DOCUMENT RESUME

ED 261 629 HE 018 728

AUTHOR	Arnold, Louise; Mares, Kenneth R.
TITLE	Analysis of Exit Interviews with Students Who Left the Combined BA-MD Degree Program of the UMKC School of Medicine.
PUB DATE	Mar 85
NOTE	31p.
PUB TYPE	Reports - Research/Technical (143)
EDRS PRICE	MF01/PC0? Plus Postage.
DESCRIPTORS	*Academic Failure; Disqualification; Expulsion; Higher Education; Institutional Research; Interviews; *Low Achievement; *Medical Schools; Medical Students; Predictor Variables; *Student Attrition; *Withdrawal (Education)
IDENTIFIERS	*Exit Interviews; *University of Missouri Kansas City

ABSTRACT

Exit interviews were conducted with 21 students who withdrew or were dismissed from the University of Missouri, Kansas City, School of Medicine. Female, minority, and rural students were disproportionately represented among students who left the program. Of 22 students who left the program during June 1983-January 1985, 16 left during the first 2 years of the program in poor academic standing. Major factors implicated in academic failure were disinterest in medicine, cognitive disadvantages, and economic deprivation. Twelve of the students felt they received help from peers, docents and assistant deans, and the medical school, while six felt Arts and Sciences faculty were not interested or unwilling to help. Of the six students who left in good academic standing, five were female, and two transferred to another medical school. At the time of the exit interview, nine of the students who left in poor academic standing expressed positive attitudes about themselves and their future. Students found the exit interview useful in sorting out their feelings and thoughts about their departure and future plans. Attention was also directed to cognitive and noncognitive predictors of academic failure, including test scores, high school rank, quality/type of high school, and high school teachers' references. (SW)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED261629

Analysis of Exit Interviews with Students Who Left the Combined BA-MD Degree Program of the UMKC School of Medicine

Louise Arnold, Ph.D. and Kenneth R. Mares, Ph.D.

March, 1985

HE 018 728

PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Kenneth R. Mares

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

U S DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

✓ This document has been reproduced as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

Acknowledgement: Special appreciation is extended to Dr. Roberta Epstein and Assistant Dean Virginia Calkins who conducted most of the exit interviews.

SUMMARY

In June, 1983, the Coordinating Committee requested the Research in Medical Education Group to conduct and analyze exit interviews with students who withdrew or were dismissed from the UMKC School of Medicine. From that time to January 1, 1985, 22 students left the program. Exit interviews were completed for 21 of these students. Although the interviews were thoughtfully and carefully conducted, it should be noted that the data which they generated contain subjective elements.

Who Left, When, and Why?

Female, minority, and rural students were disproportionately represented among this group of students who left the program. Most of the students (16 of the 22) left during the first two years of the program, particularly in Year 2. A majority (again, 16 of the 22) left in poor academic standing; that is, they met Evaluation Council Guidelines for dismissal.

Students Who Left in Poor Academic Standing

Their Profiles. As Diagram 1 shows, the major factors implicated in the academic failure of the 16 students were: 1) disinterest in medicine, 2) cognitive disadvantages, and 3) economic deprivation. In all cases these primary factors were compounded by additional ones, such as ill health, family problems, and the use of inappropriate coping techniques, for example, anger and withdrawal.

Their Perceptions of Support Networks. Given these problems, did the students who left the program in poor academic standing believe they had somewhere to turn for help? Twelve of the students felt they did receive help from their peers here, from docents and assistant deans, and from the Medical School in general. About half reported that they used the UMKC Learning and Counseling Centers. On the other hand, six of these students said they found Arts and Sciences faculty unwilling to help them or disinterested in their difficulties. (Such a perception might be expected in view of the fact that low grades in Arts and Sciences courses frequently brought about the students' dismissal.) Occasionally, students wished their docents had offered more support, especially outside of the docent group itself.

Predictors of Academic Failure. Although neither the students themselves nor their support networks were able to prevent the students' dismissal, could the academic failure of these students have been predicted on the basis of information available during the selection process? Selection Council files of the students who left in poor academic standing were systematically compared with files of a control group, matched for sex and entering class, randomly drawn from students who are performing acceptably in the program. Information in the Council files tended to foreshadow some of the difficulties which students who left the program in poor standing subsequently faced. As Table 1 indicates, this information included students' test scores, rank in high school class, quality/type of high school attended, scores on an interest inventory, Selection Council interviews, and high school teachers' references. The capacity of this information to differentiate between students who left the program and those who remain is not perfect, however.

