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Author(s): Peter Conrad

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The Myth of Cut-Throats Among Premedical Students: On the Role of Stereotypes in Justifying Failure and Success*

PETER CONRAD

Brandeis University

This paper reports a study of the premedical student culture at a major university, based on fieldwork and interviews with 30 premedical students. The paper examines the role of stereotypes in the premedical culture; specifically, the common belief in "cut-throats" among premedical students. Cut-throats are described as excessively competitive, selfish, grade-hungry students who cheat, steal books and lab reports, and sabotage lab experiments. Despite the widespread belief, our findings suggest cut-throats are a myth. We found more evidence for cooperative than cut-throat behavior. The myth emerges from the competitive and pressured situation of premedical students and the uncertainty of the medical school admission process, and is in part a manifestation of students' collective anxiety. More significantly, it provides cultural explanations for failure and success for premedical students. We discuss its connection to the general premedical stereotype and its relation to pre-medical education.

Sociologists have displayed a long-time interest in medical education and physician socialization. Although numerous studies have been conducted of medical schools and medical students (Merton et al. 1957; Becker et al. 1961; Bloom 1973; Coombs 1978; Broadhead 1982) and residency training (e.g., Bosk 1978; Light 1980), sociological examination of premedical education and the premedical years has been neglected. Over the past two decades sociologists have described the prolongation of physician socialization at the graduate end (e.g., residencies are now often four or five years rather than one or two) but have not paid much attention to its "backing up" into the undergraduate years. The notion of "premed" as a separate status within the physician socialization process is a relatively new one.[1] Classic studies of medical education (Becker et al. 1961; Merton et al. 1957) did not mention the term and scarcely noted the relevance of these undergraduate years.

In the medical education literature, one of the most consistent findings has been the existence of a largely negative premedical stereotype on academic campuses. Recent studies at Yale (Hackman et al. 1979), Stanford (Rosenberg 1983) and Harvard (Ahrens and Akins 1981) have linked the "premed stereotype" to competition for medical school admission (see also Sade et al. 1983). In the Yale study premedical students were given the most negative rating of all majors and preprofessional students. According to Hackman et al. (1979, p. 310):

> The premed is seen as excessively hard-working, competitive, and grade-conscious; narrow in interests; less sociable than others; and more interested in money or prestige. On the positive side, premeds are described as having a sense of direction and as being highly motivated.

These studies show that premeds themselves share the negative stereotype that other students have of them. This leads the authors to suggest that there is probably some truth in the stereotype. The Stanford study, which used

participant observation and a brief survey, found many similar characteristics and suggested that "the role of being a premedical student is an undesirable, stereotyped, frustrating and anxiety provoking experience" (Rosenberg 1983). The Harvard study (Ahrens and Akins 1981, p. 21) attempted to go beyond the stereotype and investigate whether what they called a widely perceived "premed syndrome" exists among some Harvard premedical students:

> It [the premed syndrome] is a perjorative term that implies that a student is over-achieving, excessively competitive, cynical, dehumanized, overspecialized and narrow.

On the basis of a wide variety of interviews, Ahrens and Akins (1981, p. 22) concluded that the premed syndrome "does exist at Harvard and is intensifying." Another study of 13 colleges in South Carolina found evidence of the premed syndrome in these schools as well (Sade et al. 1983).[2] From these several studies, conducted on diverse campuses, it appears that the image of the overcompetitive, grade-grubbing premedical student is common.

In the vast social scientific literature on the topic, (see Fishman 1956; Harding 1968), stereotypes were depicted originally as "pictures in our heads" (Lippman 1922) but more recently as "a belief which is not held as a hypothesis buttressed by evidence but is mistaken in whole or part for an established fact" (Jahoda 1964). The bulk of research, focusing initially on stereotypes related to racial prejudice and ethnic relations (Harding et al. 1969), has been extended to other devalued groups such as the elderly (Levin and Levin 1980) and disabled people (Altman 1981). Numerous studies suggest that these negative stereotypes are usually held by in-groups toward out-groups (e.g., Sherif and Sherif 1969; Howard and Rothbart 1980; Park and Rothbart 1982) and can be understood in terms of ethnocentrism and in-group solidarity.

