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ABSTRACT

The academic performance during Fall 1972 of regular admits, scholarship award winners, and disadvantaged students admitted under the exceptions admissions policy at the University of Maryland Baltimore County is analyzed. Comparisons are made of the effect of tutorial assistance provided by the UMBC Learning Resources Center upon the grade point average of the disadvantaged students. Disadvantaged students who participated in the intensive study skills summer session performed better than the students who only had the fall tutorial assistance. All groups of disadvantaged students tended to have a lower GPA than the rest of the entering freshman class. The females in these categories achieved a higher GPA than the males.

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COMPARISON OF THE FIRST SEMESTER ACADEMIC PERFORMANCE
OF REGULAR, HONORS, AND DISADVANTAGED FRESHMEN
AT UNIVERSITY OF MARYLAND BALTIMORE COUNTY
FOR FALL 1972

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
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June 1973

Introduction

This report is an analysis of the academic performance during Fall 1972 of the Fall 1972 entering freshman class. In addition to statistics on the population as a whole, students in various exceptions categories have been identified and statistics by group have been developed.

Data

Students in exceptions categories were identified using lists provided by:

1. R. Lawrence, Director of Minority Recruiting
2. J. Hirsch, Director of Admissions & Registrations
3. T. McIver, Administrative Assistant, LRP
4. J. Calliotte, Acting Director, Counseling Center.

The exceptions categories are:

1. Students who received 6th week warning letters.
2. Students admitted in the 6% exceptions category.
3. Fall 1972 LRP invitees. This category was further broken down into:
 - a. Those who entered the program
 - b. Those who declined.
4. Summer 1972 ALP participants
5. Students who received Scholastic Achievement awards
6. Students admitted from the lottery
7. Students not in any of the above categories.

Note that the categories are not mutually exclusive.

Of these students, those who were first semester freshmen (0-8 earned hours prior to start of semester) in the Fall 1972 semester were selected for further study. This yielded a total population of 1278 students for the study.

For each of these students a data set was developed using the aforementioned lists, the Student Data Base (date of file February 1973), and the enrollment file for the 3rd week of classes (see attachment 1).

Design of the Study

The following variables were selected for study:

1. Cumulative hours earned
2. Cumulative G.P.A.

3. Hours attempted, 3rd week of the Fall 1972 semester
4. Hours attempted, end of term
5. Year of birth
6. SAT verbal
7. SAT Math
8. Decile rank of student in the graduating high school class (high school of 90-100, 10th decile; 80-90, 9th, etc).
9. Predictive Index.

Basic statistics (mean (\bar{y}), standard deviation (s), number of students (n), min, max) were developed for the population as a whole and for each of the subgroups. Students t and t' (two tailed) was then computed testing the hypothesis that the subgroup mean (\bar{y}) equaled the population mean (u) ($H_0: \bar{y}=u$, $H_1: \bar{y} \neq u$).

The results of this analysis are summarized in Table 1.

Additionally, the academic status and the sex/marital status was investigated for each group. The academic status code is developed using the guidelines set down in the UMBC academic retention plan. The results of these tabulations are in Table 2.

Discussion of Findings

First we may note that there are some inconsistencies in the data, particularly in maximum values for certain data elements. Some of these are due to miscoded data in the files (e.g., a transfer student coded as a 1st semester freshman, etc). Some are due to the fact that a student having 8 earned hours at the beginning of the semester (transfer credit, credit by exam, etc) is considered a 1st-semester freshman. The number of students having extreme values is very small and does not appreciably affect the statistics.

It should also be noted that n varies for the variables within groups. This is due to missing data values in the file. Missing values were eliminated in the computation of the statistics.

1. Cumulative Hours Earned & Cumulative G.P.A.

In general, students in the categories:

- a. 6th week warning letter
- b. 6% exceptions admits
- c. LRP (Fall 1972)
- d. ALP (Summer 1972)
- e. Lottery admit

scored significantly lower than the general population. The only exception to this was the LRP (Fall 1972) participants. For this group the mean cumulative hours earned is not significantly lower than the population mean.

Scholastic Achievement award students are performing at a slightly lower level than the population as a whole but this difference is not statistically significant.

Students not in any of the exceptions categories are performing at a level significantly higher than the population mean for these two variables.

2. Hours Attempted (3rd week of term),
Hours Attempted (end of term)

For 'hours attempted' (3rd week of term) no significant difference has been noted for students in the following categories:

- a. 6% exception
- b. LRP (Fall 1972)

Significantly lower means are indicated in the groups:

- a. 6th week warning letter
- b. ALP (Summer 1972)
- c. Lottery Admits
- d. Scholastic Achievement award

Students not in any of the above groups show a significantly higher mean.

