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ABSTRACT

The role of the counselor in helping the community college student redefine his occupational and educational future is discussed, and data from the Nor Cal Attrition Study are provided. An analysis of the data showed that the counselor is the institutional leader in the "cooling out" process. Tables provide the study data, and appendixes present tabulations of Response to Question 17 of the Nor Cal Co-operative Research Questionnaire, Phase II and III 1969-70 (Which of the following people would you rely on most for advice about school or job plans?), lists of participating colleges in Nor Cal Phase II and III, and the final report of the Nor Cal Study consisting of data from the two phases of the study. (DB)

THE COMMUNITY COLLEGE COUNSELOR IS THE COLLEGE'S PRIMARY INSTITUTIONAL LEADER IN THE "COOLING OUT" PROCESS

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THE COMMUNITY COLLEGE COUNSELOR IS THE PRIMARY INSTITUTIONAL LEADER IN THE "COOLING OUT" PROCESS

In 1960, Dr. Burton Clark published a book and an article in which he identified two latent functions of the community junior college. Until the time of Clark, the goals or functions of the community junior college were agreed upon by professionals in the field to include the following:

(1) Transfer function.

(2) Terminal function.

(3) General education function.

(4) Continuing education function.

(5) Student personnel function.

(6) Community services function. (Medsker, 1960)

When Clark arrived on the scene he identified two more functions and the phrase he turned to describe one of them continues to make his name important in the area of the sociology of the community college system. The two functions he identified were:

(1) The "cooling-out function,"

(2) The protection by the junior college of the selective interests of the other segments of higher education.[1]

(Clark, 1960a, 1960b)

By using the "case study" approach, Clark investigated one community college, then known as San Jose Junior College. Of course,

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[1]This function is mentioned more recently in Dr. Amitai Etzioni, Chairman of Columbia University's Department of Sociology, in "The High-Schoolization of Colleges," 1970 mimeograph.

San Jose City College, as it is now known, was a member of the Cal Research Consortium and participated for three years in the Nor Cal Attrition Reduction Effort.

Clark pointed out that there was a basic inconsistency in American society. This society encourages everyone to achieve when in reality, hierarchical work organizations and other factors permit fewer and fewer persons to succeed at ascending levels. Thus American society encourages people to achieve when there is actually only limited opportunity to do so. Clark referred to this inconsistency in American society as a "disjuncture" between culturally instilled ends and institutionally provided means of realization. He went on to say that the community junior college is the social unit in American society whose latent function is to ameliorate the consequent stress by "redefining failure" and providing for a "softer" denial. He further stated, "the major form of the soft response...is found ...in the college that specializes in handling students who will soon be leaving--typically the two-year public junior college." This "cooling-out" function of the community junior college, Clark himself noted, is "...one major role and sociologically the most interesting one (that) has not been previously identified...." (Burton Clark, 1960a, p. 157) The performance of the "cooling-out" function by the community junior college allows the system of higher education in America to be both democratic and selective. The inconsistency between culturally encouraged achievement motives and the realities of limited opportunities

needs to be worked out by the community junior college. It is this segment of higher education that operates to ameliorate the stress that arises by performing a "cooling-out" or reorienting function for those students who are caught in the "disjuncture" between ends and means. In short, Clark seems to be saying that American society is both democratic and selective and that it falls to the community junior college to not only be both democratic and selective, but also somehow be the institution that ameliorates the consequent stress. Clark writes:

> The central point can be restated as follows: the basic problem of the junior college is the processing of the student who falls between the terminal and transfer groups. Students with transfer intentions for the most part do not transfer but neither do they complete terminal curricula. Most terminate their education while in the college but do so as dropouts while pursuing transfer work. In this way the modal student does not fall clearly into the transfer or the terminal category.... (Burton Clark, 1960a, p. 84)

In a journal article, Clark refers to these students who are caught in the "means-ends disjuncture," as "latent terminal students." (Burton Clark, 1960b, p. 572) In his article Clark estimates that the "latent terminal students" number "about half of all the students in the California junior colleges...." (Burton Clark, 1960b. p. 572) He further states that the "basic problem" of processing these latent transfer students is handled by moving them out of a transfer major into a one or two-year vocational, business or semi-professional program. In the "cooling-out" process that the community junior college performs,

latent terminal students find their occupational and educational futures being redefined.

While Clark's intensive case study analysis of one community junior college in California was enough to spark the idea that this segment of higher education performed a latent "cooling-out" function, it did not provide the knowledge of which "institutional leader" at the community college carried out this process. Who, in fact, helps the student to redefine his occupational and educational future? In the Sociology of Teaching, the author, William Waller, has a chapter entitled, "Teaching as Institutionalized Leadership." In this chapter, Waller notes that leadership "depends upon a psychic set-up of expectancy, upon a certain eager attentiveness focused upon the leader and a willingness to take a cue from him...the led must have some faith in the competence of the leader...the school depends almost entirely on institutional leadership." (Waller, 1967, pp. 189-192) But who is the community college's institutional leader when it comes to the reorienting process in which students find their educational and occupations futures being redefined? Who does the job of helping to transform the transfer into terminal students? Who are the "responsible operatives," or "coolers," who represent the community college in its effort to ameliorate the consequent stress experienced by these latent terminal students? In short, who are the college's institutional leaders in the "cooling-out" process? Clark did mention the role of the counselor in four of the five stages of the "cooling-

out" process in San Jose Junior College, and he did speak of counselors as "agents of consolation," in the institution which worked to change the intentions of the over-ambitious students, and tried to reduce aspiration as well as to help define and help fulfill it. But the clearest answer to the question of who is the institutional leader in the community junior college who spearheads the drive in the "cooling-out" function is found in the recent analysis of Question 17 in the Nor Cal Attrition Reduction Questionnaire.

If American society at large must be both democratic and selective, and if the junior college ameliorates the stress by performing the "cooling-out" function, then these data suggest that it is the community college counselor who is the "institutional leader" in this reorienting process. As the intensive statistical analyses of Question 17 for both Phase 2 and Phase 3 indicate, the students in the community junior colleges who answered this question do indeed have a "willingness to take a cue" from their community college counselor, and "have some faith in the competence" of this leader. The data in Table 1 indicate that in all colleges that participated in Phase 2 and/or Phase 3 of the Nor Cal Attrition Study, students said they would rely most on their counselor for "advice about school or job plans." After it was seen that freshmen in all colleges seemed to be identifying the counselor as the institutional leader to whom they would turn in their academic and occupational planning, a statistical analysis of this question was

undertaken.[2] It was postulated that the universe of community junior college freshmen depended significantly upon their counselors in the area of advice about "school or job plans." This research hypothesis became a statistical hypothesis that was tested at the .05, .0) 005, and .001 levels. Confidence intervals were calculated around each sample proportion according to the methods advised by Gunther and Mariscuilo. (Gunther, 1965, p. 157, 158; Mariscuilo, 1971, p. 250, 380) In every case, for every one of the community colleges, the proportion of students indicating they would rely on "teachers," or "others." The statistical significance was found to exist in every case at or beyond the .01 level. This level of significance was attained in every community junior college that participated in Phase 2 of the study, and with every community junior college that participated in Phase 3 of the study. An example might help explain the presentation of the analysis of the data from one college.

In Table 2 it will be seen that the descriptive statistics for College F as it participated in Phase 3 of the Nor Cal Study indicate that 459 students chose the response category "Counselor," whereas 95 students chose the response category "Teacher." Since College F had a respondent sample size of 1011, the proportion of students answering "Counselor" was 45.40%, and the response rate for "Teacher" was 9.40%. In order to test the hypothesis

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[2]Appreciation is expressed for the consultation time given on this subject by Dr. Mariscuilo and Dr. Woodson of the University of California at Berkeley.

that there is no significant difference in the proportion choosing "Counselor" and "Teacher," confidence intervals were determined around the sample percentage of 45.50 and 9.40 by the methods of Gunther and Mariscuilo. As shown in Table 2, at the alpha level ($p < .05$), the percent of students choosing "Counselor" is between 42.33 and 48.47%. The percent of students choosing "Teacher" is between 7.60 and 11.20%. Similarly, confidence intervals for the sample proportions were determined at the .01 level, at the .005 level, and the .001 level. At the .001 alpha level for example the interval is 40.01 to 50.79 percent for the "Counselor" category.

The next step in the analysis consisted of constructing matrices having eight rows and eight columns which matched the response categories to the question and in which the confidence bands took the general form of column percentage minus row percentage. It was shown that at the .05 level, the population of entering freshmen at College F chose "Counselor" between 42.33 and 48.47%. The research question that is examined in the matrix shown in Table 3 given that the level of alpha = .05, is the question, "At the population level, is the percent of students who selected 'counselor' greater than the percent of students who selected 'teacher'?" The calculations that were performed in order to produce the matrices for College F consisted of determining a lower and an upper limit for the subtraction of "Counselor" minus each of the other response categories, including "Teacher."

Using the data for College F as an example, the lower limit for

"Counselor" was 42.33% and the upper limit for "Teacher" was 11.20%. At the population level, more students selected "Counselor" than selected "Teacher" by a difference of 42.33% minus 11.20%. This produces a lower limit in the alpha = .05 matrix of 31.13% given "Counselor" as the column and "Teacher" as the row. Similarly, the upper limit for this difference between "Counselor" and "Teacher" is determined by taking the upper limit for the confidence interval for "Counselor," which is 48.47%, and subtracting from that the lower limit for "Teacher," which was 7.60%. Thus the upper limit in the .05 matrix is 40.87%. An easy way to test the question, "Do more students in the population of entering freshmen select 'Counselor' than select 'Teacher' or 'Other' or any other response category?" is to read down the "Counselor" column in the Table 3 matrix. If one wishes to be extremely precise, one need only read the left hand column under the "Counselor" column. In the example for College F (alpha = .05), the population of entering freshmen at that college prefer "Counselor" over "No One" by at least 35.05%; "Counselor" over "Teacher" by at least 31.13%; "Counselor" over "Mother" by at least 31.78%; and "Counselor" over "Others" by at least 34.33%. In a similar fashion, the confidence intervals for the sample proportions for each of the response categories as calculated at the .01, .005, and .001 levels are used to determine the matrices for alpha = .01, alpha = .005, and alpha = .001, respectively.

For every college involved in Phase 2 or Phase 3, the population of entering freshmen prefer "Counselor" over "Teacher"

or "Other"; the response categories which exhaust the universe of people available at the community college for help in this area.

The determination for Chi Square is also given again, in every case, for every college, the Chi Square analysis testing the hypothesis that the proportion of students selecting each of the eight categories is equal of such a value as to permit rejection of the hypothesis of equal proportions for each of the eight categories. In every case, for all colleges in Phase 2 and Phase 3, the Chi Square value is of such a magnitude as to be significant at the .001 levels. [The Chi Square was performed as recommended by Guenther (Guenther, 1965, p. 180).]

Further information is contained in the sense that both Phi (ϕ) and Phi prime (ϕ'), where ϕ is theorem 17-2 and ϕ' is theorem 17-3, have been calculated for each college, after Mariscuilo. (Mariscuilo, 1971, p. 406)

The same kinds of calculations were done for Phase 2 and Phase 3 data. *For all twenty-three colleges involved in Phase 2, and for all twenty-nine colleges in Phase 3, the analyses of these data lead to the same conclusion. The counselor is shown to be the institutional leader in the "cooling-out" process.* Overwhelmingly, students choose counselors as the person they would rely on most for advice about school and job plans. At the student population level, the community college "Counselor" is always chosen over the community college "Teacher" and "Other." In fact, in the entire *universe of people* to whom the student could turn to for advice, the community college "Counselor" is shown

to be THE *person* the students rely on *most*.