The specific negative stereotype examined here is the widespread belief in "cut-throat" premedical students. The cut-throat image is a particular and extreme permutation of the broader premedical stereotype. In this paper, I show that, while premedical students believe in the existence of cut-throats, there is little evidence of cut-throat behavior; indeed, coopera-

tion is common. To explain the persistence of the myth I locate structural sources in the students' (1) competitive situation, (2) heavy workload, and (3) anxiety attached to the medical school admissions process.[3] I argue that the cut-throat myth can be understood in terms of the functions it serves in the premedical culture—most notably as a culturally available explanation for failure and success in the premedical program.

The second goal of this paper is to depict and analyze the premedical student culture as it is manifest on one university campus. The data come from a field study conducted at Brandeis University. Our conceptualization of student culture is similar to Becker's (1970, p. 295):

> By this term we referred to the meanings and understandings generated in interaction among students, the perspectives they developed and acted on in confronting the problems set for them by the school, authorities, and curriculum.

In addition, the premedical student culture is also affected by forces outside the university, especially the scarcity of medical school places and the selective medical school admissions process.

DATA COLLECTION

Method

This study originated in an undergraduate research seminar taught by the author in Spring 1984. With six students as a research team, a research plan was developed to carry out an ethnographic study of "the premedical subculture" of our university. The author became interested in the topic through his three years advising premedical students as a member of the Board of Premedical Advisors. Since three of the students in the seminar were "premed" and the other students knew some fellow premeds, we had easy entree into the premedical world.

The first weeks of the study were spent doing fieldwork in required premed classes, in labs, in the science library and in residence halls. After several weeks we developed an interview strategy and constructed an open-ended interview guide. The author trained the

students as interviewers. We interviewed 30 premedical students, 15 of whom were an opportunity sample of friends and acquaintances while the other 15 were randomly chosen from a list of junior and senior premedical students.

Sample

Our sample consists of 8 seniors, 13 juniors, 8 sophomores and 1 freshman. Eighteen of our respondents are men; 12 are women. The sample is roughly representative of the gender distribution of premeds, but overrepresents upperclass (junior and senior) premeds, who had survived earlier hurdles. This was deliberate since we felt these students would be the most involved in the premedical-student world and would have the most experiences to draw upon.

We regard our respondents primarily as informants who provided data which enabled us to piece together the essential features and dynamics of the premedical student culture.[4] The themes examined in this paper emerged during the course of the interviews and became the focal concern during the analysis stage of the research.

Setting

Brandeis University is a selective private university with an undergraduate enrollment of about 2800. It is located in a suburban community about 15 miles west of Boston. The student body is approximately 70% Jewish; three-fourths of the undergraduate population is from the Northeast. The university maintains a liberal arts orientation and students can choose from among dozens of majors.

The premedical program is highly visible at Brandeis. It is highlighted in the course catalogue and in a special brochure. There is a new Premedical Center which includes labs and a lounge and the university sponsors a Board of Premedical Advisors (there is no such board for any other preprofessional program). The university has developed a reputation for excellence in the sciences and makes efforts to attract students specifically because of its premedical program. Some of our respondents

said that this was why they chose to come to Brandeis. The Admissions Office estimates that more than a quarter of all entering freshmen claim they are interested in a premedical track. Over 50 seniors are accepted to medical school each year (roughly 8% of the graduating class). Nine percent of Brandeis alumni are physicians.

As announced in the premedical brochure, "Brandeis applicants to medical school have been extremely successful." For the last six years the Brandeis acceptance rate to medical school has been about 70% compared to the 45% national average.[5]

The premedical program is thus an important aspect of the undergraduate student world at Brandeis. The vast majority of premedical students major in the natural sciences, a fair number in the social sciences and a few in the arts or humanities.

FINDINGS

The Social Reality of Cut-Throats

As part of the students' image of "typical premeds," we found a widespread and well-developed belief in the existence of "cut-throats." Cut-throats were the extreme manifestation of the premed stereotype.

The characteristics of cut-throats are vivid and entirely negative. Cut-throats are "people who will do anything for a [good] grade" and are unwilling to help or share with other people. They "always want to get something extra from the professor" and are prone to "intimidate others." Further:

> A cut-throat is someone who goes out of their way to make life tough for you. By psychologically trying to bring you down on a test, or ripping pages out of the reserve room reading or taking a book out and never returning it.

It is believed that cut-throats steal needed books from the library, sabotage laboratory experiments, and take lab reports from mailboxes. Since they are so grade-hungry, it is assumed they will cheat if necessary. As one student said: "These are people who don't cooperate. They're really intensely competitive and want everything for themselves." Cut-throats are out for themselves and their

grades and will use all measures to achieve success.