For the variable 'hours attempted' (end of term) all of the exceptions categories indicate significantly lower means with the exception of the LRP (Fall 1972) participants. Those in the other freshman category show a significantly higher mean for this variable.

3. SAT verbal, SAT math, Decile in graduating High School class, Predictive Index

Exceptions category students show significantly lower means on all of these variables and students not in an exceptions category show significantly higher mean. The only exception to this is the Scholastic Achievement award category. The means for High School Rank and predictive index are significantly higher than the population mean for this group.

4. Academic Status Code

The academic status code is computed according to the UMBC academic retention plan. Referring to UMBC Bulletin 1972-73, page 60 and to the tabulated codes:

<u>Category</u>	<u>Criteria</u>	<u>Total Hours Attempted</u>	<u>GPA</u>
Good standing	1-5		0.0
	6-20		1.35
	21-35		1.65
Honors	12 in given semester		3.50 in given semester
Probation	1-5		N.A.
	6-20		1.35
	21-35		1.65
Dismissal	1-5		N.A.
	6-20		0.35
	21-35		1.35

"Regardless of his cumulative grade point average, however, no student shall be dismissed at the end of any grading period during which he was registered for and completed at least 12 semester hours with an average of 2.00 or better".

Note that students with fewer than 5 cumulative hours attempted are considered in good standing regardless of their GPA and that the honors category is based on semester hours attempted and GPA, not cumulative.

The study shows that for the total population 32 (2.5%) students were dismissed and 120 (9.4%) are on academic probation and 1,125 (88.1%) are in good academic standing.

The pattern for the students in the various categories indicates that students in the exceptions categories have proportionately more students in academic difficulty (probation, dismissed) than the total population. Scholastic Achievement Award students have about the same percentage of students in the probation/dismissal category as the general population and all other freshmen have a lower proportion of students in these categories.

5. Sex/Marital Status

Overall the entering class contains 665 males (52.03%) and 613 females (47.97%). Grouping the Other Freshmen and Scholastic Achievement Award categories we find 422 males (48.45%) and 449 females (51.55%). Grouping the remainder of the students, those in exceptions categories, shows 243 males (59.71%) and 164 females (40.29%). Thus a higher proportion of males are represented in the exceptions categories.

The Scholastic Achievement Award students show a reverse disproportion, i.e. 32 of the 39 (82.1%) participants are female.

CONCLUSIONS

This report is a first look at the performance of the Fall 1972 freshmen class. As the statistics for the academic performance variables (cumulative hours earned, Cumulative GPA, Hours Attempted 3rd week and end of term) are for a single semester it is felt that attempting to draw too many conclusions from these statistics would be an error. The statistics on the descriptive variables (Year of Birth, Sex/Marital Status, SAT's, Decile and Predictive Index) however, do give some idea of the composition and academic preparation of this class.

Keeping these limitations in mind the following conclusions may be drawn:

1. Students in the LRP Fall (accepted) category are performing at the level of the general population. The means for cumulative Hours Earned, Hours Attempted (3rd week) and Hours Attempted (end of term) are not significantly different from the population means. The mean for Cumulative GPA is significantly lower than the population mean. Even with this the mean value (1.729) is a satisfactory first semester GPA. Additionally students in this category are performing at a higher level than students in the LRP Fall (declined) category.

2. Students in the Summer 1972 ALP category are performing at a much lower level than both the general population and any other exceptions category.

3. Male students are disproportionately represented in the academic exceptions categories, females in the Scholastic Achievement Award category.

TABLE I

Category Variable	1st Sem. Freshman	Fall 1972		6th week		LRP		LRP		LRP		Summary		Lottery Admit.	Scholastic Achievement	Other Freshmen
		Warning letter	Exception Fall 1972	Accepted	Declined	Fall 1972	1972	ALP	1972	ALP	1972	ALP	1972	ALP		
Cumulative	\bar{y}	10.903	-8.489	9.017	9.429	10.067	8.950	6.344	9.226	10.205	11.819					
Hours	s	4.531	4.646	4.743	2.737	5.158	4.378	3.764	4.696	5.983	4.146					
Earned	n	1,278	180	118	105	45	60	32	177	39	832					
min	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
max	33.0	27.0	28.0	28.0	28.0	17.0	23.0	26.0	33.0	25.0						
t		-6.985	-4.331	-3.199	-1.094	-3.464	-6.859	-4.765	-7.84	6.338						
G.P.A.	s	.959	.916	.859	.878	.839	.912	.706	.869	.855	.905					
	n	1,278	180	118	105	45	60	32	177	39	832					
min	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
max	4.0	3.75	3.65	3.65	3.5	3.65	2.50	3.5	3.75	4.00						
t		-3.466	-6.677	-5.287	-3.3741	-4.043	-6.418	-6.905	-1.066	7.681						
hours	\bar{y}	13.348	13.151	13.161	13.133	13.133	13.133	12.750	12.887	12.487	13.537					
attempted	s	2.202	1.898	1.835	2.005	1.938	2.071	1.741	2.099	2.293	2.265					
(3rd week)	n	1,277	179	118	105	45	60	32	177	39	832					
min	3.0	6.00	6.00	6.00	9.00	6.00	9.00	6.00	7.00	3.00						
max	25.0	18.00	18.00	18.00	18.00	17.00	16.00	18.00	17.00	25.00						
t		1.389	-1.107	-1.099	-0.744	-0.804	1.943	-2.922	-2.345	2.407						
hours	\bar{y}	11.520	10.000	10.661	10.848	10.867	10.833	8.812	10.548	10.359	12.064					
attempted	s	3.514	3.846	3.555	3.621	3.835	3.484	3.257	3.601	3.305	3.323					
(end of term)	n	1,278	180	118	105	45	60	32	177	39	832					
min	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					

