get any coursework in other important related fields.

There are other controversies in training family scientists, many of which involve identifying, defining, and filling gaps in doctoral programs. For example, many family scientists do not receive much (if any) coursework on social stratification by race, class, and gender, three axes of stratification emphasized by sociologists and feminists. Course-work in close relationships, often taught in communications departments and in social psychology courses, also could be very valuable. Additionally, coursework in which scholarly knowledge is applied could be advantageous, and we propose that doctoral students who want to teach should be required to take courses in curriculum and instruction. Of course, this list is suggestive rather than exhaustive and is intended to highlight gaps and to stimulate dialogue.

Training Family Scientists for the Next Millennium

Where do professionals in the field of family science go from here in the endeavor to educate family scientists of the future? Before speculating about the future, a brief examination of the past may be helpful in establishing the context.

For the most part, family science programs evolved out of home economics units that were situated in land grant universities. Family courses were a part of a broader home economics curriculum. In the beginning, the purpose of family science was not necessarily to study families or to train family scholars, but rather to prepare young women for family life (i.e., White middle-class family life). Family research was seldom a product of these units; it was primarily family sociologists who produced the seminal empirical work on families. The more applied nature of family science did not seem to lend itself to empirical investigations in the early years. Although other groups of scholars trained students to work with families (e.g., psychiatrists, social workers, psychologists) or conducted research on families (e.g., psychologists), historically, the academic training of family scientists was done by family sociologists and the so-called "functional" (i.e., applied) family relations scholars.

Current events. More recently, the study of family functioning has been the target of increased attention by academics from a wide variety of disciplines. Burr and Leigh (1983) identified at least 19 disciplines that share an interest in families. For example, the relatively new American Psychological Association's division of family psychology is now one of the fastest growing divisions in psychology, family nursing is emerging as a powerful subgroup within that discipline, and family medicine is a medical specialty that has shown renewed interest in understanding family processes. In the midst of this burgeoning interest in studying families, family science may be emerging as a separate discipline or field of study. Additionally, applied research on the family now appears to be more highly valued than in the past, perhaps as a result of professional and public concern about the state of American families (Popenoe, 1993; Whitehead, 1993).

Nonetheless, despite the growing concern about families and the increased interest in family study, family scientists suffer from identity problems and negative external perceptions of the value of their accomplishments. In a recent issue of Sociological Spectrum, Knottnerus and Maguire (1995) discussed the image problems of sociology: "Sociology is an ill-defined discipline. What exactly is a sociologist, and what does a sociologist do... what distinctive contribution does a sociology department make to a university setting? . . . [isn't sociology] just 'dressed up' common sense . . ." (pp. 2425). Their argument is equally applicable to family science.

Family scholars also hear the complaint that family science is just common sense. Everyone has experienced family life, so what is there to study? In fact, undergraduate students sometimes perform poorly in family science classes because they assume their beliefs about families are widely shared and are, in fact, the truth, so they exert little effort towards studying and learning.

Family science has an even greater identity problem than sociology. This identity problem is exemplified by the variety of names used by departments (e.g., family studies, family science, family social science) and by the diverse array of seemingly disconnected subject matter areas that are sometimes housed in the same department as family science (e.g., speech pathology, consumer economics, housing, textiles, parks and recreation). Attempts to forge an identity (e.g., family realm, famology) have met with a fair amount of criticism, if not derision. Most of all, educators need to guard against tendencies to let the enriching and stimulating multidisciplinary nature of family science degenerate into an inadequate, watered-down approach designed to fit all graduate students regardless of their background.

This is a daunting task. One of the pitfalls of multidisciplinary training is that family scientists-in-training may feel like jacks- and jills-of-all trades, but master/mistress of none. There are many advantages to the broad and wide-ranging multidisciplinary education that has characterized family science programs, but one disadvantage is that graduates know less about more than the graduates of single-discipline degrees. As an anonymous reviewer of an earlier draft of this article wrote,

If you have to understand psychology, sociology, and family therapy-at a minimum-how do we give our students this in one PhD? And how competitive will they be with other students who have spent the same amount of time studying just one of those disciplines? Can our students understand sociological theories applied to the family without understanding them in the broader sociological context? Can they understand adult attachment without understanding Bowlby and Ainsworth in developmental context? Are we trading depth for breadth? If so, is that good or bad? What are the implications of these issues for our students, and how do we deal with them in graduate training?

