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In the fall of 1972-73 the president of the Midwest Association of Student Financial Aid Administrators (MASFAA) appointed an eleven member committee to develop "some uniform guidelines for student expense budgets which could be utilized by financial aid administrators" in making decisions about the reasonableness of expenditures of their students. The American College Testing Program (ACT) was requested to provide a Financial Aid Program consultant to assist the committee in fulfilling its charge.

This discussion highlights ACT's response to three of MASFAA's areas of concern — actual expenditures as reported by a sampling of students, the reality of student self-help expectations, and the extent of the practice of students contributing to parents instead of the reverse.

A review of the literature related to research on student expenses revealed several problems concerning its relationship to the goals of the committee. This is not to say that these studies are not valuable. Bekkering (1971), Cavanaugh (1970), and Johnson (1971) have written excellent articles. Allan and Suchar (1973), and Sanford (1961), among others, have also shed light in the area. These and numerous other studies in the area, however, provide little assistance in this instance since many are now outdated, samples were frequently too restricted, or more importantly the expenses were reported by institutions not students. A noteworthy exception is the Haven and Horch (1972) study which adequately summarizes student reported data.

Coauthors of this study undertaken by the American College Testing Program are Keith J. Jepsen, Director of Student Assistance Programs, Operations Division; E. James Maxey, Director of Research Services, Research and Development Division; and Joe B. Henry, Director of the Financial Aid Program, Educational Services Division, all with ACT.

The data used to address these questions were derived from Phase I of a much larger and more comprehensive ongoing two year investigation entitled *A Study of the College Investment Decision.*[1] In their initial report economists Walter W. McMahon and Alan P. Wagner presented findings revealed in data collected from 2,693 students and their families relative to their income, assets, expected parental contribution and borrowing, the monetary and nonmonetary returns they expect from a college education, the components of the investment they are making, and other characteristics relevant to the appraisal of their financial need and to the economic analysis of their actual investment behavior.

Sample

The stratified random sample of upper-classmen relevant to this discussion was selected from the population of all students who requested ACT to analyze their family financial situation in the spring and summer of 1972, took the ACT assessment, and answered the race identification question in the Student Profile Section. There were two follow-ups to students who did not respond to the original questionnaire. The result was a 78.7 percent response rate.

Student Reported Expenses

Table 1 summarizes self-reported 9-month expenses for nearly 2,200 upperclassmen who indicated where they lived while attending school. Two measures of central tendency, the mean (arithmetic average) and median (point below which 50 percent of the cases fall), are presented. It is reasonable that the mean is greater since it is influenced by the actual higher expense amount of cases in the upper 50 percent of the distribution while the median merely represents the point below which 50 percent of the cases fall and is not influenced by extreme amounts.

As one would expect, expenses for students who live with parents or relatives (usually defined as commuters) are substantially lower than for students who live in non-university housing, residence halls, fraternities, sororities, or other university housing. A comparison of median totals reveals approximately $700 to $900 differences. These differences are apparently due to similar differences in the room and board category.

A common rule of thumb used by aid administrators is to add $400 to $500 to tuition, fees, books, room, and board expenses when building standard budgets to account for unspecified expenses. This appears to be supported by the data. The $400 figure appears appropriate for the residence hall students while the $500 amount seems reasonable for the commuter and off-campus non-commuter. Approximately $75 to $100 additional transportation costs are

1. The study is being supported by the U. S. Office of Education, The American College Testing Program, and the Spencer Foundation. Preliminary results are reported in ACT Research Report No. 59, *A Study of the College Investment Decision Project Report I,* Walter W. McMahon and Alan P. Wagner, June 1973.

