

First Generation Community College Students: The Impact of College Experiences on Educational and Psychosocial Attainment

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NLA, Inc.

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Educational Attainment

- Factors associated with educational attainment
 - Decreased:
 - Unemployment
 - Public Assistance



Educational Attainment

- Factors associated with educational attainment
 - Increased:
 - Volunteerism
 - Voting
 - Personal Income



An Increase in Post-Secondary Attendance

- Tremendous growth among community college
- Majority (53%) of entering students at community colleges are “first-generation” students

What is a first-generation college student?

■ Dichotomous Definition

□ First-Generation Student:

- Neither parent attended a post-secondary institution and persisted to degree attainment (including a 2-year degree/certificate)

□ Non First-Generation Student:

- At least one parent attended a post-secondary institution and persisted to degree attainment (including a 2-year degree/certificate)

What is a first-generation college student?

■ Polytotomous Definition

□ First-Generation Student:

- Neither parent attended a post-secondary institution and persisted to degree attainment (including a 2-year degree/certificate)

□ Moderate Parent Education:

- At least one parent attended a post-secondary institution and persisted to a 2-year degree
- Neither parent received a Bachelor's or higher

□ High Parent Education:

- At least one parent attended a post-secondary institution and persisted to a 4-year degree or higher



First Generation Students in the Literature?

- Most studies have examined first-generation students who have attended 4-year colleges
- Emphasis on
 - Academic Preparation
 - Persistence to 4-year degree attainment



Why Study First-Generation Community College Students?

- Only a hand-full of studies that examine the impact of the college experience for those attending 2-year colleges
- Need to research this topic since the majority of students who enter a 2-year college are first-generation students



Why Study First-Generation Community College Students?

- First-generation students are at greatest risk for non-persistence (Advisory Committee on Student Financial Assistance, 2006).
- If we can understand the barriers to attainment, we can take action to make a change




First-Generation Community College Student Literature Review

- Very few studies
- Samples were not representative
- Surveys, such as “Faces of the Future,” (AACCC) have been used to examine demographic factors and college satisfaction experiences, but with a limited database since the survey is only used by a handful of community colleges