Impact of Dismissal. At the time of the exit interview, nine of the students who left in poor academic standing expressed positive attitudes about themselves and their future. Seven discussed a diminished or damaged self-image as a result of their failure at UMKC. For nine of the students, their future plans included reapplication to the UMKC School of Medicine. Three in fact have been readmitted, and one is a Year 1 stand-by.

Students Who Left in Good Academic Standing

Of the six students who left the program in good academic standing, five were female. Two of the students transferred to another medical school in order to be with significant others, and one followed her husband in residency training out-of-town. Three changed their career plans. That these three students would switch career interests away from medicine was somewhat apparent in the Selection Council files during the admissions process.

Proposed Action for Coordinating Committee

In the authors' opinion, this study based on exit interviews provides a summary of possible factors associated with students' departure from the program. It corroborated and added to previous work on prediction of student performance at UMKC. None of the findings were so clear cut, however, as to warrant alterations in selection, curriculum or evaluation. According to the exit interviewers, students found the interview useful in sorting out their feelings and thoughts regarding their departure and their plans for the future.

Accordingly the following action for the Coordinating Committee is proposed:

1. Accept this report
2. Continue exit interviews to provide leaving students with an opportunity to explore and express their feelings and thoughts
3. Discontinue use of the exit interview as a basis for predicting student performance while RIME continues to conduct prediction studies using a more appropriate methodology based on entire entering classes of students.

Introduction

In June, 1983, the Coordinating Committee requested the Research in Medical Education Group to conduct and analyze exit interviews with students who withdrew or were dismissed from the School. From that time to January 1, 1985, 22 students left the program.

Who were these students? When and why did they leave? What factors contributed to their departure? How did students feel about the support services designed to facilitate student retention? Could the departure of these students have been predicted on the basis of information available during the admissions process? These questions are the focus of this report. It rests on data drawn from 21 exit interviews* conducted by educational assistants, a docent, an assistant dean, and a staff member and from the files of the Selection and Evaluation Councils. Every attempt was made to ensure that the interviews were thoughtfully conducted. However, it should be remembered from the outset that data from the exit interviews do contain subjective elements.

Who Left, When, and Why

As Table 1 shows, a greater number of females, Caucasian, and urban students left the program during the past year and a half than did male, minority and rural students. However, when the number of students who left in each of these demographic categories is compared to the total number of 1983 year 1 students in the same categories, a slightly different picture emerges. A greater percentage of minority (10%) and a slightly larger percent of rural students (5%) left than did their counterparts (Caucasian: 3.8%; urban: 3.4%). The percent of female students who left was higher than the percent of males who left (as the numerical description also revealed).

---

* The uninterviewed student originally had a leave of absence to be with her husband during his out-of-town residency. She did not return to the city and separated herself from the program.

Most of the students (Table 1) left during the first two years of the program, especially in year 2.

A majority left in poor academic standing; i.e., they met Evaluation Council Guidelines for dismissal (Table 1).

The Academic Failures

Of the 16 students dismissed in poor academic standing, just half were female (Table 2). Most were from urban areas and Caucasian, and most left during years 1 and 2. All of the minority students who left the program departed in poor academic standing.

PROFILES OF ACADEMIC FAILURE. What factors are associated with these students' academic failure? According to the exit interviewers, eleven of these students were not motivated for medicine (see Profile 1 in Diagram 1). Most of these disinterested students (N=9) found other fields (such as business, literature, mathematics, and arts), extra-curricular activities (such as music), and friends more appealing than medicine and therefore more worthy of their time and effort. In all cases, other factors compounded these students' sagging motivation for medicine. These were: 1. problems with family (parents mostly but also boyfriends and rommates); 2.cognitive difficulties (specifically poor academic preparation, moderate (at best) academic ability, inaccurate expectations of the academic demands of the program, poor study habits, and poor test-taking skills); 3. ill health; and 4. inappropriat coping techniques (such as anger and withdrawal).

For another set of three students (see Profile 2, Diagram 1), their academic failure stemmed in a more straight forward fashion from poor academic preparation and (in one case) severely compromised cognitive ability. The students' cognitive disadvantages were also compounded by ill health, the use of inappropriate coping techniques (acting-out), and the economic need to work.