Table 1
Student Reported Expenses
by Where Students Live at School (N = 2,168)

	With Parents or Relatives (N=560)		Non-Univ. Housing (N=194)		Residence Hall Frat., Sor. (N=1,352)		Other Univ. Housing (N=62)	
Expense Items	Mean	Median	Mean	Median	Mean	Median	Mean	Median
Tuition	508	423	528	419	684	500	694	476
Books, Supplies	135	115	131	119	135	119	158	128
Board	225	124	603	496	622	570	611	445
Room	84	0	577	460	380	349	489	366
Medical/Dental	72	42	125	59	57	32	59	32
Durable Good Purchases	137	0	183	20	94	0	137	0
Debt Repayment	80	0	167	0	36	0	86	0
Travel	270	195	284	197	157	99	231	123
Other (total 1-6)	399	263	548	286	347	243	383	263
1. Clothing	157	118	139	97	124	94	123	97
2. Entertainment	63	40	72	49	55	39	60	45
3. Laundry	25	10	40	30	31	21	41	20
4. Personal Care	45	35	45	35	41	30	45	30
5. Beverages, Snacks	50	36	51	30	43	30	45	35
6. Other costs	59	24	201	45	53	29	69	36
TOTAL	1,910	1,162	3,146	2,056	2,512	1,912	2,848	1,833

incurred by the latter group of students, which accounts for the difference. More than half of this $400 to $500 figure consists of "other" or miscellaneous expenses, of which clothing is the largest component. Surprisingly, a small amount is reported by students as expenditures for entertainment, beverages, or snacks.

Table 2 summarizes student reported expenses for 1,856 students who indicated the type of institutions attended. Both mean and median amounts are given for each expense category and for the total expense. The small number of students within two sub-groups (private university, N=52, and private 2-year, N=26) suggests caution be used in interpreting results. The traditional cost differences among institution types is supported by student reported expenses. As expected, this difference can be traced to large differentials in tuition and fees between private and public institutions.

After examining the unique situation of students attending two-year institutions, transportation cost differentials are quickly apparent. Larger travel expenses are reported by students at these institutions, frequently as much as double those at other institutions. Even with these differences the two-year institutions remain substantially less expensive than the four-year schools.

Table 2

Student Reported Expenses
by Type of Institution (N = 1,856)

	Private (N=368)						Public (N=1,488)					
	(N=52) *		(N=290)		(N=26) *		(N=699)		(N=542)		(N=247)	
	University		4-Year		2-Year		University		4-Year		2-Year	
Expense Items	Mn	Md	Mn	Md	Mn	Md	Mn	Md	Mn	Md	Mn	Md
Tuition	780	550	1,239	1,200	997	860	590	484	450	369	337	285
Books, Supplies	130	115	135	115	130	93	146	126	126	111	136	120
Board	448	330	534	526	448	190	564	495	558	519	411	358
Room	298	330	322	335	209	0	379	349	304	299	269	233
Medical/Dental	51	25	64	35	107	20	65	45	61	35	92	46
Durable Goods Purchases	30	0	98	0	103	0	106	0	120	0	159	25
Debt Repay.	42	0	64	0	127	0	49	0	66	0	75	0
Travel	149	85	194	120	317	160	178	103	182	100	259	199
Other	290	268	429	288	414	245	380	317	347	295	380	327
TOTAL	2,218	1,703	3,079	2,619	2,852	1,568	2,457	1,919	2,214	1,728	2,118	1,593

* The sample size is too small to make generalizations.
The results should be used cautiously.

Student Reported Summer Savings

Students were asked, "Approximately how much money did you save from your job last summer (1971)?" Their responses are summarized by four age groups in Table 3.

Table 3
Amount of Summer Savings
by Age of Responder

	Age in Years			
	18	19	20	21
Number of students	68	1,528	445	74
Amt. at 25th percentile	$ 0	$ 0	$ 0	$ 0
Amt. at 50th percentile	0	195	147	95
Amt. at 75th percentile	195	395	290	290
Mean	$145	$275	$258	$227

It would appear that traditional summer expectations are too high for most students. Fully half the students responding saved less than $200 and a quarter were able to save nothing. Obviously this could be a function of many factors — poor job opportunities during the summer of 1971 or the wording of the question in asking about savings rather than earnings, for example. But for this national random sample of over twenty-one hundred students, the usual summer savings figures to be expected by aid offices should be reexamined.

