Beyond Numbers: Quantitative and Qualitative Research with Alumni Regarding Physician Career Choice and Satisfaction.

This paper describes a research project at a medical college in northeastern Ohio using personality data from 10 graduating classes regarding physician career choice and satisfaction. The project began with the intention of analyzing existing personality data and developing group profiles for medical specialties. It was expanded to relate these profiles to career satisfaction. The paper discusses how the original project was broadened through the use of quantitative and qualitative methodology. Over the 10 years, the number of medical students who participated, taking one of several personality assessments, was more than 800. As the project was developed, several campus departments expressed various concerns about the effort, especially about the negative effects of surveying alumni repeatedly. Eventually, 295 alumni, representing a wide range of specialties, provided permission to use their data. Of these, 210 also responded to the qualitative questions on the survey. The surveys and qualitative comments identified these areas that have an impact on physician satisfaction: gender, balancing family and medicine, time commitments, pressures and stress, working full- or part-time, politics of medicine, rewards, and managing the practice and business of medicine. The implementation of this project shows the value of establishing partnerships across campus that can result in the development of broader alumni studies of greater benefit to the institution. (SLD)
Beyond Numbers: Quantitative and Qualitative Research with Alumni Regarding Physician Career Choice and Satisfaction

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Abstract

This paper describes a research project that began with existing data on ten graduating classes (1989-1998) from one medical college in northeastern Ohio, examining personality and medical career choice. The project was expanded to include new data from alumni, which was obtained from survey research that included quantitative statements utilizing a Likert scale along with qualitative questions. The new and existing data were combined to create a broader data set, including “rich” descriptive information that identified issues impacting physician career choice and satisfaction.

Purpose

This paper describes a research project at a medical college in northeastern Ohio using personality data from ten graduating classes regarding physician career choice and satisfaction. The project began with the intent of analyzing existing personality data and developing group profiles for medical specialties. It was expanded to relate these profiles to career satisfaction. This paper will discuss how the original research project was broadened through the use of quantitative and qualitative methodology.

Background

Personality data from ten graduating classes (1989-1998) were stored after the results were individually interpreted to medical students by the first author. The instruments - Personality Research Form (PRF), Myers Briggs Type Indicator (MBTI) and Medical Specialty Preference Inventory (MSPI) - had served the purpose of providing each individual student who voluntarily took the instrument(s) with information about self, preferences, and careers in medicine when the student was deciding on a career in medicine. Over the ten years, the number of medical students who participated in the personality assessment was 800+. The data set had the potential to provide information about personality types and medical career choice. It was the first author’s intent to analyze the data and use it to help future students who were having difficulty choosing a medical specialty.
The second author, a postdoctoral fellow in Behavioral Sciences, had both an interest and background in research on personality and medical career selection. She came from another medical school to continue her research interests and to work with leaders in the field of career selection at the institution. The two authors collaborated in the Winter 2000 and decided to begin a research project using the existing personality data set.

Research Project

The two authors, along with the chair of behavioral sciences department, met to discuss objectives and purpose of the project. It was decided to add physician career satisfaction to the research project since many of the medical students, now alumni, had years of experience in their career of choice.

As the project was in the development phase, several departments across campus expressed various concerns regarding the research project. The concerns expressed were relevant to each department's respective area. For example, the offices of institutional research and alumni relations were concerned about repeatedly surveying alumni. Institutional research was also concerned about multiple departments across campus surveying alumni without some in-house coordination to ensure that alumni were not asked to provide duplicate information. The additional concern expressed by alumni relations was that inundating the alumni with multiple surveys could result in a lack of willingness on the part of alumni to respond to requests for assistance with admissions, recruitment programs and annual fund drives. The outcome of meetings with institutional research and alumni relations, coordinated by the Executive Associate Dean for Academic Affairs, resulted in a coordinated effort to stagger the surveys so that alumni did not receive multiple surveys in short periods of time. Also, alumni relations agreed to send a letter to alumni, informing them of the multiple projects underway and the periodic requests for information from them.

After approval from the institution's review board, the first author communicated by letter with each of the 800+ alumni regarding the project's objectives, asked for informed consent, and included a one page survey regarding career satisfaction. The survey included six
statements utilizing a Likert scale from an existing study (Snyder, 1994). Qualitative questions were added to the physician satisfaction survey regarding expectations and the actual practice of the specialty area. The basis for these questions came from a study conducted by Warren and Wakeford (1990).