Another group of 2 students (see Profile 3 in Diagram 1) had to work full-time in order to support themselves because their families could or would not help them pay their expenses. These students came from broken homes, used poor coping techniques, and had only moderate cognitive ability.

STUDENTS' PERCEPTION OF SUPPORT NETWORKS. Given these problems, did the students who left the program in poor academic standing believe that they had somewhere to turn for help? From an institutional perspective, a myriad of support services have been developed to assist students with a variety of problems and to aid in student retention. Consequently, during the exit interviews the students' perceptions of these services and other potential support networks such as family were explored. Overall, 12 of the students who left in poor academic standing conveyed positive feelings about the support they received from their peers here, from docents and assistant deans, and from the school in general. About half reported that they used the UMKC Learning or Counseling Centers. About half also said that their parents were supportive. A primary source of dissatisfaction lay in the students' perception that A & S faculty were not helpful or were disinterested in their difficulties. Occasionally, students wished their docents had offered more support, particularly outside of the docent group itself.

PREDICTORS OF ACADEMIC FAILURE. Although neither the students themselves nor their support networks were able to prevent the students' dismissal, could the academic failure of these students have been predicted on the basis of information available during the selection process? The Selection Council files on these students who left the program in poor academic standing (subsequently labelled the dismissed students) were systematically compared with files of a control group, matched for sex and entering class, randomly drawn from students who are currently in the program and who are performing acceptably. Table 3 summarizes the students characteristics examined as possible predictors of academic failure.

Cognitive Factors. As previous studies of student performance at UMKC have shown, a student's total score on the standardized test of academic ability (the ACT) was associated with his/her subsequent performance in the program. More specifically, in this study, 10 of the 16 students dismissed for poor performance had test scores lower than their matched control (Table 4). Put another way, only four of the dismissed students had total scores at or above the 90th percentile; whereas 12 of the 16 in the control group students scored at or above this level (Table 5).

Similarly, 12 of the dismissed students had lower raw scores in the social science subtest of the ACT than the matched controls (Table 4). Eleven of the dismissed students had lower raw scores in the English subtest than the controls, and 10 of them in comparison with the controls had lower raw scores in the mathematics subtest and on the natural sciences subtest.

The percentile rank in high school class, previously found to predict student performance at UMKC, also differentiated in this study between the students who left in poor academic standing and those who remain in the program (Table 6). More particularly, 12 of the dismissed students had lower class ranks than their matched control. Furthermore, only 2 of the dismissed students had class ranks at the 99th percentile, whereas 8 of the control students had a class rank at the 99th percentile. More tellingly, these two dismissed students with the 99th percentile class rank came from poor quality inner-city schools; but none of the controls with the top class rank came from such schools.

In fact, the overall quality and type of high school which students attended seemingly was related to their subsequent performance here. For example, only 3 of the dismissed students graduated from very strong suburban, preparatory, or parochial high schools; but seven of the control students completed their high school education in such a quality school (Table 7). In contrast, four of the dismissed students went to weak inner-city schools; while none of the control students attended that type of high school.

In sum, the academic failure of the students who left the program was foreshadowed by previous measures of their cognitive ability, academic performance, and academic preparation. But, could the sagging motivation for medicine, which the exit interviewers noted among the dismissed students, also have been predicted?

Noncognitive Factors. The American College Testing Service provides a profile of each students' career interests. This inventory, based on a well researched instrument, yields scores in six interest areas. High scores in science and social service are characteristic of students interested in medicine and characteristic of physicians themselves. The inventory, then, can serve as an indirect measure of motivation for medicine.

Does the interest inventory distinguish between the students who left the UMKC program in poor academic standing from those controls still in the program? Strikingly, fewer of the dismissed students, when compared with the controls had high interest scores in science (Table 8). That is, eight of the dismissed students had scores at the 80th percentile or above, but 14 of the controls scored at this level or higher. On the other hand, eight of the dismissed students had interest scores in science at the 60th percentile or lower; only 2 of the controls scored that low in interest in science.

The score on *interest in social service* (Table 8) also showed a relationship to performance in this program although this association was not as strong as the relationship between interest in science and performance. Moreover, the association between interest in social service and performance was negative, not positive as would be theoretically expected. That is, more of the dismissed students had high scores in social service (at the 90th percentile or above) than controls, while more of the control students had low scores in this area (at the 60th percentile or less).

