MENTORING EXPERIENCES: OPPORTUNITIES FOR UNDERGRADUATE STUDENTS IN THE FAMILIES ADAPTING TO DISABILITY/CHRONIC CONDITIONS PROJECT

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Since 1993, faculty from the College of Nursing, School of Family Life, and Department of Counseling and Special Education at Brigham Young University have been involved in an interdisciplinary team studying familial adaptation to a child with disabilities/chronic conditions. We have involved undergraduate students in this project for several years as paid research assistants (RAs).

We believe involving undergraduate students in research is important and beneficial. It increases their ability to apply research to practice, allows them to become directly involved in research activities, exposes them to faculty conducting research, helps them become aware of the importance of lifelong learning, and emphasizes the role of the baccalaureate prepared professional in research. In addition, collaborative opportunities allow for pooling student resources and talents. Finally, it is an effective method of promoting an understanding of the research process; helps the process come alive and increases appreciation for the experience itself. Funding for the project has been obtained from a variety of internal and external sources, and has allowed us to hire several undergraduates as RAs from nursing, special education, and marriage, family and human development.

The undergraduate RAs are afforded a rich mentoring environment. Regularly scheduled meetings, opportunities to enhance professional growth and an actual physical space for our meetings and data storage help facilitate the mentoring process. Biweekly mentoring meetings with both students and faculty are used to teach principles of research, coordinate research activities, analyze data and evaluate the experience. Professional growth is enhanced by having students become co-authors on presentations at professional conferences and manuscripts submitted for publication in peer-reviewed journals. Some also write undergraduate student scholarship proposals funded by the university. Finally, we have physical space to not only store and analyze our data, but also to meet.

A discussion of recruiting, orienting and mentoring follows. First, faculty recruit undergraduates from their respective disciplines (nursing, counseling psychology and special education, marriage, family and human development). Usually the faculty member knows the students because they are in courses the faculty teaches. Faculty also make announcements in their classes or ask specific students to apply for the position because the faculty knows the students would be willing to work on the project for at least one year. Finally, potential RAs are referred by students who currently are working on the project. All students who apply are interviewed by a faculty member and then a decision is made as to who will be hired.

After being hired, RAs are oriented at a meeting. Here, an overview of the project, as well as study findings, a discussion of interviewing tips, how to trouble shoot potential challenges in interviewing, and the informed consent/assent procedures are presented. Handouts describing interview procedures and copies of all measures are discussed. At the end of the meeting, names and phone numbers of families are distributed so the RAs can begin contacting the families. Finally, RAs are given copies of project articles to read and encouraged to come to the investigators with questions.

Research assistants make three home visits. During the first visit, they obtain consent from parents and assent from children who will participate, deliver questionnaires, interview children, and explain how to complete the fourteen-day daily diary and use a disposable camera to children who will participate in that phase of the project. During the second visit, RAs collect the daily diaries and cameras. During the third visit, RAs interview children about their photographs and deliver a second set of questionnaires to parents. Faculty and more senior RAs are always available to newly hired RAs to address issues informally and at periodically scheduled meetings.
After data are gathered, faculty and students meet frequently to analyze qualitative data. Initially, qualitative analysis and how one examines these data for themes are discussed. The importance of rigor and how it is determined is emphasized. Then during analysis meetings, faculty and students work together. For example, when analyzing the fourteen day daily diaries kept by siblings of children with Down syndrome and autism, RAs brought transcribed copies of the diaries to meetings so RAs and faculty could independently (1) read the transcribed responses to each diary question, and (2) make notes or highlight statements that seemed to illustrate a certain theme. Then, all identified themes for each diary question response were written on the black board, discussed and grouped into common categories by counting the number of times a particular theme appeared and noting those themes that appeared regularly. Operational definitions for all themes were then determined, and quotes reflecting operational definitions and themes selected. After analyzing diary entries, faculty and RAs identified similarities and differences between diary responses of the two groups of siblings; those with a brother or sister with Down syndrome or those with a brother or sister with autism. Students were always very involved in the discussions and faculty served mainly as facilitator and blackboard scribe.

Analysis of qualitative data has resulted in student-faculty collaboration on several presentations. For example, up to now, faculty and RAs working on the diary project have prepared and given presentations based on their findings at the National Conference of Undergraduate Research 2003, the annual Brigham Young University College of Nursing Research Conference, the Utah Council on Family Relations, the National Council on Family Relations, the Western Institute of Nursing, and the Council for Exceptional Children Annual Convention. Currently, the students and faculty mentors are in the process of completing several manuscripts based on the sibling diaries.

Students analyzing photographs taken by these same siblings used similar methods: discussing qualitative data analysis, examining photographs for themes, determining operational definitions, and then looking for similarities and differences in themes between the two groups of siblings: those with a brother or sister with Down syndrome or those with a brother or sister with autism. These RAs presented their papers at the Brigham Young University College of Nursing Annual Research Conference in 2004, the 7th International Family Nursing Conference in Victoria, BC Canada in June of 2005 and the Western Institute of Nursing annual meetings in San Francisco in April of 2005, and in Albuquerque in April of 2006. They have completed three manuscripts. One has been submitted to a peer reviewed journal; the other two are about to be sent to additional peer reviewed professional journals.

These mentoring experience have been worthwhile and students’ comments positive. Students have had a hands-on experience collecting and analyzing data, and writing and reporting results to a professional audience. It is a successful, innovative, and relevant way to learn about research. Students also indicate these experiences have increased their appreciation for and fostered their ability to be a productive researcher, improved their self confidence in designing and completing their own research, and encouraged them to consider attending graduate school.

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