Cut-throats are seen as isolated and anti-social. One student said, "Cut-throats sit by themselves" while another noted that a cut-throat was "someone who is not going to talk to you, they're not going to cut your throat, they're just not going to say anything to you." This perceived isolation reflects the cut-throat's all-for-myself ethic and unwillingness to share with others.

Students can tell "atrocity stories" about the dastardly deeds of cut-throats. They usually take the form of "you hear about . . .," like rumors or hearsay, but their themes are consistent and recurrent.

> I've heard of people taking other people's lab books, something I head about two or three years ago, but I never saw any of those instances. . . . I don't remember the specifics but in chemistry lab I did hear [of] people sabotaging one or two experiments. Adding acid to a chemical that should not have it and that kind of thing.

Stories like these are well-known among premedical students. Students seem to repeat and share them with each other and they become part of the reality of being in the premed world. We heard them time and again in our interviews and fieldwork. As this senior suggests, however, not everyone believes these stories.

> I mean you hear these horror stories of people wrecking other people's experiments but that doesn't really happen here. I've never heard of anybody wrecking somebody else's experiment.

But even students who claim to have no direct experience with cut-throats know about them and don't hesitate to describe their characteristics and behavior. For example, these two students had never had contact with any cut-throats and yet are able to portray their behavior in lurid detail.

> I luckily have not had any direct experience with what a typical cut-throat would do—sabotaging experiments and what not. Cut-throatedness is just an attitude that people seem to have or not have. . . .

> Cut-throat [means] you go up to someone and ask them for help and they refuse to give you help. Someone who will change your lab around or steal your notebook or something

like that. Being a premed, you want to look out for people who are cut-throats and those people who are [that] competitive you can find them I'm sure. . . . I don't choose my friends that are like that. I haven't had any contact with cut-throats.

The premeds don't know the exact prevalence of these cut-throats, although most suggest they are a minority. Students contend that most premedical students are hardworking and serious but aren't cut-throats. Cut-throats are small in number—one student suggested half a dozen or so—but are deemed to have a large impact on the premedical world.

There are some students who don't believe that cut-throats exist at the university but even they can describe what cut-throats do. It is of note that four of the six students who specifically said they didn't believe in cut-throats were seniors (the other two were juniors). One senior said:

> I really don't see such a thing as cut-throats or someone who will actually go out and burn other people's notebooks or say nasty things about someone to the professor. I think a cut-throat actually goes out and tries to hurt someone. Are there very competitive people here? Absolutely. Are there people here who will sit for 12 or 13 hours in the library just to get a better grade on a test? Of course. But I don't feel that those people would actually go out and burn lab notebooks.

Several students suggested that the premed cut-throat was really a stereotype and that there were cut-throats in other demanding and preprofessional programs. Because premed students may be more visible, they have developed an undeserved bad reputation.

> I feel there is a very biased feeling toward premeds because there are so many of them. People in other majors feel that premeds are very one-dimensional persons. And they always think of us as cut-throats. And I feel that of some of the people, that's true.

In sum, among premedical students the belief in cut-throats is widespread and the ability to describe their behaviors is nearly universal. The cultural reality of cut-throats is deeply embedded in the premedical subculture and probably in the larger student population.[6] In the next sections I describe structural or contextual sources of the cut-throat myth: the

competitive situation, workload, pressure, and anxiety stemming from the uncertainty of medical school admission.

The Competitive Situation

The social reality of cut-throats is related to the competitive situation that exists for premedical students. In the first place, nationally there are roughly twice as many students who want to become doctors as there are medical school spaces. Students know that if they do not earn good grades, especially in their science courses, they will have very little chance of gaining admission to medical school. At this university over half the students leave the premed track before their junior year. Freshmen and sophomores especially are concerned about being "weeded out." For all students this creates a competitive environment; for some students it becomes "really intense." One student describes it:

> The one thing that kind of bugged me is it is really intense here. People really get very competitive and at the same time you look at it and there are just so many spots open to people coming out of school and . . . sometimes it gets a little overbearing.

One strategy to reduce the competitive pressure is to choose not to associate with many other premedical students. This junior man said he did not "hang around with too many premeds":

> I think there is a sort of aura in just being around premeds that everyone has to study and it's a little pressure that you have to be better than the other person. I don't like the attitude and try to stay away from it.