The *interviews* which Selection Council members conducted during the admissions process predicted in two ways the subsequent performance of students, their motivation for medicine, and the possibility of the development of problems during the course of their stay at UMKC. First, interviewers awarded fewer points more often to the dismissed students than they did to the controls. Second, and more importantly, the interviews contained clues to the difficulties that the dismissed students were to experience in the program. In *8* out of the 16 instances, interviewers expressed in their written evaluations some concern over perceived deficits in the students who were subsequently dismissed. For example, an interviewer on the Selection Council wrote about one of the subsequently dismissed students:

" [He] glorifies the profession of medicine too much. [illegible] is not realistic about the difficulties [encountered in the practice of medicine]. . . I could not find the honesty and sincerity indicative of self-awareness and maturity." These eight instances can be thought of as "true negatives" (See Table 9). On the other hand, in only three instances among the controls, did interviewers identify potential areas of concern. These three instances can be considered "false negatives". Yet, in the remaining 13 instances among the controls, the "true positives", the interviewers were appropriately supportive. In fact, in seven of these instances, the interviewers summarized by using such phrases as "a real winner", "a must", etc. Only two of the dismissed students were so glowingly described by their interviewers. These two would constitute blatant instances of "false positives", totalling 9 in all among the dismissed students.

Combined Measures. Several measures of both cognitive and noncognitive characteristics of students differentiated between the students who left the program in poor academic standing and those in the control group. References written by high school teachers for subsequently dismissed students contained just one superlative comment such as "He is the best student in all ways that I've encountered in my 20 years of teaching". However, in half of the control group (8) the references included such laudatory remarks.

Finally, the Council Index, as in a previous study, was associated with student performance. The Council Index for the dismissed students was more often lower than that of the controls. Additionally, just one of the dismissed students, but four of the controls, received a perfect Council Index of 5.

In sum, there were indications at the time of admission that these students might experience difficulty in the UMKC program.

Notably, these include test scores, rank in high school class, quality/type of high school, interest inventory scores, and comments of interviewers and references. Unfortunately, the relationship between these measures of students' cognitive and noncognitive characteristics, on the one hand, and their subsequent performance here is not perfect; and decisions by the Selection Council are and must be made in the context of uncertainty.

IMPACT OF DISMISSAL ON STUDENTS. The consequences of dismissal for the students' self concept and their future were closing topics of most interviews. By the time students came to the interview, nine of them expressed positive attitudes about themselves and their future. Seven discussed a diminished or damaged self-image as a result of their failure at UMKC. Four were actively engaged in professional counseling to help them with their problems.

For nine of these dismissed students, their future plans included reapplication to UMKC School of Medicine. In fact, three of these students have been readmitted, and one is a year 1 stand-by.

The exit interviewers believe that the process of the interview itself helped students to sort out issues, and a few of the students specifically said they appreciated the interview.

The Withdrawals

WHO, WHEN, AND WHY THEY LEFT. Six of the students who left the program were in good academic standing. Five of the six are female. All are Caucasian. Four are from urban areas and two from rural areas. One of these students left the program in Year 1, two departed in Year 2, and two left in Year 4, and one departed in Year 5. Among the students who withdrew after Year 3, two transferred to another medical school in order to be with their boyfriend/fiance. The third followed her husband undertaking an out-of-town residency. The three students who left during the first two years of the program changed their career plans, a switch for which there were some signals already in the Selection Council files at the time of admission.

PREDICTORS OF CHANGED CAREER PLANS. The interviewer of one of these students specifically stated that the student had little motivation for medicine and only fair perception of it. Also this student's interest inventory was low in science (58th percentile) but high in business (86th percentile), one area he wants to explore further in the future. Moreover, on the ACT print out, the student listed his vocational choice as business/commerce although he was not certain about that choice. The second of these three students displayed a catholic range of interests during the selection process. Her interviewer remarked on her strong interest in political science, apparently uncovered during the interview. The student herself listed engineering on the ACT print out as her vocational choice, but she was unsure of that selection. Her interest inventory indicated high scores not only in science (97th percentile) but also in creative arts (80th percentile), her area of potential future interest. The third student, now hoping to pursue a graduate degree in chemistry, had a high interest score in science, and one of her references raised a question about the student's motivation for medicine.