The intensive care study that Burton Clark conducted in the late 1950's provided a new term in community college education, the "cooling-out" process. In 1973, the kinds of statistical analysis performed on both the Nor Cal Phase 2 and the Nor Cal Phase 3 data bases as shown in Tables 1 and 2 below have shown that the community college counselors are the "primary institutional leaders" in this "cooling-out" process.

Finally, there are some unanswered questions. Burton Clark indicates his conjecture that the "cooling-out" function is latent; that is, hidden from the community. The question arises, Is this really true? Has it ever been measured? A study could be done to find out whether or not members of the junior college's surrounding community do in fact see this as a function of the junior college. Do they see it, or is it hidden? Burton Clark also says that the "cooling-out" function needs to remain hidden or the ability of the college to perform this function would be impaired. Is this true? Are there any hard data to indicate that this has ever happened or is now happening? The same two questions hold true for the function of protecting the four year colleges and universities so that they can be selective. Does the community recognize this as a function, or is this indeed hidden? Does this really need to be kept hidden?

Clark mentions how in the class, "Orientation to College", a student's skills and ability to reach higher levels can be impersonally discussed. Waller also makes a point of the impersonal nature of teaching in the classroom. Both Waller and Clark imply that this factor of being impersonal is a necessary

ingredient of talking tough. Could this conjecture somehow be tested? Is not the usual nature of counseling to be in a one-to-one situation? Perhaps being impersonal is a factor in a one-to-thirty situation in teaching. Isn't there a factor of spontaneity and "being personal" that exists in the counseling relationship? Can't a counselee "be personal" in the one-to-one counseling situation? Is there any evidence to suggest that if being personal occurs, then it is somehow detrimental? Perhaps in this situation being personal has an effect opposite from being detrimental.

Finally, Medsker and Clark indicate that a decade ago between two-thirds and three-fourths of entering freshmen said they were transfer students. Nor Cal finds that this proportion is down in the fifty percent (50%) range. This is presented in Appendix 2.

Are students actually more realistic now than they were ten years ago? What does this mean in terms of the college's focusing attention on the "cooling-out" function? Are community college freshmen better, more realistically oriented than they were twelve years ago. If so, what American institution is helping the junior college in its "cooling-out" function?

TABLE 1

Nor Cal Community College Students' Selection of the "Most Significant Source of Advice Regarding Their School and Job Plans"

Source of Advice	1969 Number	1969 Percent	1970 Number	1970 Percent
Counselor	9,598	40.8%	11,141	40.8%
Father	5,654	24.0%	6,450	23.6%
Mother	2,282	9.7%	2,527	9.2%
Teacher	1,798	7.6%	2,131	7.8%
No one	1,102	4.7%	1,404	5.1%
Bro/sister	1,088	4.6%	1,156	4.2%
Friends	1,018	4.3%	1,140	4.2%
Other	1,008	4.3%	1,387	5.1%
	23,548	100.0%	27,336	100.0%

T A B L E 2

**Display of Chi Square and other statistical values as well as confidence interval bounds surrounding each sample proportion at the four alpha levels.
(Data from Phase 3--Analysis of questionnaire responses made by first-time, full-time, day freshmen at one California community college.)**

17. Which of the following people would you rely on most for advice about school or job plans?

Alpha Level	No One	Father	Mother	Teacher	Counselor	Brother/Sister	Pals	Other
	5.84%	15.73%	8.80%	9.40%	45.40%	4.55%	3.26%	7.02%
	59	159	89	95	459	46	33	71
.05	4.39 to 7.28	13.48 to 17.97	7.06 to 10.55	7.60 to 11.20	42.33 to 48.47	3.27 to 5.81	2.17 to 4.36	5.45 to 8.66
.01	3.93 to 7.74	12.77 to 18.68	6.50 to 11.10	7.03 to 11.76	41.36 to 49.44	2.86 to 6.24	1.82 to 4.71	4.95 to 9.10
.005	3.76 to 7.91	12.51 to 18.94	6.30 to 11.31	6.82 to 11.98	41.00 to 49.80	2.71 to 6.39	1.69 to 4.83	4.77 to 9.28
.001	3.30 to 8.37	11.79 to 19.67	5.74 to 11.87	6.24 to 12.55	40.01 to 50.79	2.30 to 6.81	1.34 to 5.19	4.26 to 9.79

N = 1011

Response rate = 96.6%

H_0: Population proportions are equal across response categories.

$x^2 = 843.5$ $\phi = 1.06$

$p < .001$ $\phi' = 0.40$

TABLE 3

Display of the lower and upper limits of the interval obtained by subtracting the row percentage range from the column percentage range*

	NO ONE	FATHER	MOTHER	TEACHER	COUNSELOR	BRO/SISTER	PALS	OTHER
NO ONE		6.20 to 13.58	-2.22 to 6.16	0.32 to 6.81	35.05 to 44.08	-1.44 to -1.12	-5.11 to -1.12	-1.86 to 3.61
FATHER	-6.20 to -13.58		-2.93 to -10.91	-2.28 to -10.37	29.36 to 34.99	-7.64 to -14.70	-9.12 to -15.80	-5.48 to -12.52
MOTHER	0.22 to -6.16	2.93 to -10.91		4.14 to 2.95	31.78 to 41.41	-1.22 to -7.28	-2.70 to -8.38	0.94 to -5.10
TEACHER	-0.32 to -6.81	2.28 to 10.37	-4.14 to 2.95		31.13 to 40.87	-1.76 to -7.93	-3.24 to -9.03	0.48 to -5.75
COUNSELOR	-35.056 to -44.08	-24.36 to 34.99	-31.78 to -41.41	-31.13 to -40.87		-36.49 to -45.20	-37.97 to -46.30	-34.33 to -43.02
BRO/SIS	1.44 to 1.12	7.64 to 14.70	1.22 to 7.28	1.76 to 7.93	36.49 to 45.20		1.09 to -3.67	4.73 to -0.39
PALS	5.11 to 0.03	9.12 to 15.80	2.70 to 8.38	3.24 to 9.03	37.97 to 46.30	-1.09 to 3.67		5.83 to 1.09
OTHER	1.86 to -3.61	5.48 to 12.52	-0.94 to 5.10	-0.40 to 5.75	34.33 to 43.02	-4.75 to 0.39	-5.83 to -1.09	

*The lower limit is calculated as the difference resulting from the subtraction of the upper limit of the row category from the lower limit of the column category. The upper limit is calculated as the difference resulting from the subtraction of the lower limit of the row category from the upper limit of the column category. (At the $\alpha = .05$ level at least 35% preferred "Counselor" over "No One," at least 24% preferred "Counselor" over "Father," at least 31% preferred "Counselor" over "Mother," at least 31% preferred "Counselor" over "Teacher" etc.)

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Appendix 1

Response To Question 17 of the Nor Cal Co-Operative Research Questionnaire, Phase II, 1969-70

Which of the following people would you rely on most for advice about school or job plans?

College	Respondent Sample Size	Response Rate	No One	Father	Mother	Teacher	Counselor	Brother Sister	Pals	Other
		91.1%	3.09%	25.07%	8.49%	6.15%	45.96%	4.43%	3.22%	3.55%
A	2389	232	74	599	203	147	1098	106	77	85
		96.5%	6.50%	18.80%	9.09%	8.66%	40.04%	6.12%	6.36%	4.40%
B	2090	75	136	393	190	181	837	128	133	92
		97.6%	5.33%	21.35%	10.96%	8.94%	38.96%	4.76%	5.19%	4.47%
C	693	17	37	148	76	62	270	33	36	31
		96.4%	3.82%	26.36%	8.66%	9.68%	38.34%	4.20%	4.20%	4.71%
D	785	29	30	207	68	76	301	33	33	37
		97.6%	3.48%	23.43%	9.40%	8.53%	43.77%	4.83%	3.31%	3.20%
E	1839	45	64	431	173	157	805	89	61	59
		97.9%	4.10%	27.89%	11.07%	5.66%	35.93%	5.49%	5.25%	4.59%
F	1219	26	50	340	135	69	438	67	64	56
		97.6%	7.11%	17.57%	13.80%	6.69%	36.82%	7.11%	5.02%	5.85%
G	239	6	17	42	33	16	88	17	12	14
		98.3%	3.98%	18.35%	8.37%	7.84%	45.87%	5.58%	5.18%	4.78%
H	752	13	30	138	63	59	345	42	39	36
		98.9%	4.73%	29.57%	8.63%	8.18%	36.34%	3.77%	4.37%	4.37%
I	3128	35	148	925	270	256	1137	118	137	137
		98.2%	5.95%	22.73%	7.61%	7.61%	42.73%	4.04%	4.88%	4.40%
J	840	15	50	191	64	64	359	34	41	37
		98.5%	3.14%	14.65%	8.37%	8.90%	51.83%	5.75%	2.61%	4.71%
K	191	3	6	28	16	17	99	11	5	9
		94.5%	7.43%	31.40%	8.26%	9.09%	30.57%	4.13%	4.13%	4.95%
L	121	7	9	38	10	11	37	5	5	6
		92.2%	4.53%	24.55%	10.54%	6.82%	42.64%	4.43%	3.72%	2.74%
M	1128	96	51	277	119	77	481	50	42	31
		90.9%	6.16%	26.54%	7.10%	7.58%	39.33%	2.84%	6.16%	4.26%
N	211	21	13	56	15	16	83	6	13	9
		98.4%	5.66%	22.64%	8.89%	6.46%	46.90%	2.42%	2.69%	4.31%
O	371	6	21	84	33	24	174	9	10	16
		97.9%	4.57%	24.48%	12.26%	8.29%	38.10%	4.77%	3.21%	4.27%
P	1989	43	91	487	244	165	758	95	64	85
		94.4%	5.38%	21.53%	10.22%	9.15%	38.49%	4.84%	4.97%	5.38%
Q	743	44	40	160	76	68	286	36	37	40
		89.5%	4.39%	24.82%	10.43%	7.06%	42.50%	4.48%	3.53%	2.75%
R	1160	132	51	288	121	82	493	52	41	32
		96.9%	2.71%	24.74%	13.38%	5.76%	42.88%	3.22%	3.05%	4.23%
S	590	19	16	146	79	34	253	19	18	25
		95.5%	2.79%	24.84%	9.31%	4.96%	42.54%	2.17%	6.83%	6.52%
T	322	15	9	80	30	16	137	7	22	21
		97.5%	6.54%	27.58%	9.32%	6.62%	35.28%	3.92%	5.31%	5.39%
U	1298	33	85	358	121	86	458	51	69	70
		97.4%	5.46%	11.94%	10.72%	9.71%	45.34%	6.88%	4.85%	5.06%
V	491	13	27	59	53	48	224	34	24	25
		98.7%	4.91%	18.72%	9.41%	7.00%	45.71%	4.81%	3.66%	5.75%
W	956	13	47	179	90	67	437	46	35	55
		96.2%	4.67%	24.01%	9.69%	7.63%	40.75%	4.62%	4.32%	4.28%
Total	23548	938	1102	5654	2282	1798	9598	1088	1018	1008