First-Generation Community College Literature Review

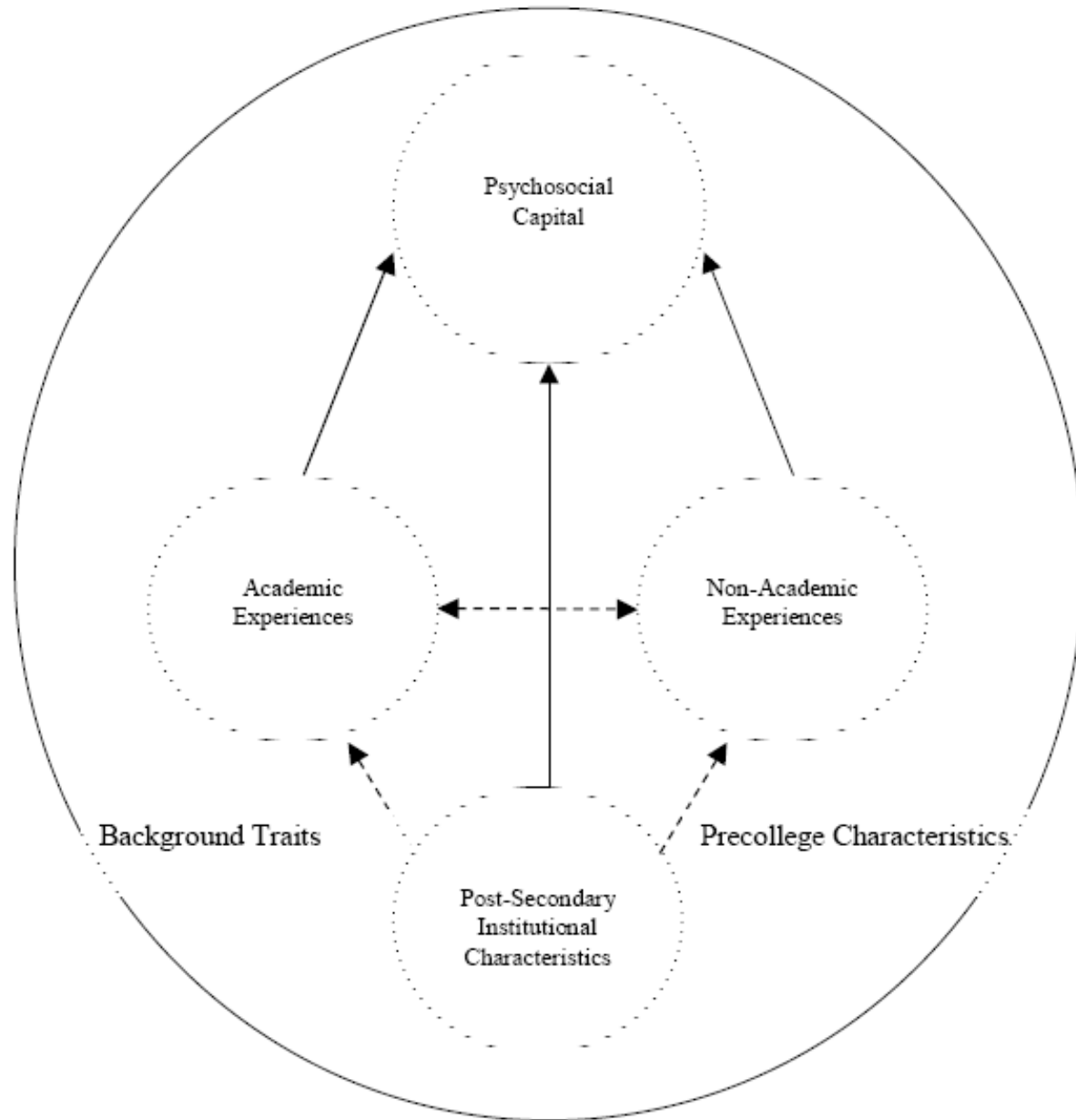
- This population is
 - Disadvantaged with respect to family financial support
 - Unfamiliar/lacks access to post-secondary planning resources
 - Less likely to set very high educational goals



Is success only measured by persistence?

- For this population, very few studies have explored:
 - College Experience
- For this population, there have been no studies that have explored the effects on:
 - Cognitive Development
 - Psychosocial Attainment
 - Social Capital

Conceptual Framework





Phase I Goals of the Research

- Obtain a “Snapshot” of first-generation community college students
 - Demographic Characteristics including
 - Race
 - Citizenship Status
 - Gender
 - Age (when they entered college)



Phase I Goals of the Research

- Obtain a “Snapshot” of first-generation community college students
 - Socioeconomic Status
 - Parental Income
 - Expected parental contribution toward first year expenses
 - Student Family Poverty Level

Phase I Goals (continued)

- Obtain a Snapshot of the pre-disposition toward social awareness and responsibility*
 - Community Service Participation in High School
 - Ambition of being a leader in the community
 - Indicated interest in influencing a political structure

*Measured as an entering freshman



Phase I Goals (continued)

■ Academic Factors

- Education Goals at the onset of their college experience (1995)
- Need for remedial coursework (as a proxy for academic preparedness)



Phase I Goals (continued)

■ Institutional Characteristics

- High School type attended
- College budget per student adjusted for full-time and part-time attendance
- % Minorities enrolled in the first institution enrolled



Phase I Goals (continued)

- Career Goals

- Stated goal of succeeding in a career
- Being well off financially



Phase II Goals

- Examine the factors the majority of 4-year studies have examined:
 - Degree Attainment
 - Academic Success (typically considered a GPA of 3.0 and higher)



Phase II Goals (continued)

- Additional factors useful for measuring a “successful outcome” for its students
 - Salary
 - Number of months enrolled in college



Phase II Goals (continued)

- Independent Variables for the Model
 - PRIMARY
 - First-Generation vs. Non-First Generation
 - Demographic Variables
 - Sex
 - Race
 - Age