While the limit on medical school admission is the ultimate factor behind the competitive situation, a second, and more immediate, generator of competition is "the curve" (i.e., the normal curve) that is used in grading exams in most science courses. This grading procedure compels students to compete against one another. A student's ranking on an exam is affected by the ranking of other students. As one senior noted:

> Competition is built in, and I think that's because everything is scaled. When you get your grade you have to do better than the

next guy, somebody has to fail, you don't have to want somebody to fail, but somebody has to in order for you to do well, which is all part of the system. It's part of the game, I guess. . . .

Students were most concerned about the competitive situation in their first two years. This is when many students see the science courses as a make-it-or-break-it situation. It forces students to be concerned with the grades others achieve as well as with their own. A junior woman described it as thus:

> I see competition. People are concerned about where they stand in comparison to their classmates. Especially in organic chemistry where with a fifty percent mark on your test, you have to be concerned where you stand among your other classmates. . . . I always feel like there is some sort of competition.

By the junior year premedical students feel less competition. They have by then taken most of the required premed science courses, are into their academic concentrations, and most importantly, feel they have been able to stay in the "race" while other students have been "weeded out." Students still see the competition but better know their place in it. A senior woman explained:

> There is a fair amount of competition, but after a while, you sort of get to know your place relative to the class and performance on each test is pretty much consistent. You know who's going to do well and who is not. No big surprises.

Some students come to see the competition as having a certain value. A junior man suggested it was "kind of healthy" since, "It does weed out people and forces you to study harder. A doctor is a serious profession and a few premeds [I know] I could not see as becoming good doctors." There is some concern, however, when the competition gets out of hand. A senior man observed:

> The competition is very keen. There is a lot of competition. I like being competitive. It's fun as long as it's done in a sportsmanlike way, a kind way. You hear the word associated with premeds is "cut-throats" and you kinda see something like that. That's when the competition gets too bad and people don't react well to it.

Thus one of the perils of the competitive situation is that, when taken too far, it can produce cut-throats.

Workload, Pressure, and Anxiety

The academic workload in the premedical program is perceived by most premed students as heavy and pressured. The first two years are filled largely with requirements. A typical load is four courses a semester including two science courses, plus two labs. One must devote considerable time to academic work to succeed with such a workload. For each week students typically spend 12 hours in class, 8 hours in labs, and from 20 to 35 hours studying. The workload usually increases before exams. As one student noted: "To me being a premed is doing work . . . I feel like I'm studying constantly." There is a general feeling that science courses are more difficult and require more work than other liberal arts courses. Many students believe that, because of the premedical workload, they must make sacrifices in the freedom to choose courses, engage in extracurricular activities, and vary their social life.

Students speak frequently of "the pressure" that the competition and workload generate. This vocabulary allows them to describe the emotional side of being a premedical student. As a junior man put it: "The pressure is there; it's not all created by our imaginations." As a consequence, many students suffer from personal discomfort and anxiety. A junior woman said:

> The workload is such that it puts too much pressure on you. You can't relax and socialize if you want to, sometimes. Sophomore year I never socialized, never. . . . All I ever did was study, that's all I did. And I felt too much pressure and I couldn't relax. And the workload was just too much.

Another junior woman talked about "the underlying amount of nervousness and anxiety" as affecting her ability to pursue a career in medicine. She mentioned how she "tries to exorcise the tension out of [her] mind." The strain makes some students question their competence, as with this sophomore woman:

> Because it's so hard you start to ask and think, will I make it through the next test?

Will I do well in this class? It's scary. And then I say to myself, if I don't make it to medical school than I'll just do something else. . . . I wonder if I'm going to make it, because I really want to be a doctor.

For some students this raises continuing doubts about their choice of medicine as a career. Others never entertain the question.

While students regard the workload as intrinsically heavy and difficult, the pressure can be intensified by the behavior of other premeds, including cut-throats.

Although the premeds are in an inherently competitive situation and ultimately each student is accepted to medical school on the basis of his or her individual achievements, there is a considerable amount of active cooperation.

Cooperation Among Premeds

Premedical students aid each other in learning material, completing work, and achieving better grades.

While the competition was usually described as competition with other premeds, with the "system," or with oneself, cooperation is more specifically demarcated: Cooperation occurs most frequently among small groups of friends and acquaintances.