Appendix 2

NOR CAL COOPERATIVE RESEARCH PROJECT
PHASE III

17. Which of the following people would you rely on most for advice about school or job plans?

College	Respondent Sample Size	Response Rate	No One	Father	Mother	Teacher	Counselor	Brother/ Sister	Pals	Other
		95.9%	9.14%	9.14%	6.34%	12.31%	44.21%	2.98%	4.47%	11.38%
A	536	23	49	49	34	66	237	16	24	61
		95.9%	4.12%	33.48%	11.77%	6.57%	33.18%	4.28%	3.51%	3.05%
B	654	28	27	219	77	43	217	28	23	20
		98.7%	4.78%	26.69%	1.89%	7.86%	34.38%	6.41%	5.20%	3.75%
C	1652	22	79	441	180	130	568	106	86	62
		97.9%	5.10%	23.58%	7.78%	8.45%	42.63%	4.03%	4.25%	4.13%
D	3171	68	162	748	247	268	1352	128	135	131
		98.8%	3.60%	18.40%	12.00%	11.20%	44.00%	4.00%	3.60%	3.20%
E	250	3	9	46	30	28	110	10	9	8
		96.6%	5.93%	15.72%	8.80%	9.39%	45.40%	4.54%	3.26%	7.02%
F	1011	36	59	159	89	95	459	46	33	71
		96.6%	8.47%	24.92%	9.32%	6.58%	31.68%	4.75%	5.97%	8.28%
G	1641	57	139	409	153	108	520	78	98	136
		97.9%	4.48%	29.05%	8.96%	6.40%	38.80%	3.42%	4.86%	3.99%
H	2654	57	119	771	238	170	1030	91	129	106
		97.6%	6.04%	25.65%	9.57%	6.59%	37.36%	4.27%	4.83%	5.60%
I	1076	27	65	276	103	71	402	46	52	61
		95.5%	4.34%	17.69%	7.84%	6.34%	50.25%	3.50%	2.00%	8.01%
J	599	28	26	106	47	38	301	21	12	48
		96.1%	7.26%	12.06%	11.06%	10.72%	44.02%	3.46%	4.80%	6.59%
K	895	36	65	108	99	96	394	31	43	59
		96.1%	7.28%	21.45%	8.90%	8.50%	38.86%	5.26%	2.42%	7.28%
L	247	10	18	53	22	21	96	13	6	18
		97.6%	5.42%	27.57%	8.41%	8.13%	37.94%	4.57%	3.27%	4.67%
M	1070	26	58	295	90	87	406	49	35	50
		98.7%	3.05%	24.42%	9.41%	10.68%	45.27%	1.78%	2.54%	2.79%
N	393	5	12	96	37	42	178	7	10	11
		96.3%	4.08%	22.99%	10.08%	7.52%	42.88%	4.08%	3.76%	4.57%
O	1835	70	75	422	185	138	787	75	69	84
		98.1%	4.53%	25.23%	10.23%	5.00%	41.16%	4.53%	5.58%	3.72%
P	860	17	39	217	88	43	354	39	48	32
		98.1%	3.69%	24.36%	7.70%	8.22%	46.51%	3.69%	3.05%	2.74%
Q	948	18	35	231	73	78	441	35	29	26
		92.1%	4.77%	29.18%	11.19%	5.91%	37.48%	4.40%	2.89%	4.15%
R	795	68	38	232	89	47	298	35	23	33
		96.9%	4.28%	20.50%	9.38%	8.44%	46.78%	4.02%	2.94%	3.61%
S	746	24	32	153	70	63	349	30	22	27
		96.0%	3.52%	27.17%	12.65%	5.60%	37.55%	5.80%	3.31%	4.14%
T	482	20	17	132	61	27	181	28	16	20
		96.6%	9.77%	12.61%	3.15%	7.57%	44.16%	1.89%	5.36%	15.45%
U	317	11	31	40	10	24	140	6	17	49
		98.4%	4.22%	28.44%	11.19%	6.60%	37.98%	5.13%	2.93%	3.48%
V	545	9	23	155	61	36	207	28	16	19
		96.6%	3.57%	29.25%	11.40%	7.82%	35.85%	4.94%	3.29%	3.84%
W	728	26	26	213	83	57	261	36	24	28
		97.6%	7.23%	17.32%	6.35%	8.99%	43.64%	2.63%	2.85%	10.96%
X	456	11	33	79	29	41	199	12	13	50
		94.4%	3.65%	27.24%	10.29%	8.97%	37.87%	2.32%	3.98%	5.64%
Y	301	18	11	82	31	27	114	7	12	17
		96.0%	4.53%	19.38%	8.60%	9.03%	44.39%	5.29%	4.63%	4.11%
Z	2115	89	96	410	182	191	939	112	98	87
		98.5%	3.28%	23.40%	9.67%	7.93%	43.71%	3.09%	5.02%	3.86%
AA	517	9	17	121	50	41	226	16	26	20
		98.3%	5.37%	23.98%	8.25%	5.89%	43.11%	3.14%	3.80%	6.42%
BB	763	13	41	183	63	45	329	24	29	49
		97.5%	3.79%	5.06%	7.59%	12.65%	58.22%	3.79%	3.79%	5.06%
CC	79	2	3	4	6	10	46	3	3	4
		97.1%	5.13%	23.59%	9.24%	7.79%	40.75%	4.22%	4.17%	5.07%
TOTAL	27336	830	1401	6450	2527	2131	11141	1156	1140	1387

Appendix 3

The following colleges participated in Phase II of the Nor Cal Attrition Study. Those colleges are listed in alphabetical order. The order of the colleges was changed, letters of the alphabet were assigned, and each college's responses to question 17 were listed. In this way the participating colleges receive the attention they deserve, the responses of individual college's incoming freshmen can be shown, and each college's profile of responses remain a secret.

Nor Cal Phase II
Participating Colleges

American River College in Sacramento
Butte College in Butte
Cabrillo College in Aptos
Chabot College in Hayward
City College of San Francisco in San Francisco
College of San Mateo in San Mateo
College of the Sequoias in Visalia
Contra Costa College in Richmond
De Anza College in Cupertino
Diablo Valley College in Pleasant Hills
Foothill College in Los Altos Hills
Laney College in Oakland
Merced College in Merced
Merritt College in Oakland
Monterey Peninsula College in Monterey
Napa College in Napa
Ohlone College in Fremont
Porterville College in Porterville
San Joaquin Delta College in Stockton
San Jose City College in San Jose
Sierra College in Rochlin
Yuba College in Marysville

Appendix 4

The following colleges participated in Phase III of the Nor Cal Attrition Study. Those colleges are listed in alphabetical order. The order of the colleges was changed, letters of the alphabet were assigned, and each college's responses to question 17 were listed. In this way the participating colleges receive the attention they deserve, the responses of individual college's incoming freshmen can be shown, and each college's profile of responses remain a secret.

Nor Cal Phase III
Participating Colleges

American River College in Sacramento
Barstow College
Cabrillo College in Aptos
Chabot College in Hayward
City College of San Francisco in San Francisco
College of San Mateo in San Mateo
College of the Sequoias in Visalia
Contra Costa College in Richmond
De Anza College in Cupertino
Diablo Valley College in Pleasant Hills
El Centro College in Dallas, Texas
Foothill College in Los Altos Hills
Fullerton College in Fullerton
Los Angeles Valley College in Van Nuys
Merced College in Merced
Merritt College in Oakland
Monterey Peninsula College in Monterey
Napa College in Napa
Ohlone College in Fremont
Porterville College in Porterville
San Joaquin Delta College in Stockton
San Jose City College in San Jose
Sierra College in Rochlin
Shasta College in Redding
Solano College in Fairfield
Victor Valley College in Victorville
Yuba College in Marysville

APPENDIX 5
NOR CAL ATTRITION STUDY
PHASE 3 FINAL REPORT

DATA FROM PHASE 2 -- ANALYSIS OF QUESTION 17

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17. Which of the following people would you rely on most for advice about school or job plans?

