

Medical Students and Residency Selection: The Match

by

Kenneth J. King

This study examines the matching system at the University of Southern California School of Medicine. The goal was to determine if personality profiles or traits had an influence on the selection of fourth year medical students in the matching process.

My interest in this subject stemmed from a conversation with a third year medical student. She expressed concern about getting into a residency due to only satisfactory marks in her medical studies. I related an article I had read which appeared in the LA Times and reported that average students make good employees for employers. Further, it was reported that companies and corporations wanted to hire average students because of their social and personal qualities. In some instances, corporations and businesses believe that average students help boost morale by setting a more enjoyable work environment in offices and other commercial settings.

Since I was unaware of how medical students were evaluated for placement, I decided to explore the procedure. Consequently, I was registered for a senior research class and elected to use this topic as my subject. My goal was to provide this as a tool for incoming medical students.

My research generated two articles relating to this subject, "An assessment of academic performance," published in Medical Education 1991, volume 25, pages 345-348 and "Factors important to students in selecting a residency program," Academic Medicine, Volume 65, #155, pages 640-643, October 1990.

In the first article, the study examined whether personality profiles, using personality factors, were associated with academic success. This investigation was a retrospective study to determine if there was a relationship between academic performance and personality and whether personality factors could be used to predict success or failure in medical students. One hundred and forty medical students were surveyed at the University of Wales College of Medicine using a quantitative study and a personality questionnaire.

The second article involved how well medical students matched by comparing ranking lists submitted by the matriculating seniors and residency program directors measuring students' priorities in ranking programs. It was determined that students' priorities were geographic location and diversity of training experience with benefits and salary as the least important.

In my study, I used personality profiles and personality traits to determine if these factors have an influence on whether medical students get their first choice in the matching process. Nine medical students were evaluated. One independent variable and three dependent variables were used to help evaluate the criteria of the various levels of medical school. The first dependent variable I used was honors in the first and second year of medical school which consists primarily of in-class lectures and book work. During the two years of class work students are prepared for the California licensing exam. The Federation of State Medical Boards (FSMB) and the National Board of Medical Examiners (NBME) have established a single, uniform examination for medical licensure in the United States. Thus, the United States Medical Licensing Examination (USMLE) provides a common evaluation system to measure knowledge and cognitive competence of applicants for medical licensure.

The second dependent variable was the third and fourth years of medical school. During this period, medical students get most of their experience working with patients, under the day-to-day supervision of senior residents and other hospital staff. It appears that medical students' personal qualities are observed during this time since these qualities are the most frequently mentioned by the clinical evaluators.

My last dependent variable is the Medical College Applicant Test (MCAT) examination score. I used this score to measure students' exam taking skills before starting medical school. In addition, I asked my subjects to write their undergraduate GPA along with the MCAT score to further assist with my analysis.

Taking my first two dependent variables, Med I, II, III and IV, I used weeks of "honors" and "near honors" as the criteria for measurement. A "near honors" grade is equivalent to 2/3rds of the "honors" grade; therefore a "near honors" grade in a six-week clerkship is equal to four weeks of "honors" credit. In order to be eligible for the outstanding designation, at least 12 weeks of the required 21 weeks must be straight "honors".

When interviewing my respondents, I asked them how many weeks of "honors" and "near honors" they received during each of the four years of medical training. During the third and fourth years I also wanted to measure the personality of each subject. I used a Likert Scale type question during the interview. Specifically, I asked how well they believed they got along with the floor chairman, the senior resident and other house staff as well as patients. The scale used was 1 to 5, 1) poorly, 2) below average, 3) average, 4) above average, and 5) outstanding to help measure their personalities.

For an independent variable, I used how the medical students matched after four years of training. Specifically, I wanted to know what choice they received or did they have to scramble.

When all this was completed, I reviewed my notes. I compared the independent variables and the dependent variables to see if there were any correlations. While doing my analysis, I noted that some students had average test scores on the MCAT and no weeks of "honors" during the 1st and 2nd years of medical school, however they still matched with their first choice. When reviewing the 3rd and 4th years, these same students began to receive more weeks of "honors" and "near honors". However, other students who received "near honors" or "honors" and high exam scores throughout their training didn't match with their first choice. This was interesting because grades, particularly in the first and second years of medical school, didn't seem to make a difference in how medical students matched.

After reviewing the data regarding what I believed to be the two most important factors in how medical students were evaluated for matching, namely the Med I and II, III and IV weeks of honors, I became baffled. I began then to look at how each respondent evaluated him/herself on the Likert scale. The students who answered that they got along excellent or outstanding with patients and other hospital staff always seemed to get their first choice in the match process. For example, one student said she was told by several patients that she was going to be an excellent doctor. She so impressed the patients that many told the student's instructor. This particular

individual had low MCAT scores, no weeks of honors during Med I and Med II and only 12 weeks of honors during Med III and Med IV. When I asked her how she got along with the other health professionals including department or floor chairman, attendings, senior residents, and other hospital staff, she reported those relationships as outstanding. This respondent completed her medical studies and received her first choice in the match.