Informal mutual help groups often began during the freshman year and continued throughout college. During the interview students often referred to their group or their clique. It was clear from their remarks that these groups did not necessarily comprise close friends:

> There are probably cliques that form around the dorms. Premeds who live in dorms together. They meet each other freshman year. When I was in my freshman year there was a group of premeds. We lived in Ridgewood and did our freshman chemistry homework together. We grew up here together. Some of us were weeded out and some of us weren't.

Groups provide support and mutual aid. A senior woman said, "[Within] my group we're very helpful and share everything." A senior man suggested his group "is the only way I get through it [the premedical program]." To nonmembers these groups may at times appear to be exclusive cliques and contribute to the selfish, cut-throat image, although there are many

different and overlapping groups. As one student noted:

> There are a million cliques like that, about eight or nine of them in every class. I am on the fringes of one of those groups and there is another I can turn to, and that's one of those things I do socially. Some of the groups are incredibly close-knit.

A large part of the cooperation consists simply of studying together and helping each other work out class problems. Sometimes it involves going over coursework before an exam or "testing" each other about the material. Chemistry problems in particular elicit cooperation, perhaps because they are often deemed troublesome.

Even people who are not part of a particular group report cooperation among premedical students. Virtually all our respondents claimed they readily helped others who asked for help. This sophomore's attitude was typical: ". . . I will be helpful to others if they come to me. I don't hog my knowledge." Students seem to realize that there can be direct benefits to the helper from helping others. A sophomore man paraphrased an old adage "When you explain something to someone, you understand it better yourself." He added, "You're never hurting yourself by helping someone else."

Fudging: A form of cooperation. Because cheating is associated with the cut-throat stereotype, we asked students about cheating on exams. While there were reports of a small amount of cheating, students believed there was relatively little because the risk was so high. However, we encountered another, milder form of academic dishonesty that was commonplace and accepted among premedical students: fudging lab reports. In part, this fudging is actually a form of illicit cooperation.

Over a four-year career, a premedical student must spend hundreds of hours in labs and complete dozens of lab reports. Although there are students who love labs, many students find them a chore to get through. Fudging on labs facilitates getting through, and, according to our respondents, "is the rule, not the exception."

Students usually fudge under two sets of circumstances. The first is when one's experiment gets ruined. When asked if he ever fudged his labs, a sophomore replied:

> I have [to say] yes, because when you sit there for six hours and then you knock over your product and that ruins the whole thing and you have to start again, you just take what you have and make up the rest.

The second is when students' results "won't come out right" or "are off" the expected yield. Then students will change significant figures or fabricate necessary data. A senior man explained:

> I know a lot of people who fudge. You want to get your lab results to look better and to get a better grade then you fudge your data a little. Almost everyone I've ever talked to and asked if they've ever fudged, they've said, "Sure, I've fudged. Of course."

While much fudging is an individual, although socially acceptable act within the premed culture, it is also at times a form of cooperation. Students help one another, especially when one's results are off the expected mark. A junior man provided an example:

> [There was] a probability problem in physics lab where you had to throw pennies up in the air. I never understood some things about it, so the way I learned it was by getting information from other people and seeing if I could get the same results.

Other students talk about having inadequate data from an experiment and getting better data from a friend to "average" theirs out.

Students do not define fudging as serious academic dishonesty or as "cut-throat" behavior. Its particular definition makes it an acceptable premed behavior, one that may even involve some mutual aid between students.

Cut-Throats as a Myth

Even though the image of cut-throats is part of the common culture of premedical students and belief in their existence is widespread, *we found much more evidence of cooperative than cut-throat behavior among premedical students.* There were very few reported firsthand experiences with cut-throat behavior: one or two cases of missing library materials and one unconfirmed report of a disturbed fruitfly experiment. Nearly all our respondents experienced cooperation with other students; very few actually experienced many actions they or we might call cut-throat.

While there may be some overly competitive and even unscrupulous premedical students, the evidence suggests that cut-throats are largely a myth. This raises the questions of why this myth exists, and what are its meanings and functions? In the remainder of the paper we will explore these questions.

To understand the myth of cut-throats, one must examine the context of the premedical students. As we have described it above, the structure of premedical education creates a very competitive and often anxiety-producing situation.

I argue that the myth of cut-throats emerges from the structure of the premedical situation. The myth reflects the difficulty of the premedical program and the uncertainty of the medical school selection process. The program is so hard and the competition so strenuous that students may believe there are malevolent forces at work. The myth is in part a cultural product of the fear and dread of the premedical process.