College	Respondent Sample Size	Response Rate	Level of Significance	No One	Father	Mother	Teacher	Counselor	Brother/Sister	Pals	Other	
A		91.10%		3.09%	25.07%	8.49%	6.19%	45.96%	4.43%	3.22%	3.57%	
	2389	232		74	599	203	147	1098	106	77	85	
			.05	2.40 to 3.79	23.37 to 26.81	7.34 to 9.62	5.19 to 7.12	43.96 to 47.96	3.61 to 5.26	2.52 to 3.93	2.82 to 4.30	X^2 = 3160.1
			.01	2.18 to 4.01	22.79 to 27.36	7.03 to 9.97	4.89 to 7.42	43.33 to 48.59	3.35 to 5.52	2.29 to 4.16	2.58 to 4.56	p < .001
			.005	2.10 to 4.09	22.54 to 27.57	6.99 to 10.10	4.77 to 7.54	43.10 to 48.83	3.25 to 5.62	2.21 to 4.24	2.49 to 4.65	Ø = 1.14
			.001	1.86 to 4.33	22.02 to 28.12	6.54 to 10.46	4.46 to 7.84	42.45 to 49.47	2.99 to 5.89	1.99 to 4.47	2.25 to 4.89	Ø' = .42
B		96.86%		6.50%	19.80%	9.09%	8.66%	40.01%	6.12%	6.36%	4.40%	
	2090	75		136	393	190	181	837	128	133	92	
			.05	5.45 to 7.57	17.13 to 20.48	7.86 to 10.32	7.45 to 9.87	37.95 to 42.15	5.10 to 7.15	5.32 to 7.41	3.52 to 5.28	X^2 = 1640.0
			.01	5.12 to 7.90	16.60 to 21.01	7.17 to 10.71	7.07 to 10.25	37.28 to 42.81	4.77 to 7.48	4.99 to 7.73	3.23 to [illegible]	p < .001
			.005	4.99 to 8.02	16.40 to 21.21	7.32 to 10.86	6.93 to 10.39	37.04 to 43.06	4.65 to 7.76	4.86 to 7.86	3.13 to [illegible]	Ø = .90
			.001	4.65 to 8.36	15.06 to 21.74	6.97 to 11.25	6.54 to 10.79	36.36 to 43.74	4.32 to 7.93	4.53 to 8.20	2.86 to [illegible]	Ø' = .34
C		97.60%		5.33%	21.35%	10.96%	8.94%	38.96%	4.76%	5.19%	4.47%	
	693	17		37	148	76	62	270	33	36	31	
			.05	3.67 to 7.01	18.31 to 24.41	8.61 to 13.29	6.82 to 11.07	35.33 to 42.59	3.19 to 6.35	3.54 to 6.85	2.93 to 6.01	X^2 = 568.9
			.01	3.14 to 7.54	17.34 to 25.37	7.90 to 14.03	6.15 to 11.74	34.18 to 43.71	2.69 to 6.84	[illegible] to 7.37	2.44 to 6.50	p < .001
			.005	2.94 to 7.74	16.98 to 25.73	7.63 to 11.30	5.91 to 11.93	33.75 to 44.17	2.49 to 7.01	2.83 to 7.56	2.27 to 6.68	Ø = .90
			.001	2.40 to 8.28	16.00 to 26.71	6.99 to 15.05	5.22 to 12.68	32.59 to 45.33	1.98 to 7.55	2.30 to 8.10	1.77 to 7.18	Ø' = .34
D		98.40%		3.82%	26.36%	8.66%	9.69%	38.34%	1.20%	4.20%	4.71%	
	785	29		30	207	68	76	301	33	33	37	
			.05	2.45 to 5.16	23.29 to 29.45	6.70 to 10.63	7.61 to 11.75	34.91 to 41.75	2.80 to 5.61	2.80 to 5.61	3.23 to 6.20	X^2 = 726.3
			.01	2.06 to 5.59	22.31 to 30.43	6.07 to 11.25	6.96 to 12.40	33.87 to 42.82	2.36 to 6.05	2.36 to 6.03	2.76 to 6.67	p < .001
			.005	1.90 to 5.74	21.95 to 30.78	5.84 to 11.48	6.72 to 12.63	33.47 to 43.22	2.19 to 6.22	2.19 to 6.22	2.59 to 6.84	Ø = .95
			.001	1.47 to 6.15	20.94 to 31.78	5.21 to 12.12	6.05 to 13.31	32.37 to 44.31	1.74 to 6.67	1.74 to 6.67	2.11 to 7.32	Ø' = .38
E		97.60%		3.49%	23.43%	9.40%	8.53%	43.77%	4.87%	3.31%	3.20%	
	1839	45		64	431	173	157	805	89	61	59	
			.05	2.64 to 4.32	21.50 to 25.37	8.07 to 10.74	7.26 to 9.81	41.51 to 46.04	3.86 to 5.82	2.50 to 4.14	2.40 to 4.01	X^2 = 2109.2
			.01	2.38 to 4.58	20.89 to 25.99	7.65 to 11.16	6.86 to 10.22	40.79 to 46.76	3.55 to 6.13	2.24 to 4.39	2.15 to 4.27	p < .001
			.005	2.28 to 4.68	20.66 to 26.21	7.49 to 11.32	6.71 to 10.37	40.52 to 47.03	3.43 to 6.25	2.14 to 4.49	2.05 to 4.36	Ø = 1.06
			.001	2.01 to 4.95	20.04 to 26.84	7.07 to 11.75	6.30 to 10.78	39.79 to 47.75	3.12 to 6.53	1.88 to 4.75	1.80 to 4.62	Ø' = .40
F		97.90%		4.10%	27.89%	11.07%	5.66%	35.93%	5.49%	5.29%	4.59%	
	1219	26		50	340	135	69	438	67	64	60	
			.05	2.99 to 5.22	25.37 to 30.41	9.31 to 12.84	4.36 to 6.96	33.21 to 38.63	4.22 to 6.78	4.00 to 6.50	3.42 to 5.77	X^2 = 1050.7
			.01	2.64 to 5.57	24.58 to 31.21	8.76 to 13.39	3.95 to 7.37	32.37 to 39.48	3.81 to 7.18	3.60 to 6.99	3.05 to 6.14	p < .001
			.005	2.51 to 5.70	24.29 to 31.50	8.55 to 13.60	3.80 to 7.52	32.07 to 39.79	3.66 to 7.33	3.46 to 7.05	2.91 to 6.28	Ø = .93
			.001	2.15 to 6.06	23.47 to 32.31	7.98 to 14.17	3.39 to 7.93	31.20 to 40.66	3.25 to 7.74	3.05 to 7.45	2.53 to 6.66	Ø' = .35
G		97.60%		7.11%	17.57%	13.90%	6.69%	36.82%	7.11%	5.02%	5.85%	
	239	6		17	42	33	16	88	17	12	14	
			.05	3.85 to 10.37	12.75 to 22.40	9.43 to 18.19	3.53 to 9.86	30.71 to 42.94	3.85 to 10.37	2.25 to 7.79	2.88 to 8.94	X^2 = 155.0
			.01	2.82 to 11.41	11.22 to 23.93	8.03 to 19.37	2.52 to 10.47	28.77 to 44.87	2.82 to 11.10	1.38 to 8.67	1.93 to 9.78	p < .001
			.005	2.41 to 11.79	10.66 to 24.49	7.54 to 20.04	2.15 to 11.24	28.05 to 45.59	2.44 to 11.79	1.05 to 8.99	1.59 to 10.13	Ø = .79
			.001	1.39 to 12.83	9.10 to 26.04	6.13 to 21.48	1.13 to 12.26	26.09 to 47.55	1.39 to 12.93	.16 to 9.88	.63 to 11.08	Ø' = .30

APPENDIX 5 (CONT.)

College	Respondent Sample Size	Response Rate	Level of Significance	No One	Father	Mother	Teacher	Counselor	Brother/Sister	Pals	Other	
H		98.30%		3.99%	18.35%	8.37%	7.84%	45.87%	5.58%	5.19%	4.78%	
	752	13		30	138	63	59	345	42	39	36	
			.05	2.59 to 5.39	15.58 to 21.12	6.38 to 10.36	5.92 to 9.77	42.32 to 49.42	3.93 to 7.23	3.60 to 6.77	3.26 to 6.31	X^2 = 851.4
			.01	2.15 to 5.83	14.70 to 21.99	5.77 to 10.58	5.32 to 10.38	41.19 to 50.57	3.47 to 7.70	3.09 to 7.27	2.79 to 6.80	p < .001
			.005	1.98 to 6.00	14.38 to 22.42	5.54 to 11.22	5.03 to 10.60	40.77 to 50.98	3.23 to 7.94	2.91 to 7.16	2.61 to 6.96	Ø = 1.06
			.001	1.51 to 6.48	13.50 to 23.21	4.99 to 11.85	4.47 to 11.22	39.64 to 52.13	2.70 to 8.47	2.40 to 7.98	2.11 to 7.47	Ψ = .40
I		98.90%		4.73%	29.57%	8.83%	8.19%	36.34%	3.77%	4.37%	4.37%	
	3128	35		148	925	270	256	1137	118	137	137	
			.05	3.99 to 5.49	27.97 to 31.17	7.63 to 9.82	7.22 to 9.15	34.66 to 38.01	3.11 to 4.44	3.66 to 5.16	3.66 to 5.16	X^2 = 2904.2
			.01	3.75 to 5.71	27.47 to 31.66	7.31 to 9.93	6.82 to 9.45	34.13 to 38.57	2.90 to 4.65	3.44 to 5.32	3.44 to 5.32	p < .001
			.005	3.67 to 5.80	27.28 to 31.87	7.21 to 10.01	6.81 to 9.56	33.93 to 38.77	2.84 to 4.73	3.35 to 5.41	3.35 to 5.41	Ø = .95
			.001	3.43 to 6.04	26.77 to 32.39	6.90 to 10.36	6.50 to 9.87	33.39 to 39.31	2.60 to 4.94	3.12 to 5.61	3.12 to 5.64	Ψ = .36
J		98.20%		5.95%	22.73%	7.61%	7.61%	42.73%	4.04%	4.88%	4.40%	
	840	15		50	191	64	64	359	34	41	37	
			.05	4.35 to 7.55	19.90 to 25.57	5.83 to 9.41	5.83 to 9.41	39.39 to 46.04	2.72 to 5.29	3.42 to 6.34	3.02 to 5.75	X^2 = 876.8
			.01	3.84 to 8.06	19.01 to 26.47	5.26 to 9.99	5.26 to 9.99	38.31 to 47.14	2.23 to 5.81	2.95 to 6.80	2.58 to 6.22	p < .001
			.005	3.66 to 8.23	18.67 to 26.79	5.05 to 10.19	5.05 to 10.19	37.93 to 47.53	2.14 to 5.94	2.79 to 6.97	2.42 to 6.75	Ø = 1.03
			.001	3.14 to 8.76	17.70 to 27.71	4.47 to 10.77	4.47 to 10.77	36.87 to 48.61	1.71 to 6.39	2.32 to 7.44	1.97 to 6.84	Ψ = .39
K		98.50%		3.14%	14.65%	8.37%	8.90%	51.83%	5.75%	2.61%	4.71%	
	191	3		6	28	16	17	99	11	5	9	
			.05	.67 to 5.62	9.61 to 19.69	4.45 to 12.31	4.86 to 12.94	44.75 to 58.92	2.46 to 9.04	.35 to 4.89	1.71 to 7.72	X^2 = 356.2
			.01	- .12 to 6.40	8.05 to 21.26	3.21 to 13.53	3.59 to 14.22	42.53 to 61.16	1.13 to 10.11	- .36 to 5.60	.76 to 8.67	p < .001
			.005	- .12 to 6.69	7.47 to 21.85	2.74 to 14.01	3.11 to 11.65	41.67 to 61.99	1.12 to 10.59	- .63 to 5.85	.41 to 9.02	Ø = 1.22
			.001	-1.20 to 7.49	5.86 to 23.46	1.47 to 15.27	1.80 to 15.98	39.40 to 64.27	-3.97 to 11.56	-1.36 to 6.55	- .56 to 9.90	Ψ = .48
L		94.50%		7.43%	31.40%	8.26%	9.09%	30.57%	4.13%	4.13%	4.95%	
	121	7		9	38	10	11	37	5	5	6	
			.05	2.75 to 12.11	23.14 to 39.69	3.36 to 13.17	3.97 to 14.21	22.37 to 38.79	.59 to 7.68	.59 to 7.68	1.09 to 8.83	X^2 = 90.8
			.01	1.28 to 13.59	20.52 to 42.29	1.81 to 14.72	2.35 to 15.83	19.77 to 41.39	.54 to 8.80	.54 to 8.80	.13 to 10.05	p < .001
			.005	.73 to 14.14	19.55 to 43.26	1.25 to 15.10	1.75 to 16.41	18.81 to 42.35	- .95 to 9.22	- .95 to 9.22	- .39 to 10.50	Ø = .87
			.001	- .77 to 15.64	16.89 to 45.92	- .25 to 16.58	.09 to 18.09	16.17 to 44.99	-2.09 to 10.35	-2.092 to 10.36	-1.83 to 11.75	Ψ = .33
M		92.20%		4.53%	24.55%	10.54%	6.82%	42.64%	4.43%	3.73%	2.74%	
	1128	96		51	277	119	77	481	50	42	31	
			.05	3.31 to 5.73	17.73 to 22.36	8.76 to 12.31	5.35 to 8.29	39.76 to 45.53	3.23 to 5.63	2.62 to 4.83	1.79 to 3.70	X^2 = 1258.0
			.01	2.93 to 6.13	17.04 to 21.20	8.19 to 12.91	4.89 to 8.76	38.83 to 46.44	2.85 to 6.01	2.27 to 5.19	1.49 to 4.09	p < .001
			.005	2.78 to 2.26	16.77 to 21.59	7.94 to 13.12	4.72 to 8.91	38.50 to 46.78	2.71 to 6.16	2.14 to 5.31	1.35 to 4.12	Ø = 1.08
			.001	2.39 to 6.65	16.62 to 21.27	7.19 to 13.70	4.24 to 9.41	37.58 to 47.71	2.33 to 6.54	1.79 to 5.66	1.07 to 4.42	Ψ = .40
N		90.90%		6.16%	26.54%	7.10%	7.58%	39.37%	2.84%	6.16%	4.26%	
	211	21		13	56	15	16	83	6	13	9	
			.05	2.92 to 9.41	20.58 to 32.49	3.61 to 10.58	4.01 to 11.16	32.75 to 45.93	.60 to 5.09	2.92 to 9.41	1.54 to 6.99	X^2 = 204.6
			.01	1.89 to 10.43	18.70 to 34.38	2.53 to 11.67	2.88 to 12.29	30.65 to 48.01	.11 to 5.90	1.89 to 10.43	.64 to 7.88	p < .001
			.005	1.51 to 10.81	18.03 to 35.05	2.14 to 12.06	2.46 to 12.70	29.89 to 48.79	- .37 to 6.06	1.51 to 10.81	.36 to 8.18	Ø = .98
			.001	.47 to 11.86	16.04 to 37.06	1.02 to 13.21	1.31 to 13.85	27.77 to 50.91	-1.09 to 6.78	.47 to 11.86	- .52 to 9.05	Ψ = .37
O		98.40%		5.66%	22.64%	8.89%	6.46%	46.90%	2.42%	2.69%	4.31%	
	371	6		21	84	33	24	174	9	10	16	
			.05	3.31 to 8.01	18.38 to 26.90	6.00 to 11.79	3.97 to 8.97	41.82 to 51.99	.86 to 3.99	1.05 to 4.34	2.25 to 6.38	X^2 = 499.8
			.01	2.57 to 8.76	17.03 to 28.25	5.08 to 12.71	3.17 to 9.76	40.22 to 53.59	.57 to 4.49	.33 to 4.87	1.59 to 7.03	p < .001
			.005	2.23 to 9.03	16.54 to 28.75	4.74 to 13.05	2.84 to 10.06	39.62 to 54.19	.18 to 4.67	.13 to 5.06	1.35 to 7.28	Ø = 1.14
			.001	1.53 to 9.79	15.17 to 30.12	3.91 to 13.88	2.08 to 10.96	37.99 to 55.81	- .32 to 5.17	- .20 to 5.59	.69 to 7.93	Ψ = .43