TABLE 1 Who Left, When, and Why N=22

Who?

Sex	N	Race	N	Hometown	N
Female	13	Caucasian	18	Urban	14
Male	9	Minority	4	Rual	8

When?	In				
Year 1	6	Year 3	2	Year 5	1
Year 2	10	Year 4	3	Year 6	0

Why?

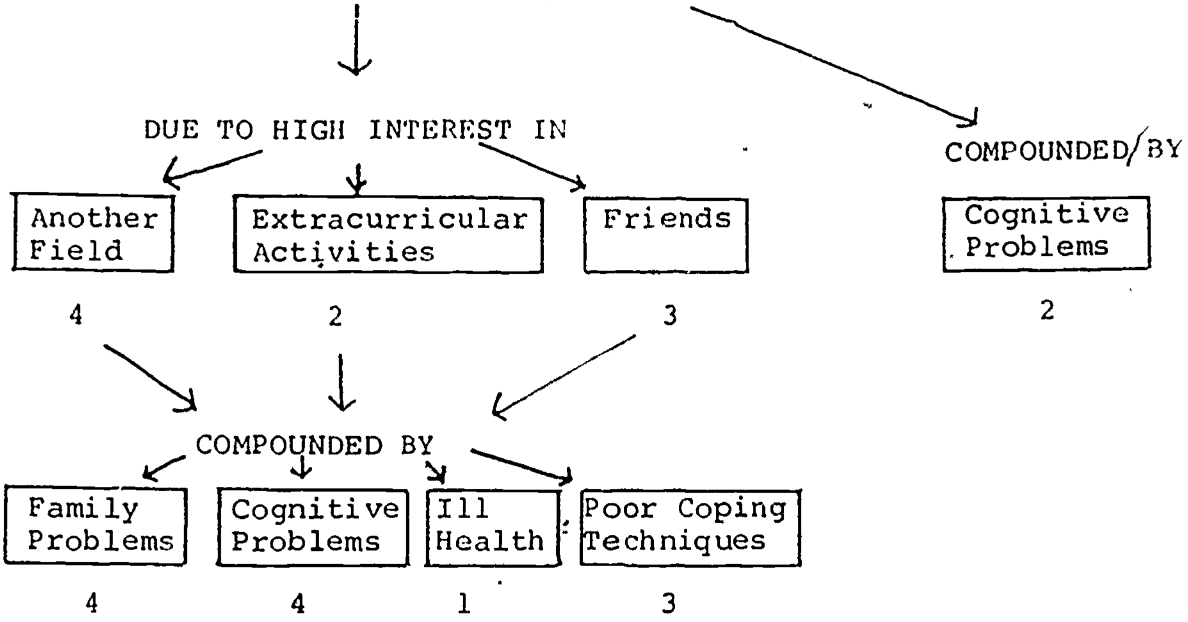
In poor academic standing	16
In acceptable academic standing.	6

TABLE 2 Characteristics of Students Who Left in Poor Academic Standing

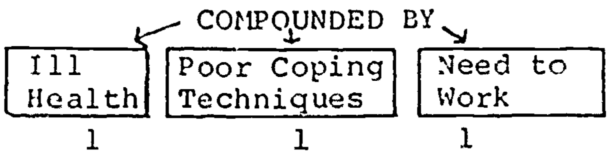
Sex		Race		Hometown	
Female	8	Caucasian	12	Urban	10
Male	8	Minority	4	Rual	6
		(Black	3)		

Diagram 1. Factors Involved in Academic Failure

Profile 1 THE DISINTERESTED IN MEDICINE (N=11)


DUE TO HIGH INTEREST IN
Another Field
4
Extracurricular Activities
2
Friends
3
COMPOUNDED BY
Cognitive Problems
2
COMPOUNDED BY
Family Problems
4
Cognitive Problems
4
Ill Health
1
Poor Coping Techniques
3

Profile 2 THE COGNITIVELY DISADVANTAGED (N=3)


COMPOUNDED BY
Ill Health
1
Poor Coping Techniques
1
Need to Work
1

Profile 3 THE ECONOMICALLY DEPRIVED (N=2)