Students do not necessarily question the unfairness and arbitrariness of premedical requirements or the medical school selection process. There is a general concern that the "race" should be fair, but an anxiety that it is not. To a degree, belief in cut-throats is a manifestation of that anxiety.

But such collective anxiety alone does not seem specific enough to account for the widespread acceptance of the cut-throat myth. I postulate that the cut-throat myth and stereotype serve the social psychological function of providing cultural explanations for both failure and success among premedical students, given a context of great uncertainty and anxiety.[7]

Failure and the myth of cut-throats. Although Brandeis has an unusually high medical school acceptance rate, if we look at the whole four years as a process, there is a high rate of "failure" in the premedical program. By failure, I refer to those students who begin college as premedical students and who do not end up in medical school four or five years later.

Within two years of declaring themselves premed, nearly two-thirds of over 200 freshmen abandon the premedical track. Too much work and pressure or poor grades in science courses are given as reasons for changing their goals or concentrations and leaving the premed track. Not all of these premed dropouts define their change as a "failure"; indeed, for some it may be a relief and a new route to education. But for many who struggle with the sciences and their own career goals, there is a sense of failure stemming from the change. Clearly, there is a widespread *fear* of failure among underclass premedical students. They frequently talk of courses "weeding out" students from the premedical program.

Even for the 75 or so students who are still premed in their senior year, the threat of failure still looms large. Only students with a 3.5 GPA and good MCAT scores are generally assured of medical school admission. For the majority of premedical students, failure to achieve medical school admission is still a possibility; and for about a quarter, it becomes a senior year reality.

The idea that the cut-throat myth may provide a ready-made explanation for failure in the premedical program does not translate into "the cut-throats did it." More likely is the belief that "it's a cut-throat world and I am just not cut-throat enough." I have heard students on the verge of leaving the premedical track say that they are deeply relieved they are no longer in the cut-throat premedical race.

In our fieldwork, we developed the distinct impression that freshmen and sophomores more strongly believed in cut-throats than did upperclass students. Several of our respondents mentioned that cut-throat attitudes were more prevalent in the first two years. These are the years when the failure rate among premedical students is highest. We hypothesize that, as students advance in class standing from freshman to senior, the possibilities for failure decrease, and the belief in cut-throats decreases as well. As the senior woman said, by now students get to know their place.

In short, the myth of cut-throats, especially in the first two years, provides a culturally available explanation for failure in the premedical program. It allows students to locate some of the reasons for failure not in themselves, but in the outside world.

Success and the myth of cut-throats. The cut-throat myth can provide an essential element of an explanation for success as well as failure.

Nearly all our respondents could describe the "typical premed": A student who studies

compulsively in the science library (including weekends), is overly grade conscious, has narrow interests, has a truncated social life, and is concerned only with getting into medical school. While most students recognized this as a stereotype, and some contended there were no "typical premeds," there is some validity to the stereotype. To be successful, most premedical students must study hard, make certain "sacrifices" for their future goals, and be concerned about their GPA if they want to have a good chance at medical school admission. To various degrees students must struggle with the "premed syndrome" in the quest for medical school.

Yet with fascinating regularity upperclass premedical students, after describing the "typical premed" and generally acknowledging it as a stereotype with some truth, were quick to interject "but I'm not a typical premed." Some students added supporting statements like "I don't hang around with premeds," "I'm not so uptight about the whole thing," or "I'm still a human being." In short, the upperclass respondents took special care to point out that they were different from the premed stereotype.

It is not surprising that students want to dissociate themselves from the stigmatized stereotypes of "typical premeds" and "cut-throats." By declaring "I'm not one," students can distance themselves from the dominant cultural images of premedical students. Thus the myth of cut-throats still serves a function for upperclass premedical students, even if they are more skeptical about its existence. It allows them to see themselves as being concerned with premedical success without a loss of character. As one student succinctly put it: "I'm not a cut-throat . . . and I survived with the desire to go on. . . ." By seeing themselves as a success without being a cut-throat, the myth enables students to create a more positive self-identity as premedical student.

CONCLUSION AND IMPLICATIONS

The cut-throat phenomenon, while literally false, has social reality. To the degree students believe in cut-throats it adds to the already competitive atmosphere of premedical educa-

tion. Students accept cut-throats as an unseemly but expected part of the premed world.