College	Sample Size	Respondent Rate	Response Rate	Level of Significance	No One	Father	Mother	Teacher	Counselor	Brother/Sister	Pals	Other	
P	193	97.9%	43		4.5% 9	21.4% 41	12.2% 24	8.2% 16	38.1% 73	4.7% 9	3.2% 6	4.2% 8	
				.05	2.07 to 8.49	15.92 to 28.33	7.98 to 18.21	4.78 to 13.51	30.94 to 46.24	1.91 to 8.71	1.44 to 6.80	1.94 to 8.15	X^2 = 1740.6
				.01	1.37 to 10.79	13.93 to 30.97	6.62 to 19.17	3.79 to 15.49	28.74 to 48.34	1.01 to 10.21	1.01 to 8.24	1.01 to 10.14	p < .001
				.005	1.01 to 11.89	13.29 to 31.19	6.29 to 19.84	3.54 to 15.91	28.03 to 48.87	1.01 to 10.32	1.01 to 8.53	1.01 to 10.32	Ø = .99
				.001	0.51 to 13.19	11.37 to 33.80	5.74 to 20.42	3.17 to 16.92	26.96 to 50.81	0.51 to 11.32	0.51 to 9.21	0.51 to 11.21	Ø' = .35
Q	743	94.4%	44		5.9% 41	21.5% 160	10.2% 76	9.1% 68	38.4% 285	4.4% 33	4.9% 37	5.3% 40	
				.05	3.78 to 7.61	19.54 to 23.49	8.23 to 12.11	7.09 to 11.21	34.99 to 41.90	3.20 to 5.79	3.42 to 6.51	3.78 to 7.01	X^2 = 544.5
				.01	2.91 to 7.61	17.94 to 25.09	7.39 to 13.10	6.42 to 11.99	33.11 to 43.19	2.41 to 6.99	2.94 to 7.32	3.29 to 7.61	p < .001
				.005	2.61 to 7.71	17.29 to 25.77	7.11 to 13.37	6.18 to 12.11	33.41 to 43.51	2.03 to 7.09	2.73 to 7.32	3.06 to 7.71	Ø = .49
				.001	2.03 to 8.23	16.35 to 26.77	6.41 to 14.05	5.11 to 12.79	32.31 to 44.63	2.14 to 7.51	2.24 to 7.39	2.54 to 8.19	Ø' = .34
R	1260	97.8%	133		4.9% 51	24.8% 260	10.4% 121	7.0% 82	42.5% 499	4.4% 52	3.5% 41	2.7% 32	
				.05	3.21 to 7.04	22.34 to 27.31	8.67 to 12.19	5.54 to 8.55	39.84 to 45.31	3.29 to 5.87	2.47 to 4.81	1.82 to 3.79	X^2 = 1207.8
				.01	2.41 to 8.59	21.96 to 27.79	8.13 to 12.77	5.13 to 9.51	39.26 to 45.43	2.94 to 6.42	2.14 to 5.01	1.52 to 4.01	p < .001
				.005	2.71 to 8.19	21.29 to 28.39	7.91 to 13.05	4.85 to 9.15	38.41 to 46.56	2.72 to 6.19	2.01 to 5.11	1.41 to 4.11	Ø = 1.06
				.001	2.32 to 6.47	20.46 to 29.19	7.34 to 13.62	4.44 to 9.56	37.51 to 47.49	2.32 to 6.37	1.67 to 5.14	1.16 to 4.41	Ø' = .40
S	580	96.9%	19		2.7% 16	24.7% 146	13.7% 79	5.3% 31	42.8% 253	3.2% 19	3.0% 18	4.2% 25	
				.05	1.49 to 4.82	21.33 to 28.23	10.64 to 16.14	3.58 to 7.64	38.89 to 46.64	1.90 to 4.67	1.66 to 4.44	2.61 to 5.86	X^2 = 644.5
				.01	.94 to 4.34	20.16 to 29.31	9.77 to 17.11	3.29 to 8.24	37.68 to 47.14	1.25 to 5.19	1.22 to 4.72	2.10 to 6.57	p < .001
				.005	.61 to 4.74	19.7 to 29.74	9.45 to 17.39	3.05 to 8.45	37.1 to 47.61	1.1 to 5.26	1.08 to 4.84	1.91 to 6.57	Ø = 1.04
				.001	.41 to 5.01	19.63 to 30.75	9.27 to 17.21	2.84 to 8.86	36.87 to 47.89	.72 to 5.72	.62 to 5.49	1.38 to 7.09	Ø' = .41
T	322	95.5%	19		3.7% 9	24.8% 60	9.3% 30	4.9% 16	42.5% 137	2.1% 7	6.8% 22	6.8% 21	
				.05	.93 to 4.66	20.13 to 29.57	6.15 to 12.49	2.60 to 7.31	37.15 to 47.85	.59 to 3.77	4.04 to 9.76	3.83 to 9.23	X^2 = 354.2
				.01	.47 to 5.17	18.64 to 31.06	5.11 to 13.54	1.95 to 8.09	35.77 to 49.26	.09 to 4.27	3.21 to 10.46	2.97 to 10.07	p < .001
				.005	.21 to 5.38	18.06 to 31.81	4.77 to 13.97	1.57 to 8.37	34.9 to 50.02	.11 to 4.49	2.9 to 11.17	2.67 to 10.39	Ø = 1.04
				.001	.37 to 5.96	16.56 to 33.12	3.79 to 14.89	.98 to 9.14	33.1 to 52.03	.62 to 4.98	2.06 to 11.97	1.79 to 12.26	Ø' = .40
U	1298	97.9%	33		6.3% 65	27.5% 354	9.3% 121	6.6% 86	35.2% 456	3.9% 51	5.3% 69	5.3% 70	
				.05	5.26 to 7.53	25.15 to 30.01	7.74 to 10.90	5.27 to 7.94	32.69 to 37.69	2.97 to 4.89	4.10 to 6.54	4.16 to 6.62	X^2 = 1043.7
				.01	4.7 to 8.32	24.2 to 31.24	7.24 to 11.40	4.44 to 8.41	31.8 to 38.71	2.61 to 5.32	3.71 to 6.93	3.74 to 7.01	p < .001
				.005	4.42 to 8.47	24.10 to 31.07	7.05 to 11.59	4.09 to 8.57	31.5 to 38.91	2.41 to 5.44	3.57 to 7.07	3.63 to 7.16	Ø = .90
				.001	4.19 to 8.91	23.31 to 31.85	6.85 to 12.10	4.25 to 9.09	30.72 to 39.85	2.07 to 5.74	3.17 to 7.35	3.24 to 7.55	Ø' = .34
V	494	97.4%	13		5.4% 27	11.9% 59	10.7% 53	9.7% 48	45.3% 224	6.9% 34	4.8% 24	5.0% 25	
				.05	3.46 to 7.47	9.09 to 14.80	8.09 to 13.45	7.11 to 12.33	40.91 to 49.73	4.85 to 9.13	2.96 to 6.75	3.12 to 6.99	X^2 = 507.7
				.01	2.97 to 9.10	8.14 to 15.71	7.14 to 14.32	6.24 to 13.16	39.37 to 51.12	3.91 to 9.52	2.36 to 7.55	2.52 to 7.61	p < .001
				.005	2.59 to 9.34	7.94 to 16.04	6.92 to 14.54	5.97 to 13.46	38.95 to 51.61	3.69 to 10.08	2.14 to 7.73	2.29 to 7.93	Ø = 1.01
				.001	1.97 to 9.98	6.92 to 16.96	6.01 to 14.44	5.13 to 13.39	37.84 to 53.05	2.96 to 10.98	1.5 to 8.39	1.67 to 8.45	Ø' = .38
W	956	98.7%	13		4.9% 47	18.7% 179	9.4% 90	7.0% 67	45.7% 436	4.9% 46	3.6% 34	5.7% 55	
				.05	3.5% to 6.29	16.25 to 21.20	7.5% to 11.27	5.39 to 8.61	42.55 to 48.87	3.46 to 6.37	2.47 to 4.85	4.29 to 7.23	X^2 = 1057.3
				.01	3.1% to 6.72	15.47 to 21.96	6.96 to 11.85	4.84 to 9.14	41.56 to 49.97	3.04 to 6.80	2.09 to 5.21	3.81 to 7.78	p < .001
				.005	2.9% to 6.99	15.19 to 22.27	6.76 to 12.07	4.69 to 9.33	41.1% to 50.24	2.87 to 6.96	1.95 to 5.37	3.61 to 7.87	Ø = 1.06
				.001	2.51 to 7.32	14.39 to 23.06	6.17 to 12.66	4.17 to 9.45	40.17 to 51.25	2.43 to 7.19	1.57 to 5.75	3.16 to 8.34	Ø' = .40