The future of family science training. The fact that family science programs increasingly are housed with strange bedfellows in academia is a factor that makes graduate training for family scientists unusually challenging. It is likely that program reductions, eliminations, mergers, and modifications in academia will continue in the near future. Family science units may be faced with absorbing unwanted or incompatible programs in order to survive, a situation that should incite family science faculty to take a strong proactive stance to maintain program integrity and focus. The importance of identifying a unique program mission and developing a coherent graduate curriculum that rigorously prepares students to carry out that mission should not be underestimated in the current political and academic climate. Social Darwinism often appears to prevail throughout these escalating periods of program scrutiny. Dialogue about some of the issues and concerns raised in this article takes on renewed urgency when academic programs are forced to publicly explain their reason for existing. We think it is imperative that faculty in family science programs be able to identify programmatic emphases that differentiate their degree programs from those of other social and behavioral sciences.

It also may be important for family science faculty to be able to distinguish their programs from family science programs at other universities. There are a few large family science programs, but these are the exceptions. For the most part, the number of faculty in family science programs is relatively small. We suggest that such units should not try to be all things to their students, but should instead focus on one or two emphasis areas in which they will concentrate. By targeting and emphasizing their unique strengths, family science programs will find it easier to define themselves to administrators, intracampus colleagues, and family science colleagues at other institutions.

One strategy for helping define programs and for preparing graduates for professional positions is to develop advisory boards that consist of professionals in academic, human service, business, and other fields. One of the

functions of such boards is to consult with faculty regarding curricular issues. This consultation provides one way to assess if what we are teaching is, in fact, what potential employers think our graduates need to know.

What will family scientists need to know to be prepared for the future? As noted earlier, we think interest in families will continue to grow, creating opportunities as well as challenges for graduate education. In addition to the content outlined earlier in this article, special emphases may need to be placed on training in two areas: (a) family policy and (b) multiculturalism and family diversity.

The value of being knowledgeable about family policy is already apparent and will continue to increase in importance. Family scientists are slowly leaving the sidelines and entering the arena of policymaking (Monroe, 1988; 1995). Job opportunities in government agencies and even in businesses will be increasingly available to family scientists who understand how policies are developed, implemented, and changed. Family scientists will be engaged in all four types of scholarship as they function in the family policy arena. Family science educators will need to work more closely with educators in law, public policy, public administration, and political science. The trend towards educating students about family policy is underway, and is sure to become more significant in the future.

Multiculturalism and family diversity is another current trend that will be of increasing relevance in the United States and in other societies. Family scientists of the future will need to be knowledgable about all types of families and will need to have an understanding and appreciation for the differences and similarities across family structures, across racial and ethnic groups, and across cultures. We think many groups that have been marginalized in family scholarship (and in society) will become the focus of attention by family scientists.

SUMMARY

In this article, we have attempted to shed some light on a topic that heretofore has not been directly addressed. Some authors have written about specific aspects of educating family science graduate students (e.g., Darling & Earhart, 1990), and others have examined undergraduate programs (e.g., Brock, 1987; Payne, 1988), but broader programmatic issues related to training doctoral students have been ignored. In writing this article, we have gained insights into why this is the case.

Family science is an ambiguous concept, one with multiple meanings and diffuse boundaries. The existence of family science as a separate discipline is a philosophical and political issue that is unresolved, and which may remain so for the indefinite future. In our view, the multidisciplinary nature of family study is a strength. However, this multidisci-plinary nature also brings with it potential dangers for family science educators. If family scientists cannot articulate what it is they are doing that is unique, then future prospects for survival in academia may be dismal.

Educators who are training future family scientists have considerable work to do. We have identified several issues we think this group of educators should address: (a) the expected competencies family scientists should have; (b) course-work that should be common to all family science graduates; (c) noncourse experiences that can help students achieve competencies; (d) deciding if, indeed, a discipline of family science exists and, if so, what the parameters of such a discipline are; (e) figuring out ways to broaden family science training while retaining a core body of knowledge; and (f) anticipating the demands made of family scientists in the future.

We hope our comments serve to stimulate thinking and discussion among family scholars. Our intention is to initiate debate on a topic that we believe has been neglected for too long.

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