Phase II Goals (continued)

- Independent Variables for the Model
 - Socioeconomic Status Background
 - Parent Income

 - Academic Preparedness
 - Remedial Coursework



Phase II Goals (continued)

- Independent Variables for the Model
 - Attribution toward Social Attainment
 - Stated goal of being a leader in the community
 - Becoming an authority in a field
 - Influencing political structure



Phase II Goals (continued)

- Independent Variables for the Model
 - Career Goals
 - To be successful in desired career
 - Socioeconomic Status Goals
 - To be Well Off Financially



Phase III Goals

- Examine the Effects on Psychosocial Development
 - College Satisfaction Variables
 - Overall College Satisfaction measure
 - Social Integration into the college
 - Academic acclimation at the college



Phase III Goals

- Examine the Effects on Psychosocial Development
 - Personal Impressions of College Effects
 - Perceived intellectual growth



Phase III Goals

- Examine the Effects on Psychosocial Development
 - Social Accountability
 - Volunteerism as reported in 2001



Phase III Goals

- Examine the Effects on Psychosocial Development
 - Employment Characteristics
 - Satisfaction with Current Employer (2001)



Phase III Goals (continued)

- Independent Variables were the same as for Phase II of the study



Data Available

- Beginning Postsecondary Students (BPS)
1996-2001

- Survey of the National Center for Education Statistics

- cohort of students who started their postsecondary education during the 1995-1996 academic year for 5 years



Data Available

- Beginning Postsecondary Students (BPS)
1996-2001
 - Represents both:
 - traditional (age 17-21) and
 - non-traditional aged students



Data Available

- Beginning Postsecondary Students (BPS)
1996-2001
 - Percentage of Students in Dataset
 - 42% had parents with a high school diploma or less
 - Of those 42% in the database, 57% pursued their post-secondary degree at a 2-year college



Data Available

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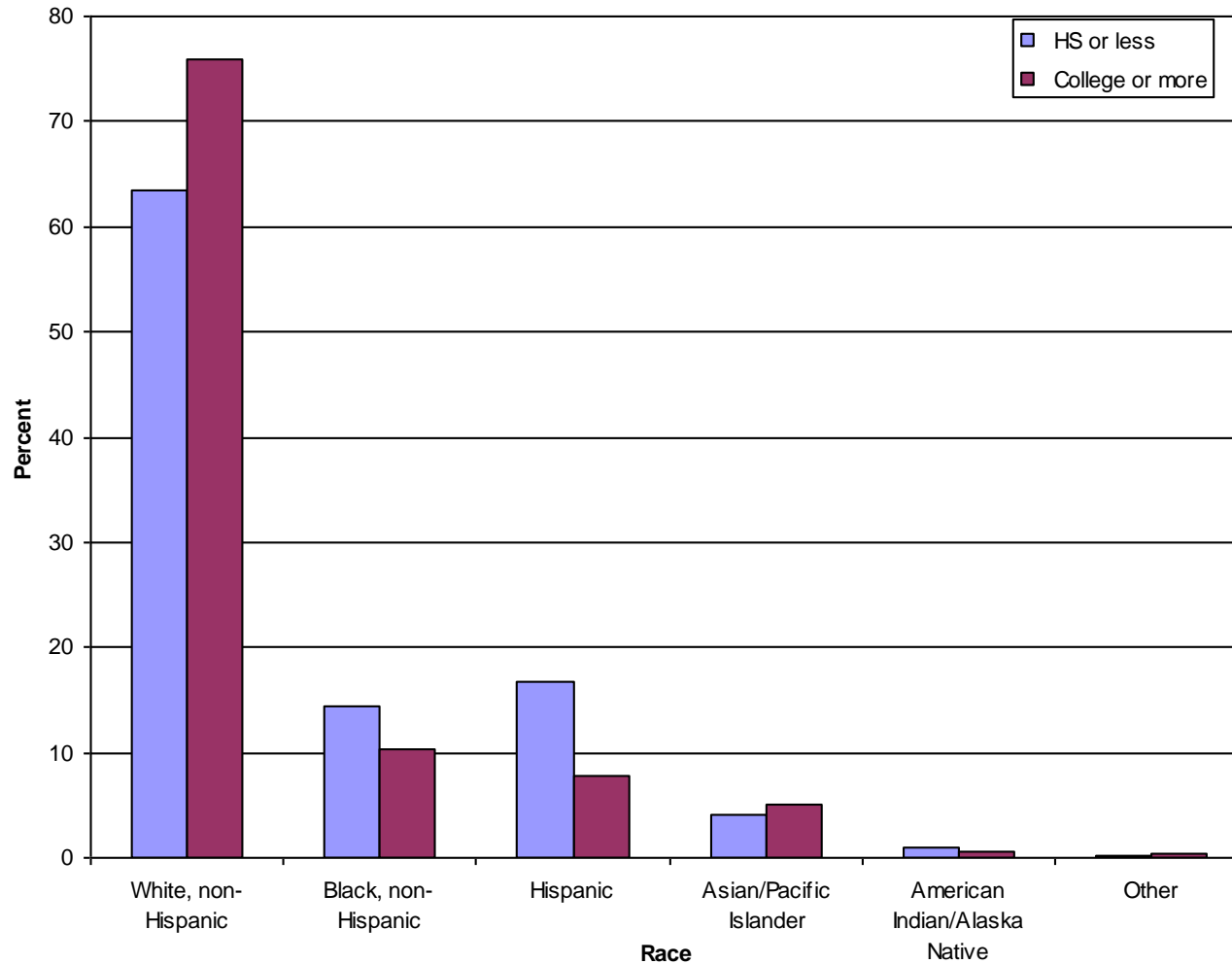
Phase I Results : Ethnicity/Race for First Generation, Moderate, and High Parental Levels of Education