TABLE 1

Category Variable	Fall 1972		6th Week		LRP		LRP		Summary		Lottery		Scholastic		Other	
	1st Sem.	Warning	Exception	Fall 1972	Fall 1972	Fall 1972	Fall 1972	Accepted	Declined	1972	Admit	Achievement	Freshmen	Award		
Freshman																
Max	18.0		17.0	17.0	17.0	16.0	17.0	14.0	16.0	15.0					18.0	
t			-5.302	-2.625	-1.902	-1.1422	-1.527	-4.703	-3.591	-2.194					4.722	
			.0000	.0096	.0567	.2585	.1282	.0002	.0007	.0324					.0000	
Year of Birth	\bar{Y}	53.758	53.883	53.600	53.544	53.444	53.621	53.710	53.605	53.842					53.786	
S	1.649	.500	1.091	1.161	1.341	1.006	.529	1.244	.886						1.896	
n	1,272	179	115	103	45	58	31	177	38						831	
min	15.0	50.0	49.0	49.0	49.0	49.0	49.0	42.0	49.0						15.0	
max	56.0	55.0	55.0	54.0	54.0	54.0	54.0	54.0	55.0						56.0	
t		3.345	-1.553	-1.871	-1.571	-1.0371	-.505	-1.636	.584						.426	
		.0014	.1192	.0609	.1196	.3046	.6227	.0995	.5692						.6743	
SE.T	\bar{Y}	457.992	407.612	399.035	412.871	409.524	415.254	354.828	416.420	377.105					482.916	
Jzbal	S	98.639	102.999	89.660	86.710	65.256	99.695	81.487	77.409	81.503					93.793	
n	1,237	173	114	101	42	59	29	169	38						809	
min	200.0	200.0	220.0	240.0	280.0	240.0	220.0	220.0	240.0						240.0	
max	760.0	760.0	730.0	730.0	540.0	730.0	560.0	600.0	530.0						760.0	
t		-6.430	-7.021	-5.230	-4.814	-3.293	-6.818	-6.932	-6.118						7.558	
		.0000	.0000	.0000	.0001	.0021	.0000	.0000	.0000						.0000	
SNT	\bar{Y}	492.510	440.809	438.044	450.960	463.571	441.983	381.379	446.225	403.947					518.203	
Math	S	104.988	107.484	96.636	94.024	94.658	93.335	87.698	99.210	85.220					98.085	
n	1,237	173	114	101	42	59	29	169	38						809	
min	200.0	200.0	230.0	230.0	250.0	230.0	250.0	200.0	210.0						240.0	
max	780.0	730.0	690.0	690.0	660.0	690.0	570.0	750.0	610.0						780.0	
t		-6.327	-6.018	-4.441	-1.981	-4.158	-6.824	-6.065	-6.406						7.450	
		.0000	.0001	.0514	.0003	.0000	.0000	.0000	.0000						.0000	

TABLE I

Category Variable	Fall 1972 1st Sem. Freshman	6th week Warning Letter	LRP Exception	LRP Fall 1972 Accepted	LRP Fall 1972 Declined	Summary 1972	Lottery Admit	Scholastic Achievement	Other Freshmen
Cecile in Graduating S. Class	7.273	6.636	3.791	.3.962	4.343	3.667	5.852	5.681	9.194
n	2.227	2.148	1.653	1.761	2.014	1.492	2.107	1.632	1.091
min	1.090	143	86	80	35	45	27	163	36
max	1.0	1.0	1.0	1.0	1.0	2.0	1.0	6.0	1.0
t	-10.0	10.0	10.0	10.0	8.0	10.0	10.0	10.0	10.0
predictive index	2.187	1.983	1.474	1.538	1.611	1.483	1.502	1.763	2.508
s	.457	.417	.205	.237	.255	.209	.262	.112	.346
n	1,240	177	117	104	44	60	32	175	36
min	.980	.980	.980	.980	.980	1.030	.980	1.270	1.440
max	3.460	3.140	1.830	2.380	2.380	1.840	1.890	1.900	3.050
t	-6.508	-37.621	-27.926	-14.983	-26.092	-14.790	-50.080	5.566	13.987
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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TABLE 2