APPENDIX 6

NOR CAL ATTRITION STUDY
PHASE 1 FINAL REPORT

DATA FROM PHASE 3 -- ANALYSIS OF QUESTION 17

17. Which of the following people would you rely on most for advice about school or job plans?

College	Respondent Sample Size	Response Rate	Level of Significance	No One	Father	Mother	Teacher	Counselor	Brother Sister	Pals	Other		
A		94.32%		5.37%	23.94%	9.29%	5.90%	43.12%	3.15%	3.80%	4.17%		
	763	13		41	183	73	45	329	21	29	49		
			.05	3.77 to 6.97	20.96 to 27.01	6.30 to 12.21	4.23 to 7.57	39.61 to 46.63	1.91 to [illegible]	2.14 to 5.19	4.08 to [illegible]	X²	[illegible]
			.01	3.27 to 7.48	20.00 to 27.97	5.69 to [illegible]	3.70 to 8.10	[illegible] to 47.75	1.52 to [illegible]	2.02 to 5.59	[illegible]	p <	.001
			.005	3.09 to 7.67	19.63 to 28.33	5.46 to [illegible]	3.50 to [illegible]	[illegible] to 48.16	1.37 to [illegible]	1.96 to 5.75	[illegible]	Ø	1.0[illegible]
			.001	2.57 to 8.18	18.67 to 29.30	4.81 to [illegible]	2.96 to [illegible]	36.95 to [illegible]	.07 to 5.72	1.42 to [illegible]	[illegible]	Ø'	.40
B		96.02%		3.53%	27.39%	12.66%	5.60%	37.55%	5.41%	3.32%	4.15%		
	182	20		17	132	61	27	181	26	16	20		
			.05	1.99 to 5.17	23.41 to 31.37	9.69 to 15.62	3.25 to [illegible]	33.22 to 41.88	3.[illegible] to 7.[illegible]	1.72 to 4.92	2.37 to [illegible]	X²	453.5
			.01	1.36 to 5.70	22.15 to 32.63	8.75 to [illegible]	2.90 to 8.30	31.86 to 43.21	3.[illegible]	1.21 to 5.[illegible]	1.41 to [illegible]	p <	.001
			.005	1.17 to 5.89	21.68 to 33.09	8.10 to 16.91	2.[illegible] to 8.75	31.37 to 43.73	2.[illegible]	1.03 to [illegible]	1.50 to [illegible]	Ø	.9[illegible]
			.001	.64 to 6.42	20.40 to 34.37	7.45 to 17.87	2.00 to 9.21	29.[illegible] to 45.14	2.11 to 9.47	.51 to 6.13	1.03 to 7.27	Ø'	.17
C		97.61%		7.21%	17.32%	6.36%	8.99%	13.6[illegible]	2.63%	2.[illegible]	10.96%		
	456	11		33	79	29	41	1[illegible]	12	13	50		
			.05	4.[illegible] to 9.[illegible]	13.95 to 2[illegible].40	4.12 to [illegible]	6.37 to 11.62	3[illegible] to [illegible]	1.36 to 4.10	1.32 to 4.3[illegible]	8.10 to 13.43	X²	160.9
			.01	4.11 to 10.37	12.75 to 21.99	3.41 to 9.31	5.54 to 12.45	37.65 to [illegible]	.79 to [illegible]	.[illegible] to [illegible]	7.19 to 14.74	p <	.001
			.005	3.43 to 10.65	12.34 to 22.31	3.15 to [illegible].57	5.22 to 12.76	37.11 to [illegible].17	.73 to 4.74	.66 to [illegible]	6.[illegible] to [illegible]	Ø	1.01
			.001	3.06 to 11.41	11.23 to 23.4[illegible]	2.13 to 10.29	4.38 to 13.60	35.65 to 51.63	.05 to 5.21	.17 to 5.53	5.93 to 16.00	Ø'	.18
D		97.90%		5.11%	23.39%	7.79%	9.45%	42.61%	4.04%	4.26%	4.13%		
	3171	69		162	744	247	268	1352	128	135	131		
			.05	4.34 to 5.[illegible]	22.11 to [illegible].07	6.46 to [illegible]	7.49 to 9.42	40.92 to [illegible]	3.[illegible] to 4.72	3.56 to 4.9[illegible]	3.44 to 4.[illegible]	X²	3[illegible]
			.01	4.10 to 6.12	21.64 to 25.53	6.56 to 9.[illegible]	7.18 to 9.73	40.37 to 41.90	3.14 to [illegible]	3.33 to 5.18	3.22 to [illegible]	p <	[illegible]
			.005	4.01 to 6.21	21.47 to 25.71	6.45 to 9.13	7.06 to 9.[illegible]	40.17 to 45.10	3.05 to 5.02	1.25 to 5.27	3.14 to [illegible]	Ø	1.03
			.001	3.76 to 6.45	21.00 to 26.19	6.15 to 9.[illegible]	8.75 to 10.95	39.62 to 45.66	2.[illegible]	3.02 to 5.4[illegible]	2.92 to [illegible]	Ø'	.19
E		98.91%		3.60%	18.40%	12.00%	11.20%	44.00%	4.[illegible]	3.60%	3.20%		
	250	3		9	46	30	28	110	10	9	[illegible]		
			.05	1.29 to 5.91	13.60 to 23.20	7.97 to 16.[illegible]	7.29 to 15.11	[illegible]	1.57 to [illegible]	1.29 to 5.91	1.1[illegible]	X²	209.2
			.01	.56 to [illegible].64	12.[illegible] to 24.72	6.[illegible]	6.05 to 16.35	[illegible] to 52.10	.90 to [illegible]	[illegible]	[illegible]	p <	[illegible]
			.005	.29 to 6.[illegible]	11.51 to 25.29	6.23 to 17.[illegible]	5.60 to 16.[illegible]	[illegible] to 52.[illegible]	.52 to 7.[illegible]	[illegible]	[illegible]	Ø	1.14
			.001	-.45 to 7.65	9.97 to 26.[illegible]	4.93 to 19.07	4.34 to 18.06	33.20 to 54.[illegible]	-.26 to [illegible]	-.[illegible]	-.[illegible] to 7.0[illegible]	Ø'	[illegible]
F		96.56%		5.84%	15.73%	8.90%	9.40%	45.40%	4.55%	3.2[illegible]	7.02%		
	1011	36		59	159	90	95	4[illegible]	46	[illegible]	71		
			.05	4.39 to 7.29	13.49 to 17.97	7.06 to [illegible]	7.60 to 11.20	42.37 to [illegible].43	3.27 to [illegible]	2.[illegible]	5.45 to [illegible]	X²	19[illegible]
			.01	3.93 to 7.75	12.77 to 18.69	6.[illegible]	7.03 to 11.7[illegible]	41.[illegible] to 49.[illegible]	[illegible]	[illegible] to 4.7[illegible]	4.[illegible] to [illegible]	p <	.001
			.005	3.76 to 7.91	12.5[illegible] to 18.91	6.30 to 11.31	6.[illegible] to 11.[illegible]	41.[illegible]	2.71 to [illegible]	[illegible]	4.7[illegible]	Ø	1.[illegible]
			.001	3.30 to 8.37	11.79 to 19.67	5.74 to 11.[illegible]	6.24 to 12.55	40.01 to [illegible].79	2.30 to [illegible]	1.[illegible] to 5.[illegible]	4.2[illegible] to 9.[illegible]	Ø'	.52
G		96.64%		8.47%	24.92%	9.32%	6.34%	31.69%	4.75%	5.97%	8.29%		
	1641	57		139	409	153	104	520	78	94	136		
			.05	7.12 to 9.82	22.83 to 27.02	7.20 to 10.73	5.3[illegible] to 7.7[illegible]	29.44 to 33.94	3.72 to 5.7[illegible]	4.83 to 7.12	6.95 to 9.62	X²	921.6
			.01	6.7[illegible] to 11.24	22.17 to 27.[illegible]	7.47 to 11.1[illegible]	5.00 to [illegible].16	28.73 to [illegible]	[illegible]	4.[illegible] to 7.[illegible]	[illegible]	p <	[illegible]
			.005	6.94 to 10.[illegible]	21.92 to 27.92	7.31 to 11.[illegible]	[illegible]	28.16 to [illegible]	[illegible]	4.[illegible] to 7.[illegible]	[illegible]	Ø	.[illegible]
			.001	6.11 to 10.[illegible]	21.25 to 28.93	6.[illegible] to 11.79	4.4[illegible] to [illegible]	27.74 to 35.[illegible]	2.[illegible]	3.96 to [illegible]	5.95 to [illegible]	Ø'	.2[illegible]

APPENDIX 6 (CONT.)