	Race/ethnicity (including Hispanic)					
	White, non-Hispanic (%)	Black, non-Hispanic (%)	Hispanic (%)	Asian/Pacific Islander (%)	American Indian/Alaska Native (%)	Other (%)
Total	70.3	11.9	12	4.8	0.8	0.3
Either parent-highest education level						
First Generation Status (N=1314)	63.4	14.5	16.8	4.1	1	0.2
Moderate Parental Education (N=552)	73.3	14.3	8.7	3.2	0.4	0.2
High Parental Education (N=1086)	78.8	7.9	6.1	6.1	0.7	0.4

Source: U.S. Department of Education, National Center for Education Statistics, 1995–96 Beginning Postsecondary Students Longitudinal Study, Second Follow-up (BPS:96/01).

Phase I Results : Ethnicity/Race for First Generation vs. Non First Generation Community College Students

Ethnicity/Race for First-Generation vs. Non First-Generation Community College Students



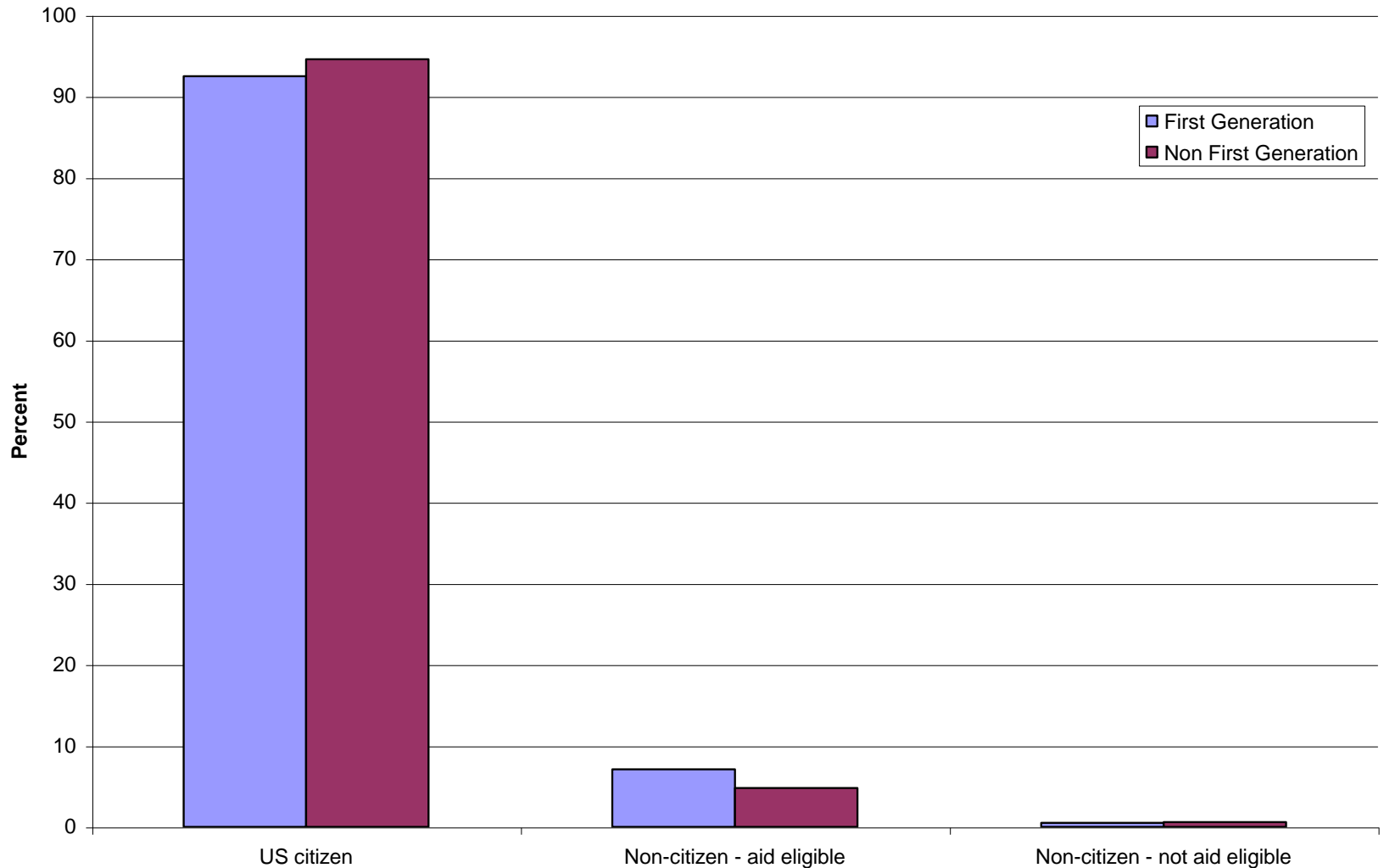
Citizenship Status for First Generation, Moderate, and High Parental Levels of Education

	Citizenship status 1995-96		
	US citizen	Non-citizen - aid eligible	Non-citizen - not aid eligible
	(%)	(%)	(%)
Total	93.6	5.9	0.5
Either parent-highest ed level			
First Generation (N=770)	92.5	7.1	0.5
Moderate Parental Educ (N=346)	96.7	3.3	0
High Parental Educ (N=497)	93.4	5.5	1.1

Source: U.S. Department of Education, National Center for Education Statistics, 1995–96 Beginning Postsecondary Students Longitudinal Study, Second Follow-up (BPS:96/01).

Phase I Results : Citizenship Status for First Generation vs. Non First Generation Community College Students

Citizenship Status for First Generation and Non-First Generation Community College Students



