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UNDECIDED, MULTIPLE CHANGE, AND DECIDED STUDENTS
How Different Are They?

This article demonstrates than an examination of demographic and performance variables revealed few differences among entering student groups in terms of whether or not they declared a major field of study. The authors state that "the major contribution of this study is to call into question the impression . . . that undecidedness represents a problem for the student. . ."

Undecidedness about choice of major is a prevalent condition on college campuses today. The number of entering students who are undecided about their major field of study varies from 22 percent to 50 percent, and the percentage of students changing their major at least once after initial enrollment varies from 50 percent to 70 percent (Gordon, 1984; Titley & Titley, 1980). Undecided students need assistance in planning academic programs, but academic or career advising programs have little basis for assisting students uncertain of their educational plans.

The term "undecided," for purposes of this paper, is an administrative term that identifies students who have not chosen a major field of study. Two points of view are expressed in the literature on undecidedness:

- undecided students are no different from other students (Ashby, Wall, & Osipow, 1966; Baird, 1967);
- differences do exist between the undecided and decided students (Chase & Keene, 1981; Titley & Titley, 1980). Several studies have suggested that being undecided about major field is associated with undesirable qualities such as lower grade performance (Sheppard, 1971), higher attrition rates (Elton & Rose, 1971), and troublesome personal qualities like dependency and uncertain identity (Peterson & McDonough, 1985). Evidence from the literature also suggests that little is known about undecided students beyond the freshman year (Foote, 1980), thus engendering further doubts about the utility of findings from research focused on the early months of enrollment.

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The purpose of this study was to provide a descriptive profile of the undecided student and compare these students with decided and multiple change students. For ease of reference, these three groups of students will be referred to hereafter as classification types. An advantage of this study over other studies of undecided students was that the students were tracked from fall 1981 enrollment through spring 1985 graduation. Special academic advising programs were not available for students in this study who initially entered the University as undecided in fall 1981.

METHOD

The data for this study were obtained at a medium-sized, public comprehensive university in southwest Virginia. The sample consisted of 1,384 students who entered the university as freshmen in fall 1981. Table I shows the number of students in the study by classification types. Student records were used to classify the students into one of three types:

- ***A decided student was one who listed a major field decision upon initial enrollment and never changed the decision.***
- ***A multiple change student was identified as one who initially listed a major field but changed the decision one or more times.***
- ***An undecided student was one who listed no major field upon initial enrollment.***

Undecided students constituted the group of primary interest in this study. Classification of all students was based upon information contained in student records across four years. Although undecided students could be distinguished from the other two types upon initial enrollment, it was not possible to distinguish between decided and multiple change students without tracing each student's record across the four years and noting any changes in major fields. Moreover, some of the undecided students changed majors ***after*** they made their initial declaration, and thus might be considered multiple changers, as well. The entries for the undecided type in Table 1, however, are limited to those who had not declared a major upon entrance to the university, even though all students declared a major prior to graduation.

Table 1

Number of Students in Classification Types Over Period of Study

Classification Types	Fall 1981 N	Spring 1985 N	%	Graduates 1985 N	%
Type I (Decided)	617	205	(33%)	143	(23%)
Type II (Multiple Change)	569	408	(71%)	305	(54%)
Type III (Undecided)	198	92	(47%)	59	(30%)
Total	1,384	705	(51%)	507	(37%)

It was the undeclared student who posed the special advising problem addressed in this research; yet, it is interesting to note the persistence and graduation data in Table 1. Multiple changers contained the most persistent students (71 percent persisted for four years) and those with the highest graduation rate (54 percent), while decided students were the least persistent (33 percent) and had the lowest graduation rate (23 percent). For whatever reason — and no causal inference can be drawn from these data — students who changed majors demonstrated greater staying power than those who did not.

One-way analysis of variance was used to determine the significance of mean differences among the three classification types on selected performance indicators, including high school rank, verbal and math SAT scores, credit hours attempted, credit hours passed, and university cumulative grade-point average (GPA). A post-hoc comparison procedure (Scheffe) was used to identify significant differences among pairs of means when significant F ratios were observed for the ANOVAs.