Another respondent took five years to complete medical school. His MCATS were good not great with only three weeks of honors during Med I and Med II. However, in Med III and IV, he received 18 weeks of honors. He said that his interaction with patients, department chairs, attending professors and senior residents were positive and supportive. He also received his first choice in the match. This student believes that his personality helped him a great deal.

My third respondent was a biology major as an undergraduate who scored very well on the MCAT. During Med I and II he received 8 or more weeks of honors and during Med III and Med IV, he received over 21 weeks of honors. This student believed he was in the top 10 of his class if there was a ranking order. He stated that his relationships on the wards were above average. However, when questioned further, he seemed to waver in his ability to communicate with the patients and made excuses for this by projecting this onto the patients. He had never received a compliment from a patient. This respondent was an honors student by several measurements and received recommendations from three of his professors. He got his second choice in the match.

These examples and others similar led me to believe that personality or personality profiles must play a major role in how medical students match. Thus, I came up with a hypothesis that personality and personality profiles or traits are what evaluators are looking at when selecting students for certain specialties.

In order to support this hypothesis, I needed to discuss this with individuals in the profession who had more experience than the fourth year respondents. I interviewed a doctor who had studied at the University of Toronto, Canada. She graduated from medical school six years ago and was attending a seminar at USC. After stating my hypothesis, she supported it and told me how she got into her residency. She did not go for an interview because the cost of the flight was too expensive. She said that she got in because the chief resident was her volleyball coach and boyfriend. In addition, she went on to say that a classmate of hers with a bad hygiene problem was suspended due to this hygiene problem.

I then discussed my hypothesis with Joseph P. Van Der Meulen, Vice President for Health Affairs, at USC. Dr. Van Der Meulen supported the hypothesis further stating that certain types of personalities are looked at for certain types of specialties. For example, psychiatrists look for profiles in medical students whom they feel will make better residents to train. He advised me to discuss the hypothesis with Dr. Ralph Jung, then Associate Dean for Student Affairs and Director, Graduate Medical Education since Dr. Jung was the individual who wrote the Dean's letters for the USC medical students.

Dr. Jung also supported my hypothesis. However, he thought the MCAT was an inappropriate

dependent variable and suggested I use the USMLE as a replacement for the MCAT dependent variable.

When I discussed the idea of average students being placed in competitive fields because of personality profiles fitting for that specialty, he said he believed it to be true. Further, he believed the selection depended on how well these students interviewed as well as their board scores. He suggested that I ask my respondents how their first choice interview went and ask them to compare it to the other interviews they had undergone. Dr. Jung believes that the interview is usually the deciding factor in whether or not a student gets into a certain residency.

However, when looking at specialties in medicine, surgery and neurology, Dr. Jung stated that high board scores as well as being part of "honors" society was more important although the interview still appears to be the deciding factor overall. Dr. Jung further stated that letters of recommendations are quite helpful in the match particularly that of the floor chairman.

For my final interview, I wanted to discuss my hypothesis with an individual who would select a student for a residency program. Thus, I asked Dr. Alexandra Levine, Professor of Medicine, and Chief, Hematology Division of the LAC+USC Medical Center. Dr. Levine said that a colleague of hers was recently looking for a fellowship postgraduate; this individual had a very nice personality and was interested in getting someone who got along well with others. Grade points and honors were important but not the most important. She found this somewhat unusual because the individual put this in the advertisement. However, she went on to state that it is a known fact that medical students are selected on personality performance although no one ever puts it in writing when recruiting doctors.

I asked Dr. Levine if this was an ethical practice because in my opinion doctors are working with people's lives and one would think that the student who received the highest grades would be the most qualified. She said that the majority of students accepted to medical school have an "A" average and are selected from good colleges all over the country. When senior residents look for new up and coming doctors, they are looking for team players and individuals who can get along with others. She further stated that if students are doing average work during medical school, that this was acceptable since they were competing with students that were 4.0 students in undergraduate and are still performing at that level.

I discussed with Dr. Levine the difference between personality and personality traits. Dr. Van Der Meulen believed that if a student doesn't do well in his/her presentation of a patient to senior residents and fellow students, evaluators are not impressed. Dr. Levine agreed that if a student doesn't prepare well and it is noticeable, an evaluator would know. However, if a student is making an attempt and has put effort into the presentation even if the outcome was wrong, it would not be held against him/her. It is Dr. Levine's belief that as long as a student is trying and open to learning, the student has the potential of becoming a good physician. However, personality is really important and particularly participating as a team player. Knowing how to help others in a friendly manner is really crucial to an evaluator.

In conclusion, doctors will always be judged and one's personality including how well you get

along with others will be an asset in this profession as in any walk of life. Dr. Levine suggested that the reality of the selection process for the match should become part of instructions and guidance for medical students. If they were aware that personality and inter-personal relationships were important in the outcome of selection, students might be able to prepare themselves better and in so doing, the process would also make them better doctors.