These same observations would seem to be supported by data in Table 4, which shows the amount of summer savings by the student's year in school. Most of the respondents were sophomores. Seniors were not sufficiently represented to be included.

Table 4
1971 Summer Savings Reported by
1971-72 Sophomores & Juniors

	Sophomores	Juniors
Number of students	1,973	185
Amt. at 25th percentile	$ 0	$ 0
Amt. at 50th percentile	200	100
Amt. at 75th percentile	400	290
Mean	$ 268	$206

Students who Contribute to their Parents

Students were asked, "Do you contribute money to your parents to help them pay bills or provide for your brothers and sisters?" Approximately 10% of the students responded yes to this question. The racial distribution of responders is summarized in Table 5. The over-sampling of black students is evident, but the proportions are striking.

Table 5
Student Contribution to Parents by Race

	American Black		American Indian		Caucasion American		Spanish American		Oriental American	
Number in Sample	577		39		1,799		180		35	
	No.	%	No.	%	No.	%	No.	%	No.	%
Yes	96	16.6	7	17.9	130	7.2	53	29.4	2	5.7
No	473	82.0	32	82.1	1,659	92.2	127	70.6	33	94.3

Table 6 shows the income level and calculated parental contribution from the ACT need analysis system.

Table 6
Income Level and Parental Contribution of Students who answered the question "Do you contribute money to your parents . . . . ?"

	Answered Yes N=288		Answered No N=2,324	
	Adjusted Gross Income	Parental Contri- bution	Adjusted Gross Income	Parental Contri- bution
Amt. at 25th percentile	$3,360	$ 0	$ 5,140	$ 0
Amt. at 50th percentile	5,575	0	8,555	124
Amt. at 75th percentile	8,960	268	12,165	808
Mean	$6,991	$346	$ 8,977	$720

Further analysis of the data reported by the 288 students who contributed to their parents' income revealed that the median contribution was $22 per month. The mean contribution by students toward their parents income was $40 per month.

The control and type of institutions attended by students responding to the question on contribution to their parents is indicated in Table 7. A greater proportion of the students who attend public and two-year institutions are contributing to their parents. This seems reasonable in light of the likelihood that higher parental income levels are more predominant for students who attend private and other types of institutions.

Table 7
Control and Type of Institution attended by Respondents to Questions on Student Contribution to Parents

	Answered Yes		Answered No	
	No.	%	No.	%
Control				
Public Institutions	238	12	1,815	88
Private Institutions	50	9	504	91
Type				
University	92	10	871	90
Other 4-Year	108	10	1,010	90
2-Year	66	18	310	82

Summary & Conclusion

There is a definite need for studies concerning the level of expenditures necessary to sustain a student attending an institution of higher education. Bekkering (1971), Sanford (1961), and others have begun the effort, but much more remains to be done, particularly from student reported data.

The students described in this survey attended schools serviced by the American College Testing Program. Therefore, characteristics which may be inherent to this group of institutions, such as regional concentrations or a preponderance of public schools, may have resulted in a bias in the tables. The figures, which have been tabulated, however, appear to have great relevance in the day-to-day operation of a financial aid office. For example, the information concerning amounts and categories of expenditures for "other" provides the administrator with a useful tool with which he can more confidently construct a model of student expenditures at his institution. While either the median or mean figures may be used in this connection, median appears more reasonable since it is not affected by unusually extreme values.

Although the survey results provide a great deal of assistance to the financial aid administrator, it also leaves much unsaid. It will, therefore, provide a springboard for more comprehensive analysis to be done by ACT. An example being considered is a study of how the expense budgets reported by students at various institutions compare with those reported by financial aid administrators at those same institutions. This would enable administrators to review their estimates in light of the "reality" of what it actually costs students to go to school.

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