But such images as are subsumed by the cut-throat stereotype may discourage students who would potentially make fine physicians from pursuing medical careers. It may actually dissuade students with more reflective and contemplative orientations from seeking a medical career. One study of several colleges found that nearly half of the undergraduates who changed their plans about becoming a physician did so because they "did not wish to enter a profession with a group of students who seemed so grimly purposeful and ambitious" (cited in Bok 1984, p. 34).

Recently there have been a number of calls for the reform of medical and premedical education (Friedman and Purcell 1983; Bok 1984; Association of American Medical Colleges 1984). In one way or another each of these reports acknowledges the existence of a "premedical syndrome" and recognizes that too many students take an overly narrow, science-dominated undergraduate path in their quest for medical school admission. They call for a deemphasis of the science curriculum and an active encouragement of students to take humanities, arts and social science courses. Paramount among the policy changes suggested are minimizing the number of science courses required for medical school admission and the recruitment of students with well-rounded undergraduate educations. The goal of these reforms is to attract and educate physicians who will be both more humanistic in orientation and better able to adapt to the continuing knowledge explosion in medicine. A report by the Association of American Medical Colleges (1984, p. 7) specifically says:

> Medical school admissions committees should make final selection decisions using criteria that appraise students' abilities to learn independently, to acquire critical analytical skills, *to develop values and attitudes essential for members of a caring profession* [emphasis added], and to contribute to the society of which they are a part.

Will "humanizing" medical schools and medical admission policies also "humanize" premedical education and change the myth of cut-throats? Certainly alterations in the medical school admission process will have an impact on premedical students and their culture.

It is possible that under different admission circumstances more premedical students will take a wider array of courses as well as major in nonscience disciplines. But we should be cautious of prematurely predicting the demise of the premed syndrome and stereotype or the myth of cut-throats. They are deeply embedded in the student culture and unlikely to change quickly. Important contributing structural factors will not change. Even though the overall number of medical school applicants is declining, there will still be more students wanting medical careers than there are places in medical schools. And new anxieties will arise, such as concern with "the doctor surplus" or the increasing corporatization of medical care (Starr 1982), that make a medical career seem more uncertain. I believe that as long as students see the medical situation as competitive and medical admissions and careers as uncertain, the fear and dread of cut-throats will remain a part of the premedical student culture.

Finally, if we are to advance our sociological understanding of the socialization of physicians, we need to embark on more systematic studies of premedical education. The central concerns of the premedical student culture are quite different from the well-studied medical school culture. While there are some similarities in terms of situational loss of idealism and extant cynicism about the curriculum and requirements, the dominant concerns differ markedly. For medical students the central concern of the student culture is "getting through" medical school (Becker et al. 1961; Coombs 1978); for the premedical students it is "getting in." And focusing on "getting in" creates its own realities and its own explanations for failure and success in that endeavor.

NOTES

1. I thank an anonymous reviewer for pointing this out to me. This reviewer suggested "the premed seems to be a product of the 1960s when the application rate to medical school started to rise and the model of the scientific physician or researcher gained ascendancy." This was also the period when the applicant's probability of being admitted to medical school began to plummet to only one of three.
2. The literature is ambiguous concerning the terms "premed stereotype" and "premed syndrome."

To distinguish between them, I will use "premed stereotype" to designate beliefs about premedical students and use "premed syndrome" to refer to students' actual behavior.
3. In this paper I use the term "myth" in accord with common (nontechnical) usage. By it I mean an unsubstantiated belief or claim used to provide an account in a situation characterized by uncertainty.
4. This is in the tradition of qualitative research (Taylor and Bogdan 1984) and grounded theory (Glaser and Strauss 1967).
5. Brandeis applicants compare favorably to the national average on grade point average (GPA) and medical college admission test (MCAT) scores as well. In 1983 Brandeis applicants' GPA was nearly identical to the national mean (3.31) and the applicants' MCAT scores on each subtest were on the average 1.3 points higher than the national mean (Board of Premedical Advisors, 1984 Yearly Statistical Report).
6. Anthropologists such as Evans-Pritchard (1937) have long recognized how cultural beliefs like witchcraft (or other bogeymen) can be used as explanations for uncertainty and a wide variety of misfortunes.
7. We observed, both in collecting the data for this paper and in discussing our results with students, a common assumption among undergraduates that there are many cut-throats among premeds. Frequently non-premed students responded with statements like, "You mean there really aren't a lot of premed cut-throats?" Thus the premed cut-throat myth penetrates the undergraduate culture as well.

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