Quantitative Component

A total of 295 alumni provided permission to use their personality data for purposes of this study. Ages of participants ranged from 25-52. Length of years in specialty ranged from currently in residency to 11 years. With regard to gender, 149 (50%) females and 144 (49%) males participated in this study. Two (<1%) individuals did not indicate their gender. Of these individuals, 234 (79%) responded that they worked full-time and 29 (10%) worked part-time, while 32 (11%) did not indicate their work status. Ethnicity of the participants included 58 (20%) Asians or Pacific Islanders, six (2%) African-Americans, 213 (73%) Caucasian, one (<1%) Hispanic, and three (1%) Mexican Americans or Chicanos. Seven (3%) individuals reported their ethnicity as other. Respondents were from the graduating classes of 1989-1998 and were represented by the following: 24 (8%) graduates from 1989, 33 (11%) from 1990, 29 (10%) from 1991, 24 (8%) from 1992, 27 (9%) from 1993, 39 (13%) from 1994, 35 (12%) from 1995, 25 (9%) from 1996, 30 (10%) from 1997, and 27 (9%) from 1998. Two (<1%) participants did not indicate the year they graduated.

A wide range of medical specialists was represented with the majority being family practitioners, followed by pediatricians, interns, obstetricians/gynecologists, and emergency room physicians. Surgeons, anesthesiologists, pathologists, dermatologists, radiologists, orthopedics, and other specialists were represented in lower numbers. In order to protect the anonymity of the participants, the exact number of participants for each specialty is not reported since some specialties only had one individual.

Qualitative Component

Of the 295 alumni who responded, 210 (71%) also responded to the qualitative questions at the end of the survey. These qualitative answers provided descriptive information regarding
physician career satisfaction and dissatisfaction. With regard to how their expectations match their actual practice, 163 provided qualitative data that could be grouped by the following categories. Thirty-nine (24%) respondents indicated that their expectations have been exceeded, 100 (61%) indicated a match between their expectations and actual practice, 11 (7%) had mixed responses, seven (4%) indicated that the match was poor, while six (<4%) described their expectations as unclear. The high level of match between expectations and actuality are similar to what Warren and Wakeford (1990) found in their survey of medical students.

The extensive qualitative comments from alumni have identified the following as areas which impact physician career satisfaction: gender, balancing family and medicine, time commitments, pressures, and stress associated medicine, working full-time or part-time as a physician, politics of medicine, monetary and personal rewards, and managing the practice and business of medicine. A small number of individuals who were dissatisfied with medicine alluded to the possibility of leaving medicine to pursue another career.

**Collaboration**

This paper describes the value of forming collaborative partnerships across campus that can result in the development of much broader alumni studies and which can have a greater benefit to the institution. Building partnerships requires openness, collaboration, shared risk and shared reward (Boex & Henry, 2001). These principles can be applied to the study discussed in this paper. For example, the investigators involved with the alumni research project were open and committed to collaboration and understood the potential for shared risk and shared reward in conducting the study. Yet, there were other constituents across campus who were needed for the research project but who had not been included in the original planning of the project. As the design of the study began to take shape, the role of the constituents became apparent. At that point in the project, a series of meetings with all constituents involved was needed to address concerns and to elicit their participation.

Building collaborative relationships requires different departments to participate at some level with researchers to maximize resources and to avoid duplication of studies. This study
required the investigators to work with the alumni office, institutional research, behavioral sciences, professional development office, which is part of student affairs, and the Dean’s office. Coordinating with these groups and alumni provides a value-added piece to this type of research. Even though conducting research projects is time-consuming and labor intensive, taking the additional time to coordinate efforts across campus can improve the quality of the study, such as increasing response rates, and it contributes to building collaboration.

Researchers who work to build and sustain collaborative relationships with multiple departments will be confronted with problems involving access to data, ownership of data, and problems that can jeopardize the integrity of the research projects. If collaborative relationships are to be fostered and sustained, conveying the findings of the research studies to alumni participants and to departments who formed collaborative partnerships is key. This will help to keep them interested in the project and it will demonstrate the tangible outcome of their time and efforts. The next step in this project is to determine how the findings of the study can be used throughout various departments across campus. For example, the departments involved in student services may utilize the results for student programming regarding career choice and faculty advising while alumni relations may be more interested in the overall satisfaction level of their graduates.

In summary, the investigators have learned valuable lessons in establishing collaborative partnerships while conducting this study. First, anticipating who the interested parties are in any project and bringing those parties together early on in the project is crucial to having all involved “buy into” the project. Second, identifying the shared risks and shared rewards on a project, as suggested by Boex and Henry (2001), encourages cooperation and collaboration. Third, continuing to communicate with the parties with which partnerships have been created until the project is completed strengthens relationships and builds opportunities for future projects.
References


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