A chi square test of independence was used to test the significance of differences in the proportions among the types with regard to demographic variables, including gender and race.

RESULTS

The question this study sought to answer was, "Are there differences among undecided, multiple change, and decided students with regard to (a) **demographic composition,** and (b) **performance variables?** A demographic breakdown between undecided, decided, and multiple change students is shown in Table 2. There were no significant differences in race or gender across the three classification types. The entire sample was predominantly white and female.

Table 2

Demographic *Composition* by Classification Type

		Classification Types			
	Stat	Decided	Multiple Changer	Undecided	Chi Square
Gender:					1.04
Male	N	123	121	46	
Female	N	494	448	152	
Race:					3.29
White	N	576	527	186	
Black	N	21	22	8	
Other	N	15	10	1	

With regard to performance variables, there were no significant differences at the .05 level among the three types on either SAT verbal, SAT math, or high school rank performance indicators as shown in Table 3.

Table 3

Performance Indicators by Classification Type

		Classification Types			
	Stat	Decided	Changer	Undecided	F
SAT Verbal	n	617	569	198	
	M	410	414	413	.23
	SD	110	91	113	
SAT Math	n	617	569	198	
	M	434	444	433	1.72
	SD	110	89	103	
H. S. Rank	n	617	569	198	
	M	66	66	64	1.17
	SD	22	20	22	
Avg. Hours Attempted	n	617	569	198	
	M	11_a	15_b	13_b	114.87*
	SD	5	2	4	
Avg. Hours Passed	n	617	569	198	
	M	11_a	14_b	12_b	113.94*
	SD	5	3	4	
GPA	n	205	408	92	
	M	2.8_a	2.6_b	2.7_b	9.61*
	SD	.5	.5	.5	

$p < .05$, Means with different lettered superscripts differ ($p < .05$) on post-hoc comparison.

Where significant differences among the classification types were found on these variables, often it was the multiple changer, rather than the undecided group, that accounted for the differences. For example, multiple changers persisted and graduated at a greater rate than either the decided or undecided students, who were more similar than different on these variables. Multiple changers tended to be full-time resident students and also had the lowest percentage of students employed of the three groups.

Significant differences were found among the classification types with regard to hours attempted, hours passed, and university cumulative GPA. The Scheffe Test was used for pairwise comparisons on these variables. The results of the Scheffe Test indicated that the multiple change students attempted and passed more credit hours than the decided and undecided students, and the ***average number of hours*** attempted and passed was significantly different from the decided group. The hours attempted and passed, however, reflect enrollment status (full-time resident), as well as potential differences in motivation, and, therefore, must be interpreted cautiously.

The university cumulative GPA for the decided group was significantly higher than the undecided and multiple change groups. Students who change major fields enroll in additional courses because requirements vary from one major field to another. As evident from the data presented in Table 2, hours attempted, hours passed, and university cumulative GPA of the undecided students were not significantly different from the multiple change students.

Because these findings were drawn from archival data, causal inferences associated with the observed differences should not be made. Perhaps, the most important finding of this study is that in higher education, undecided students do not appear to differ in any significant way from decided or multiple change students.

DISCUSSION

Findings of this study support earlier studies of Ashby, Wall, and Osipow (1966) and Baird (1967), who demonstrated that undecided students are no different from other students. It should be of interest to all educators, but especially to those who advise students about majors and career planning, that the condition or state of undecidedness about' major upon initial enrollment in higher education does not signal "problems ahead" for these students, at least on the academic performance variables considered here. There are some differences between those who are initially decided and those who are not, and they may warrant special programming. In general, however, there is no evidence in these data to treat undecided students different from other students for most programming targeted at career information. Many who first appeared decided, for example, later changed majors. All students may need accurate, timely career information presented in an approximately equal manner. Information might even lead decided students to change majors.

It should be remembered that changing majors may be associated with several desirable characteristics, such as persistence and higher likelihood of graduation. Perhaps advisors should encourage, not discourage, exploratory choices for as long as practical during the undergraduate years. **The major contribution of this study is to call into question the general impression expressed in the literature that undecidedness represents a problem for the student regarding achievement and the need of the institution to provide special assistance for students lacking a major field of study.**

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