College	Respondent Sample Size	Response Rate	Level of Significance	No One	Father	Mother	Teacher	Counseling	Brother/Sister	Pals	Other		
H		98.49%		3.29%	23.40%	9.67%	7.93%	43.71%	3.09%	5.03%	3.87%		
	517	9		17	121	50	41	226	16	26	20		
			.05	1.75 to 4.83	19.[illegible] to 27.[illegible]	7.12 to 12.22	[illegible] to 10.2[illegible]	39.[illegible] to 47.[illegible]	1.[illegible] to 4.[illegible]	3.1[illegible] to 6.91	2.21 to [illegible]	X^2	214.8
			.01	1.27 to 5.31	1[illegible] to 2[illegible]	6.[illegible] to 13.03	[illegible] to 11.[illegible]	34.[illegible] to 49.[illegible]	1.[illegible] to [illegible]	2.[illegible] to 7.[illegible]	1.[illegible] to [illegible]	p <	.001
			.005	1.[illegible] to 5.49	14.17 to 2[illegible]	[illegible] to 13.12	[illegible] to 11.27	[illegible] to 49.[illegible]	[illegible] to 5.21	2.[illegible] to 7.73	1.[illegible] to [illegible]	θ	[illegible]
			.001	.59 to 5.99	17.[illegible] to 2[illegible]	5.20 to 14.14	3.[illegible] to 12.[illegible]	36.21 to 51.2[illegible]	.[illegible] to 5.72	1.72 to 8.34	.95 to 6.79	θ'	.24
I		97.55%		6.04%	25.65%	9.57%	6.60%	37.36%	4.28%	4.97%	5.67%		
	1076	27		65	276	103	71	402	46	52	61		
			.05	4.62 to 7.46	2[illegible] to 2[illegible].26	7.[illegible] to 11.33	5.[illegible] to [illegible].04	31.47 to 40.25	3.07 to 5.[illegible]	3.[illegible] to 6.11	4.29 to 7.[illegible]	X^2	[illegible]3.2
			.01	4.17 to 7.92	2[illegible] to 2[illegible]	7.26 to 11.59	4.[illegible] to [illegible]	3[illegible] to 41.17	2.[illegible] to 5.[illegible]	3.13 to [illegible]	3.[illegible] to 7.19	p <	.001
			.005	4.[illegible] to [illegible]	21.91 to 2[illegible].19	7.[illegible] to 12.09	[illegible] to [illegible].72	33.[illegible] to 41.51	2.[illegible] to 6.01	3.09 to [illegible]	3.[illegible] to 7.[illegible]	θ	.21
			.001	3.54 to 8.54	21.07 to 3[illegible].23	6.13 to 12.[illegible]	[illegible] to 9.20	32.29 to 4[illegible].41	2.15 to 6.40	2.[illegible] to 7.04	3.24 to [illegible]	θ'	[illegible]
J		95.53%		4.3[illegible]%	17.70%	7.85%	6.34%	30.25%	3.51%	2.00%	8.01%		
	599	24		26	106	47	38	181	21	12	48		
			.05	2.71 to 5.97	11.[illegible] to 20.73	5.69 to 10.09	4.3[illegible] to [illegible].20	2[illegible].25 to 3[illegible].26	2.93 to 4.3[illegible]	.[illegible] to 3.13	5.[illegible] to 1[illegible].19	X^2	[illegible]
			.01	2.19 to 6.19	13.[illegible] to 21.72	5.[illegible] to 10.[illegible]	3.[illegible] to [illegible]	[illegible]	1.[illegible] to 3.45	.51 to 3.14	5.15 to 1[illegible]	p <	[illegible]
			.005	2.[illegible] to 6.60	13.32 to 22.0[illegible]	4.76 to 10.93	[illegible] to 9.14	[illegible] to 3[illegible]	1.3[illegible] to 5.[illegible]	.[illegible] to 5.[illegible]	4.[illegible] to 11.1[illegible]	θ	1.13
			.001	1.14 to 7.21	12.33 to 23.06	4.97 to 11.62	2.9[illegible] to 9.77	13.22 to 37.2[illegible]	.[illegible] to 6.09	.01 to 3.97	[illegible].20 to 11.[illegible]	θ'	.45
K		96.13%		7.26%	12.07%	11.16%	10.73%	44.02%	3.16%	4.80%	6.59%		
	895	36		65	108	99	96	394	31	43	59		
			.05	5.56 to [illegible].90	9.[illegible] to 11.29	9.01 to 13.12	[illegible] to 12.[illegible]	40.7[illegible] to 47.2[illegible]	2.27 to 4.66	3.40 to 6.21	4.97 to [illegible]	X^2	[illegible]
			.01	5.[illegible] to [illegible].50	9.26 to 14.[illegible]	[illegible] to 13.77	[illegible] to 13.[illegible]	39.74 to 4[illegible]	1.[illegible] to 5.0[illegible]	2.9[illegible] to 6.[illegible]	4.45 to [illegible]	p <	.001
			.005	4.[illegible] to 7.00	9.[illegible] to 1[illegible]	[illegible].12 to 14.01	7.[illegible] to 13.[illegible]	3[illegible] to [illegible]	1.73 to 5.14	2.[illegible] to [illegible]	4.[illegible] to [illegible]	θ	[illegible]
			.001	4.2[illegible] to 10.25	9.[illegible] to 15.41	7.46 to 14.67	7.17 to 11.29	3[illegible].31 to 49.[illegible]	1.36 to 5.37	2.35 to 7.2[illegible]	3.74 to 9.45	θ'	.37
L		99.36%		4.22%	28.44%	11.19%	6.61%	37.94%	3.11%	2.94%	3.49%		
	545	9		23	155	61	38	207	24	16	19		
			.05	2.[illegible] to 3.91	24.63 to 32.23	9.55 to 13.94	4.[illegible] to [illegible].69	33.91 to 42.08	3.24 to 6.99	1.52 to 4.35	1.95 to 5.[illegible]	X^2	574.6
			.01	2.[illegible] to 6.44	23.[illegible] to 33.43	7.71 to 14.6[illegible]	3.[illegible] to 9.33	32.62 to 43.[illegible]	2.70 to 7.[illegible]	1.07 to [illegible]	1.46 to 5.[illegible]	p <	.001
			.005	1.[illegible] to 6.84	23.01 to 13.[illegible]	7.49 to 14.79	3.62 to 9.60	32.11 to 43.[illegible]	2.[illegible] to 7.[illegible]	.[illegible] to 1.37	1.2[illegible] to 5.[illegible]	θ	1.01
			.001	1.26 to 7.14	21.79 to 35.09	6.55 to 15.[illegible]	2.[illegible] to 10.27	30.[illegible] to 45.13	1.[illegible] to [illegible].19	.45 to 5.42	.[illegible] to 6.1[illegible]	θ'	[illegible]
M		97.61%		5.42%	27.57%	8.41%	9.13%	37.94%	4.58%	3.27%	4.6[illegible]%		
	1070	26		59	293	90	97	406	49	35	[illegible]		
			.05	4.06 to 6.78	24.[illegible] to 30.23	6.75 to 10.07	6.19 to 9.77	35.04 to 40.[illegible]	3.[illegible] to 5.[illegible]	2.21 to 4.31	3.41 to 5.[illegible]	X^2	10[illegible]1.2
			.01	3.64 to 7.21	24.[illegible] to 31.10	6.22 to 10.60	5.[illegible] to 10.29	34.12 to 41.77	2.[illegible] to 6.2[illegible]	1.[illegible] to 4.[illegible]	3.01 to [illegible]	p <	[illegible]
			.005	3.4[illegible] to 7.37	23.73 to 31.41	6.07 to 10.[illegible]	5.[illegible] to 10.19	33.7[illegible] to 42.11	2.7[illegible] to 6.[illegible]	1.71 to 4.[illegible]	2.[illegible] to [illegible]	θ =	[illegible]
			.001	3.[illegible] to 7.[illegible]	22.97 to 32.37	5.49 to 11.33	5.25 to 11.01	32.[illegible] to 43.05	2.[illegible] to 6.7[illegible]	1.10 to 5.11	2.1[illegible] to [illegible]	θ' =	.37
N		98.74%		3.05%	24.43%	9.41%	10.69%	45.29%	1.79%	2.54%	2.80%		
	393	5		12	96	37	42	178	7	10	11		
			.05	1.35 to 4.76	20.19 to 2[illegible].68	6.33 to 12.30	7.[illegible] to 13.74	40.37 to 50.21	.[illegible] to 3.09	.99 to 4.10	1.17 to 4.[illegible]	X^2 -	511.8
			.01	.[illegible] to 5.29	18.84 to 30.02	5.61 to 13.22	6.[illegible] to 14.71	3[illegible] to 51.77	.06 to 3.59	.50 to 4.59	.65 to 4.95	p <	.001
			.005	.62 to 5.49	1[illegible].34 to 30.52	5.29 to 13.56	6.31 to 15.07	3[illegible].21 to 52.35	-.09 to 3.6[illegible]	.31 to 4.7[illegible]	.[illegible] to 5.14	θ	1.13
			.001	.07 to 6.04	16.97 to 31.[illegible]	4.35 to 14.4[illegible]	5.[illegible] to 16.07	36.66 to 53.93	-.31 to 4.04	-.19 to 5.2[illegible]	-.06 to 5.6[illegible]	θ' =	.43
O		96.33%		4.09%	23.00%	10.08%	7.52%	42.89%	4.[illegible]%	3.76%	4.59%		
	1935	10		75	422	185	138	787	75	69	84		
			.05	3.1[illegible] to 4.99	21.07 to 21.92	8.70 to 11.46	6.21 to [illegible].73	40.62 to 45.15	3.14 to [illegible]	2.89 to 4.63	3.62 to 5.53	X^2 =	1971.4
			.01	2.9[illegible] to 5.2[illegible]	20.46 to 25.53	[illegible].27 to 11.90	[illegible] to [illegible].11	39.91 to 45.[illegible]	2.90 to 5.2[illegible]	2.[illegible] to 4.91	3.[illegible] to 5.[illegible]	p <	.001
			.005	2.[illegible] to 5.39	20.24 to 25.76	[illegible].11 to 12.06	[illegible] to [illegible]	39.[illegible] to 46.14	2.79 to 5.[illegible]	2.[illegible] to 5.01	3.[illegible] to 5.[illegible]	θ	1.[illegible]
			.001	2.50 to 5.64	19.61 to 26.39	7.6[illegible] to 12.50	5.[illegible] to 9.[illegible]	38.91 to 46.[illegible]	2.[illegible] to 5.[illegible]	[illegible] to 5.29	2.90 to 6.26	θ'	.39

College	Respondent Sample Size	Response Rate	Level of Signifi-cance	No One	Father	Mother	Teacher	Counselor	Brother/Sister	Pals	Other	
P	2115	95.96%		4.54%	19.39%	8.61%	9.03%	44.40%	5.30%	4.67%	4.11%	
		49		96	410	182	191	939	112	98	87	
			.05	3.63 to 5.47	17.70 to 21.07	7.41 to 9.80	7.81 to 10.25	42.23 to 46.52	4.34 to 6.25	3.71 to 5.53	3.27 to 4.96	X^2 = 2268.3
			.01	3.37 to 5.71	17.17 to 21.60	7.07 to 10.19	7.42 to 10.64	41.91 to 47.19	4.01 to 6.58	3.45 to 5.81	3.08 to 5.23	p < .001
			.005	3.27 to 5.47	16.97 to 21.80	6.9 to 10.32	7.24 to 10.74	41.76 to 47.33	3.91 to 6.65	3.31 to 5.92	2.91 to 5.31	C = 1.01
			.001	2.94 to 6.19	16.41 to 22.34	6.51 to 10.79	6.79 to 11.19	40.64 to 48.11	3.62 to 6.97	3.06 to 6.21	2.63 5.60	C^2 = .29
Q	728	96.55%		3.57%	29.26%	11.40%	7.83%	35.95%	4.95%	3.30%	3.85%	
		26		24	213	83	57	261	36	24	28	
			.05	2.22 to 4.92	25.95 to 32.56	9.09 to 13.71	5.48 to 9.79	32.77 to 39.14	3.37 to 6.53	2.00 to 4.59	2.45 to 5.24	X^2 = 667.2
			.01	1.90 to 5.25	24.91 to 33.61	8.3 to 14.44	5.26 to 10.40	31.27 to 40.41	2.87 to 7.03	1.59 to 5.09	2.01 to 5.69	p < .001
			.005	1.64 to 5.50	24.52 to 34.00	8.0 to 14.71	5.07 to 10.63	30.88 to 40.85	2.64 to 7.20	1.41 to 5.16	1.81 to 5.9	C = .95
			.001	1.21 to 5.94	23.46 to 35.06	7.3 to 15.1	4.81 to 11.26	29.74 to 41.97	2.14 to 7.71	1.02 to 5.57	1.39 to 6.30	C^2 = .34
R	795	92.12%		4.79%	29.18%	11.19%	5.91%	37.19%	4.40%	2.89%	4.15%	
		69		34	232	89	47	296	35	23	33	
			.05	3.30 to 6.26	26.02 to 32.34	9.00 to 13.39	4.27 to 7.53	34.13 to 40.45	2.94 to 5.93	1.73 to 4.06	2.74 to 5.54	X^2 = 795.3
			.01	2.93 to 6.73	25.02 to 33.34	8.31 to 14.08	3.79 to 8.07	33.16 to 41.91	2.53 to 6.24	1.36 to 4.47	2.37 to 5.9	p < .001
			.005	2.65 to 7.01	24.65 to 33.71	8.05 to 14.31	3.5 to 8.26	32.9 to 42.31	2.36 to 6.45	1.22 to 4.59	2.14 to 6.14	C = 1.01
			.001	2.19 to 7.39	24.04 to 34.73	7.35 to 15.11	3.01 to 9.79	31.24 to 43.39	1.90 to 6.91	.95 to 4.91	1.72 to 6.59	C^2 = .38
S	746	92.49%		4.29%	22.51%	9.39%	8.45%	46.79%	4.02%	2.95%	3.62%	
		21		32	153	70	63	349	30	22	27	
			.05	2.84 to 5.74	17.61 to 23.41	7.28 to 11.48	6.45 to 10.44	43.30 to 50.26	2.61 to 5.43	1.74 to 4.16	2.2- to 4.9	X^2 = 939.9
			.01	2.39 to 6.20	16.78 to 24.32	6.63 to 12.14	5.82 to 11.07	42.97 to 51.50	2.17 to 5.44	1.35 to 4.55	1.66 to 5.19	p < .001
			.005	2.21 to 6.37	16.36 to 24.66	6.34 to 12.33	5.58 to 11.31	41.65 to 51.92	2.00 to 6.04	1.21 to 4.69	1.70 to 5.54	C = 1.11
			.001	2.19 to 3.39	16.39 to 24.73	3.35 to 15.04	3.04 to 11.79	41.15 to 52.39	1.91 to 6.91	.85 to 4.94	1.72 to 6.59	C^2 = .42
T	654	95.89%		4.13%	33.49%	11.77%	6.57%	33.19%	4.29%	3.52%	3.06%	
		24		27	219	77	43	217	28	23	20	
			.05	3.60 to 5.65	29.47 to 37.10	9.30 to 14.24	4.64 to 8.47	29.37 to 36.79	2.73 to 5.93	2.11 to 4.91	1.74 to 4.39	X^2 = 633.7
			.01	2.12 to 6.14	28.73 to 38.23	8.32 to 15.01	4.04 to 9.08	28.43 to 37.93	2.24 to 6.32	1.56 to 5.34	1.32 to 4.8	p < .001
			.005	1.91 to 6.31	28.30 to 38.67	8.03 to 15.32	3.85 to 9.30	28.01 to 38.35	2.06 to 6.51	1.49 to 5.54	1.17 to 4.95	C = .99
			.001	1.45 to 6.91	27.14 to 39.34	7.44 to 16.11	3.24 to 9.91	26.95 to 39.51	1.56 to 7.00	1.04 to 6.08	.74 to 5.35	C^2 = .77
U	2654	97.90%		4.49%	29.05%	8.97%	6.41%	34.81%	3.43%	4.86%	3.99%	
		57		119	771	238	170	1010	91	129	106	
			.05	3.70 to 5.27	27.32 to 30.79	7.44 to 10.46	5.47 to 7.34	36.30 to 40.66	2.74 to 4.12	4.01 to 5.68	3.23 to 4.74	X^2 = 3715.3
			.01	3.45 to 5.52	26.79 to 31.72	7.51 to 10.40	5.18 to 7.63	36.67 to 41.35	2.52 to 4	3.74 to 5.91	3.01 to 4.9	p < .001
			.005	3.36 to 5.61	26.57 to 31.53	7.41 to 10.53	5.07 to 7.74	36.15 to 41.87	2.44 to 4.13	3.59 to 6.03	2.91 to 5.15	C = 1.01
			.001	3.11 to 5.87	26.02 to 32.09	7.06 to 10.99	4.77 to 8.04	35.30 to 42.96	2.21 to 4.64	3.43 to 6.39	2.69 to 5.30	C^2 = .39
V	301	94.36%		3.65%	27.24%	10.30%	8.97%	37.87%	2.33%	3.99%	5.65%	
		14		11	82	31	27	114	7	12	17	
			.05	1.54 to 5.77	22.21 to 32.27	6.97 to 13.73	5.74 to 12.20	32.39 to 43.35	.62 to 4.03	2.74 to 6.20	3.31 to 9.26	X^2 = 284.1
			.01	.96 to 6.45	20.62 to 33.86	5.7 to 14.32	4.72 to 13.22	30.16 to 45.09	.09 to 4.57	2.09 to 6.90	2.22 to 9.9	p < .001
			.005	.62 to 6.69	20.03 to 34.45	5.34 to 15.22	4.31 to 13.60	30.02 to 45.73	- .12 to 4.77	1.8 to 7.16	1.91 to 9.39	C = .99
			.001	- .07 to 7.34	19.42 to 36.07	4.27 to 16.33	3.30 to 14.64	29.26 to 47.49	- .66 to 5.31	1.04 to 7.97	1.07 to 10.23	C^2 = .37
W	947	98.03%		3.70%	24.39%	7.71%	8.24%	46.57%	3.70%	3.06%	2.75%	
		19		35	231	73	78	441	35	29	26	
			.05	2.49 to 4.90	21.66 to 27.13	6.01 to 9.41	6.49 to 9.99	43.39 to 49.75	2.49 to 4.90	1.97 to 4.14	1.71 to 3.79	X^2 = 1271.6
			.01	2.11 to 5.29	20.79 to 27.99	5.47 to 9.95	5.91 to 10.54	43.09 to 50.75	2.11 to 5.29	1.62 to 4.51	1.3- to 4.13	p < .001
			.005	1.97 to 5.42	20.47 to 28.31	5.27 to 10.14	5.73 to 10.73	42.81 to 51.13	1.97 to 5.42	1.49 to 4.64	1.2- to 4.24	C = 1.16
			.001	1.59 to 5.81	19.59 to 29.19	4.72 to 10.69	5.16 to 11.31	40.91 to 52.14	1.59 to 5.81	1.11 to 4.99	.92 to 4.57	C^2 = .41