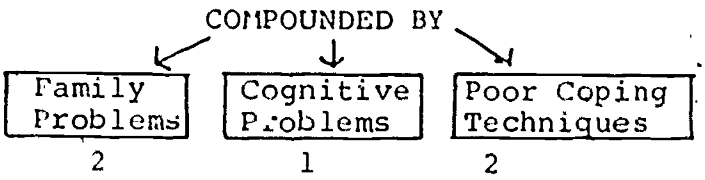

COMPOUNDED BY
Family Problems
2
Cognitive Problems
1
Poor Coping Techniques
2

TABLE 3

Predictors of Failure

Student Characteristics	Differentiated between Students Who Failed and the Controls N=32	Direction of Difference: Students Who Failed, Compared with Controls, Are:	Corroborated in Other UMKC Study † N=286
Cognitive Measures			
ACT Total Score	yes	lower	yes
ACT Social Science Subscore	yes	lower	*
ACT English Subscore	yes	lower	*
ACT Math Subscore	yes	lower	*
ACT Science Subscore	yes	lower	*
Rank in High School Class	yes	lower	yes
Quality/Type of High School	yes	from poor city schools; less often from superior preparatory, suburban, parochial schools	*

† Arnold et al. College and University. 59:95-101, 1983.

* Not previously studied

continued next page

TABLE 3 (con't)

Predictors of Failure

Student Characteristics	Differentiated between Students Who Failed and the Controls N=32	Direction of Difference: Students Who Failed, Compared with Controls, Are :	Corroborated in Other UMKC Study N=286
Noncognitive Measures			
ACT Interest Inventory Score			
Science	yes	lower	
Social Service	yes	somewhat higher	*
Creative Arts	No		*
ACT-College Major-Medicine	No		*
ACT-College Choice-UMKC #1	No		*
ACT-Vocational Choice-Medicine	No		*
Job in Health	No		No, - Correlation

* Not previously studied

TABLE 3 (con't)

Predictors of Failure

Student Characteristics	Differentiated between Students Who Failed and the Controls N=32	Direction of Difference: Students Who Failed, Compared with Controls, Are:	Corroborated in Other UMKC Study N=286
Interviews			
Points	yes	lower	yes
Subsequent Problems Identified Correctly	yes		*
Combined Measures			
Teachers' References	yes	rarely described as superlative in comments	yes
Council Index	yes	a little lower	yes

* Not previously studied

TABLE 4 ACT Scores and Performance in UMKC Program

Compared with Controls, Scores of Dismissed Students Are:	Total Score N=16	Social Science N=16	English N=16	Math N=16	Natural Science N=16
Lower	10	12	11	10	10
The same	3	0	1	1	0
Higher	3	4	4	5	6

TABLE 5 Distribution of ACT Total Scores

Percentile	Dismissed Students N=16	Control Students N=16
90 & above	4	12
80's	7	0
70's	4	4
40's	1	0

TABLE 6 Class Rank and Performance in UMKC Program

Compared with Controls Class Rank of Dismissed Students Is: (N=16)	
Lower	12
The Same	1
Higher	2
Uncodable	1

TABLE 7 Type/Quality of High School and Performance in UMKC Program

Type/Quality of School	Dismissed Students N=16	Control Students N=16
Very strong		
suburban		
preparatory		
parochial	3	7
Moderate to strong		
preparatory		
parochial		
city	3	5
Weak		
City	4	0
rural	2	0
Unknown		
parochial	1	0
rural	3	4

TABLE 8 ACT Interest Inventory and Performance in UMKC Program

Percentile Score	Science Dismissed N=16	Science Control N=16	Social Science Dismissed N=16	Social Science Control N=16
90 & above	6	12	5	2
80's	2	2	1	3
70's	0	0	5	3
60's & less	8	2	5	8

TABLE 9 Interviewer Comments and Performance in UMKC Program

	Dismissed* Students	Control* Students
Interviewer discussed/identified potential problems	8 True Negatives	4 False Negatives
Interviewer did not identify problems/made positive comments	9 False Positives	13 True Positives
Interviewer summarized with a superlative	(2)	(7)

*There was one student in the dismissed group and one in the control about whom one interviewer discussed a potential problem and the other interviewer used a superlative. The student was assigned to appropriate true and false categories.The total for students in this table thus reached 17.

ERIC
Full Text Provided by ERIC

TABLE 10 Teachers' References and Performance in UMKC Program

Reference Contained Superlatives	Dismissed Students N=16	Control Students N=16
yes	1	8
no	15	8