Sex/Marital Status	Fall 1972			6th Week			LRP			LRP			ALP			Scholastic Achievement			Other		
	1st Semester	Warning	Exception	(Invited)	(Accepted)	(Declined)	Summer	Fall 1972	1972	Fall 1972	1972	Fall 1972	1972	Lottery	Awardee	Freshmen	Awardee	Freshmen	Awardee	Freshmen	
Single Men	658	93	78	42	30	42	17	110	7	410	68	68.5	66.7	70.0	53.1	26.1	17.9	49.3			
Percent	51.5	51.7	66.1	68.5	66.7																
Single Wo-	603	86	39	32	14	18	15	65	32	410	33.1	33.1	30.5	30.0	46.9	36.7	82.1	49.3			
men	47.2	47.8	33.1	31.1	0	0	0	0	0	5	1	1	1	0	0	0	0	0	0		
Married Wo-	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
men	5	0.0	0.8	1.0	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Married Wo-	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
men	5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Other Men	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Other Wo-	3	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0		
men	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Total	1278	180	118	105	45	32	177	39	832	0	0	0	0	0	0	0	0	0	0		
Missing Values	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		

TABLE 2

Academic Status Code	Fall 1972	6th Week	6%	LRP	LRP	LRP	ALP	Scholastic Achievement	Other
	1st Semester	Warning	Exception	(Invitee)	(Accepted)	(Declined)	Summer	Admit	Freshmen
Good Standing (n)	1054	127	84	80	36	44	21	141	715
(%)	82.5	70.6	71.2	76.2	80.0	73.3	65.6	80.1	85.9
Honors (n)	71	2	2	0	2	0	1	1	65
(%)	5.6	7.1	1.7	1.9	0.0	3.3	0.0	.6	7.6
Probation (n)	120	42	25	19	7	12	8	25	41
(%)	9.4	23.3	21.2	18.1	15.6	20.0	25.0	14.2	10.3
Dismissal (n)	32	9	7	4	2	2	3	9	11
(%)	2.5	5.0	5.9	3.8	4.4	3.3	9.4	5.1	2.6
Total (n)	1277	180	118	105	45	60	32	176	39
Missing Values	1	0	0	0	0	1	0	0	0

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TABLE 2

	Fall 1972 1st Semester Freshmen	6th Week Warning Letter	LRP Exception (Invitee) Fall 1972	LRP (Accepted) Fall 1972	LRP (Declined) Fall 1972	ALP Summer Admit 1972	Scholastic Achievement Lottery Awardee Freshmen
Sex/Marital Status							
Single Men	658	93	78	30	42	17	110
Percent	51.5	51.7	66.1	68	66.7	53.1	26.1
Single Wo-	603	86	39	32	18	15	17.9
men	47.2	47.8	33.1	30.5	31.1	30.0	410
Married Men	61	0	1	0	0	0	82.1
Married Wo-	71	0	1	0	0	0	49.3
men	.5	0.0	0.8	2.2	0.0	0.0	49.3
Other Men	1	1	0	0	0	0	5
Other Wo-	3	0	0	0	0	0	0.0
men	.2	0.0	0.0	0.0	0.0	0.0	0.0
Total	1278	180	118	45	32	177	39
Missing Values	0	0	0	0	0	0	832

TABLE 2

	Fall 1972	6th Week	6%	LRP	LRP	LRP	LRP	A&LP	Scholastic	Achievement	Other
	1st Semester	Warning	Exception	(Invited)	(Accepted)	(Declined)	Fall 1972	Summer	Admit	Awardee	Freshmen
	Freshmen	Letter					Fall 1972	1972			
Good Standing (n)	1054	127	84	80	36	44	21	141	33	715	
(%)	82.5	70.6	71.2	76.2	80.0	73.3	65.6	80.1	84.6	85.9	
Honors (n)	71	2	2	2	0	2	0	1	1	65	
(%)	5.6	7.1	1.7	1.9	0.0	3.3	0.0	6	2.6	7.8	
Probation (n)	120	42	25	19	7	12	8	25	4	41	
(%)	9.4	23.3	21.2	18.1	15.6	20.0	25.0	14.2	10.3	4.9	
Dismissal (n)	32	9	7	4	2	2	3	9	1	11	
(%)	2.5	5.0	5.9	3.8	4.4	9.4	5.1	2.6	1.3		
Total (n)	1277	180	118	105	45	60	32	176	39	832	
Missing Values		0	0	0	0	0	0	0	0	0	

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