APPENDIX 6 (CONT.)

College	Sample Size	Respondent Response Rate	Level of Signifi-cance	No One	Father	Mother	Teacher	Counselor	Brother/Sister	Pals	Other	
X		98.69%		4.78%	26.60%	10.90%	7.47%	34.34%	6.42%	5.21%	3.75%	
	1652	22		79	441	180	120	568	106	86	62	
			.05	3.75 to 5.91	24.56 to 28.63	9.29 to 12.49	6.57 to 9.17	32.09 to 36.57	5.21 to 7.61	4.14 to 6.29	2.84 to 4.67	X^2 = 121.49
			.01	3.47 to 6.14	23.49 to 29.50	8.92 to 12.87	6.16 to 9.54	31.37 to 37.30	4.86 to 7.97	3.80 to 6.62	2.55 to 4.96	p ≤ .001
			.005	3.31 to 6.26	23.14 to 29.75	8.78 to 13.01	6.01 to 9.71	31.10 to 37.57	4.72 to 8.11	3.67 to 6.74	2.44 to 5.07	Φ = .07
			.001	2.99 to 6.59	22.55 to 30.14	8.26 to 13.53	5.79 to 10.15	30.36 to 38.19	4.31 to 8.49	3.43 to 7.09	2.14 to 5.36	Φ' = .33
Y		96.11%		7.29%	21.46	8.91%	8.50%	38.97%	5.26%	2.41%	7.29	
	217	10		14	53	22	21	96	13	6	18	
			.05	4.05 to 10.53	16.34 to 26.58	5.36 to 12.46	5.02 to 11.98	32.70 to 44.95	2.19 to 6.15	.51 to 4.31	4.05 to 10.53	X^2 = 232.1
			.01	3.02 to 11.56	14.72 to 28.20	4.21 to 13.51	3.92 to 13.08	30.96 to 46.97	1.09 to 9.43	- .09 to 5.16	3.02 to 11.56	p ≤ .001
			.005	2.61 to 11.91	14.12 to 28.60	3.91 to 11.09	3.52 to 13.49	30.15 to 47.78	1.27 to 9.59	- .32 to 5.14	2.61 to 11.91	Φ = .90
			.001	1.60 to 12.96	12.47 to 30.44	2.67 to 15.14	2.10 to 14.61	34.20 to 43.34	- .14 to 10.15	- .94 to 5.99	1.60 to 12.96	Φ' = .34
Z		96.65%		9.79%	12.62%	3.15%	7.57%	44.16%	1.89%	3.36%	15.46%	
	317	11		31	40	10	24	140	6	17	49	
			.05	6.51 to 13.06	9.06 to 16.27	1.23 to 5.04	4.66 to 10.44	38.70 to 49.63	.39 to 3.39	2.44 to 5.44	11.18 to 19.44	X^2 = 332.1
			.01	5.41 to 14.09	7.91 to 17.43	.62 to 5.69	3.74 to 11.40	36.97 to 51.36	- .26 to 4.03	2.10 to 6.02	10.22 to 20.70	p ≤ .001
			.005	5.09 to 14.47	7.54 to 17.96	3.96 to 6.31	3.49 to 11.75	36.43 to 52.08	- .36 to 4.01	1.81 to 6.92	9.75 to 21.16	Φ = 1.81
			.001	4.01 to 15.62	6.29 to 19.93	- .22 to 6.53	2.46 to 12.69	34.57 to 53.76	- .34 to 4.53	1.01 to 7.72	9.47 to 22.44	Φ' = .34
AA		98.06%		4.53%	25.29%	10.29%	5.00%	41.16%	4.53%	3.59%	3.72%	
	860	17		39	217	88	43	354	39	49	32	
			.05	3.11 to 5.97	22.33 to 28.24	8.21 to 12.38	3.54 to 6.46	37.87 to 44.45	3.13 to 5.93	2.65 to 4.53	2.46 to 4.98	X^2 = 463.1
			.01	2.71 to 6.37	21.11 to 29.46	7.57 to 13.01	3.09 to 6.92	36.91 to 45.39	2.79 to 6.27	1.99 to 5.19	2.06 to 5.39	p ≤ .001
			.005	2.54 to 6.52	21.07 to 29.50	7.34 to 13.14	2.91 to 7.03	36.69 to 45.61	2.54 to 6.51	1.80 to 5.34	1.91 to 5.54	Φ = 1.09
			.001	2.09 to 6.98	20.11 to 30.33	6.84 to 11.79	2.44 to 7.36	35.99 to 46.91	2.09 to 6.95	1.59 to 5.21	1.50 to 5.94	Φ' = .39
BB		97.53%		3.80%	5.06%	7.59%	12.66%	58.23%	3.80%	8.33%	2.53%	
	79	2		3	4	6	10	46	3	6	2	
			.05	- .42 to 8.01	.29 to 9.83	1.75 to 13.43	5.21 to 20.09	47.33 to 69.10	- .42 to 9.98	3.99 to 11.79	- .93 to 6.00	X^2 = 105.4
			.01	-1.73 to 9.56	-1.39 to 11.47	- .10 to 13.59	2.01 to 23.29	43.41 to 73.51	-1.57 to 9.51	- .24 to 11.40	-2.07 to 7.60	p ≤ .001
			.005	-2.37 to 9.84	-1.97 to 12.00	- .79 to 13.78	2.13 to 23.17	42.44 to 74.40	-2.15 to 9.94	-1.37 to 11.82	-2.44 to 7.50	Φ = 1.10
			.001	-3.00 to 11.20	-1.44 to 13.55	-2.69 to 17.91	- .21 to 25.52	39.11 to 77.72	-3.00 to 11.40	-3.10 to 11.75	-3.55 to 8.01	Φ' = .51
CC		95.99%		9.14%	9.14%	6.34%	12.31%	44.22%	2.99%	4.18%	11.23%	
	536	23		49	49	34	66	237	16	24	61	
			.05	6.79 to 11.50	6.79 to 11.50	4.23 to 8.41	9.53 to 15.10	38.21 to 50.12	1.54 to 4.43	2.73 to 5.21	8.69 to 14.07	X^2 = 524.2
			.01	5.91 to 12.35	5.91 to 12.35	3.61 to 9.04	8.85 to 15.78	36.39 to 51.94	1.09 to 4.88	2.17 to 6.79	7.94 to 14.92	p ≤ .001
			.005	5.65 to 13.04	5.65 to 13.04	3.31 to 9.34	8.33 to 16.30	36.13 to 52.21	.92 to 5.52	1.97 to 6.99	7.51 to 15.34	Φ = ...
			.001	4.98 to 13.62	4.98 to 13.62	2.72 to 9.97	7.43 to 17.20	35.84 to 51.60	.46 to 5.51	1.41 to 7.55	6.96 to 16.10	Φ' = .37
TOTAL		97.06%		5.14%	23.39%	9.21%	7.79%	40.75%	4.23%	4.17%	5.07%	
	27339	931		1405	6390	2527	2131	11141	1156	1140	1387	
			.05	4.87 to 5.40	23.09 to 24.10	9.20 to 9.59	7.61 to 8.11	40.17 to 41.33	3.99 to 4.47	3.93 to 4.31	4.81 to 5.33	X^2 = 26279.2
			.01	4.79 to 5.49	22.91 to 24.28	9.09 to 9.70	7.53 to 8.21	39.99 to 41.52	3.91 to 4.54	3.86 to 4.39	4.73 to 5.42	p ≤ .001
			.005	4.74 to 5.51	22.87 to 24.31	9.05 to 9.74	7.51 to 8.23	39.92 to 41.59	3.89 to 4.57	3.83 to 4.51	4.70 to 5.45	Φ = .94
			.001	4.64 to 5.60	22.71 to 24.44	8.91 to 9.85	7.34 to 8.35	39.73 to 41.77	3.81 to 4.65	3.75 to 4.59	4.62 to 5.54	Φ' = .37