

Data Analysis

Quantitative

1.Data Reduction

Example: Factor Analysis

2.Group Comparisons

Examples: ANOVA; ANCOVA (continuous outcome)

Chi Square Analysis (categorical outcome)

3.Predictors of Outcome

Examples: Linear Regression (continuous outcome)

Logistic Regression (categorical outcome)

Qualitative Data Analysis

1.Developing Codes; Generating Themes

2.Use of Software

Consultants

Perceived Support Factor Loadings

<i>Questionnaire Items</i>	<i>Primary Supports</i>	<i>Additional Supports</i>
Social interactions with Meyerhoff students	.74	.08
Academic activities with Meyerhoff students	.73	-.15
Summer bridge program	.68	-.07
Financial support from Meyerhoff program	.56	.03
Faculty involvement with Meyerhoff program	.02	.78
Meyerhoff program community involvement	-.09	.76
Cultural activities sponsored by Meyerhoff	-.25	.73
Family involvement with Meyerhoff program	.07	.67
Personal counseling by Meyerhoff staff	.10	.63
Meyerhoff family discourse about academic performance	-.10	.59
Meyerhoff mentor component	-.04	.57
Being part of Meyerhoff program community	.19	.54
Academic advising by Meyerhoff staff	.29	.53
Summer Research Opportunities	.06	.21

Relationship between Ethnicity and Perceived Program Support

Perceived Support

<i>Ethnicity</i>	<i>Primary Supports</i>		<i>Additional Supports</i>	
	<i>Mean</i>	<i>Std. Error</i>	<i>Mean</i>	<i>Std. Error</i>
African American	18.08	.20	33.84	.63
Asian/ Pacific Islander American	18.07	.43	35.20	1.33
Caucasian	18.51	.42	32.43	1.34

Academic outcomes: Meyerhoff students and students who declined Meyerhoff scholarship offer (and attended another university)

	Not Likely to Graduate in SEM ^a	Graduated in Non-SEM Discipline	Likely to Graduate in SEM	Graduated in SEM Discipline	Total N
SEM Graduation Major					
Meyerhoff students	7 (7.5%)	5 (5.4%)	4 (4.3%)	77** (82.8%)	93
Students who Declined Meyerhoff Offer	3 (8.6%)	15 (42.9%)	1 (2.9%)	16 (45.7%)	35
	Actual SEM GPA	Adjusted ^b SEM GPA	Actual Overall GPA	Adjusted Overall GPA	
SEM GPA and Overall GPA					
Meyerhoff students (N = 93)	3.16	3.16** (0.43)	3.32	3.33 (0.35)	
Students who Declined Meyerhoff Offer (N = 24)	2.90	2.89 (0.60)	3.26	3.24 (0.44)	
	No Post-College SEM	SEM Major Still in College ^c	Medical School	SEM Graduate Program	Total N (Not Known)
SEM Graduate Education					
Meyerhoff students	23 (24.7%)	5 (5.4%)	22 (23.7%)	43** (46.2%)	93
Students who Declined Meyerhoff Offer	20 (58.8%)	2 (5.9%)	9 (26.5%)	3 (8.8%)	(0) 34 (1)

^aSEM (Science, Engineering, Mathematics) disciplines included: Biology, Chemistry, Computer Science, Engineering, Mathematics, Physics.

^bMeans were adjusted for: Gender, SAT Math, SAT Verbal, High School GPA, and Scholarship Status.

^cOne student graduated in a SEM major, but has returned to college to pursue a second SEM major.

**p < .01.

Logistic regression examining entrance into doctoral programs and support

<i>Doctoral Status</i>	<i>B</i>	<i>SE</i>	<i>(ExpB)</i> <i>Odds Ratio</i>
Primary Supports	.22	.10	1.24*
Additional Supports	.08	.3	1.08*

*Significant at .05 level

Note: Analyses for Primary Support and Additional Support were conducted separately.