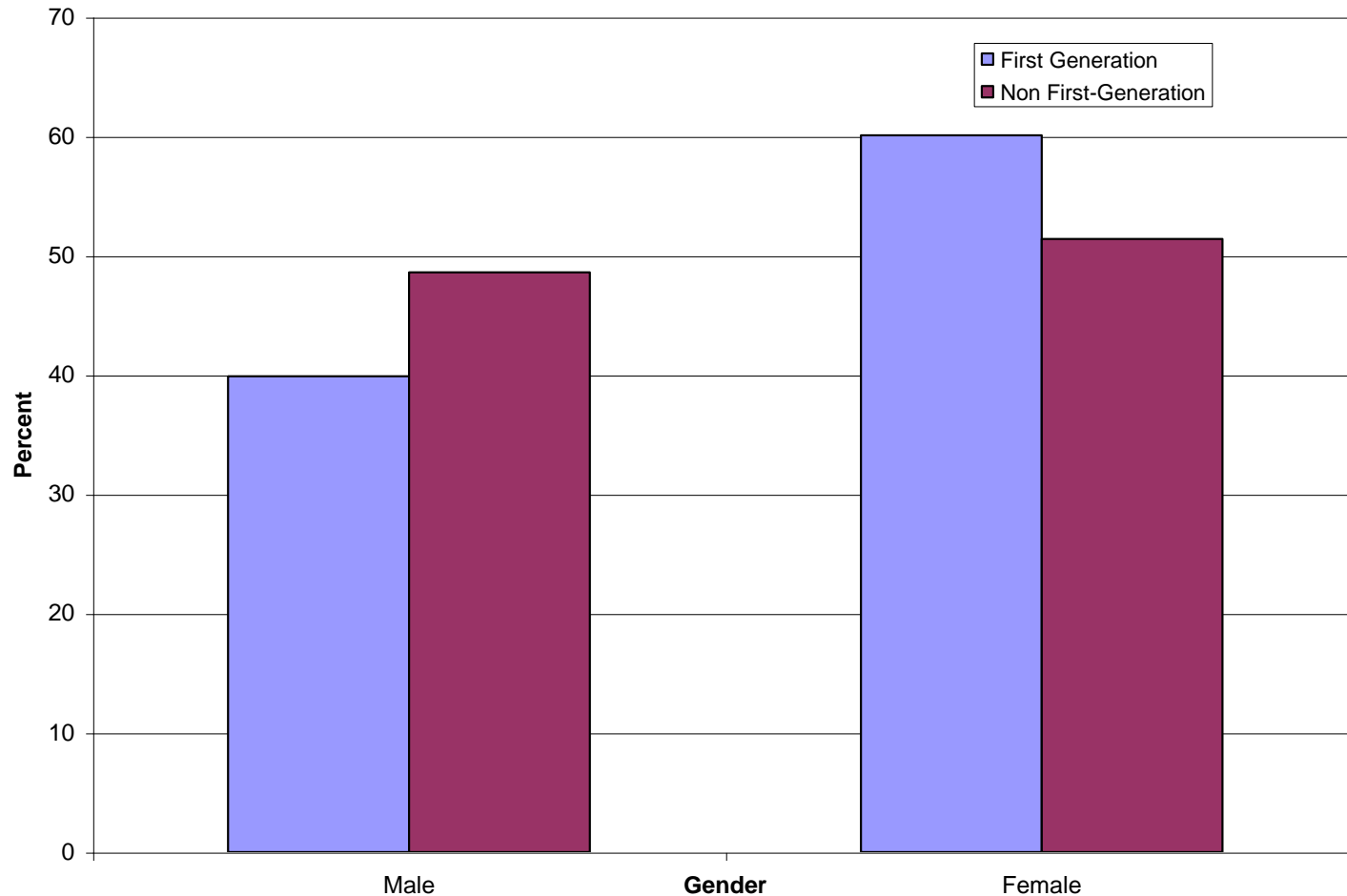
Gender of First Generation, Moderate, and High Parental Levels of Education

	Gender	
	Male (%)	Female (%)
Total	45.2	54.8
Either parent-highest education level		
First Generation (N=1314)	39.9	60.1
Moderate Parental Educ (N=552)	41.0	59.1
High Parental Educ (N=1086)	53.0	47.0

Source: U.S. Department of Education, National Center for Education Statistics, 1995–96 Beginning Postsecondary Students Longitudinal Study, Second Follow-up (BPS:96/01).

Phase I Results : Gender for First Generation vs. Non First Generation Community College Students

Gender of First Generation and Non First Generation Community College Students



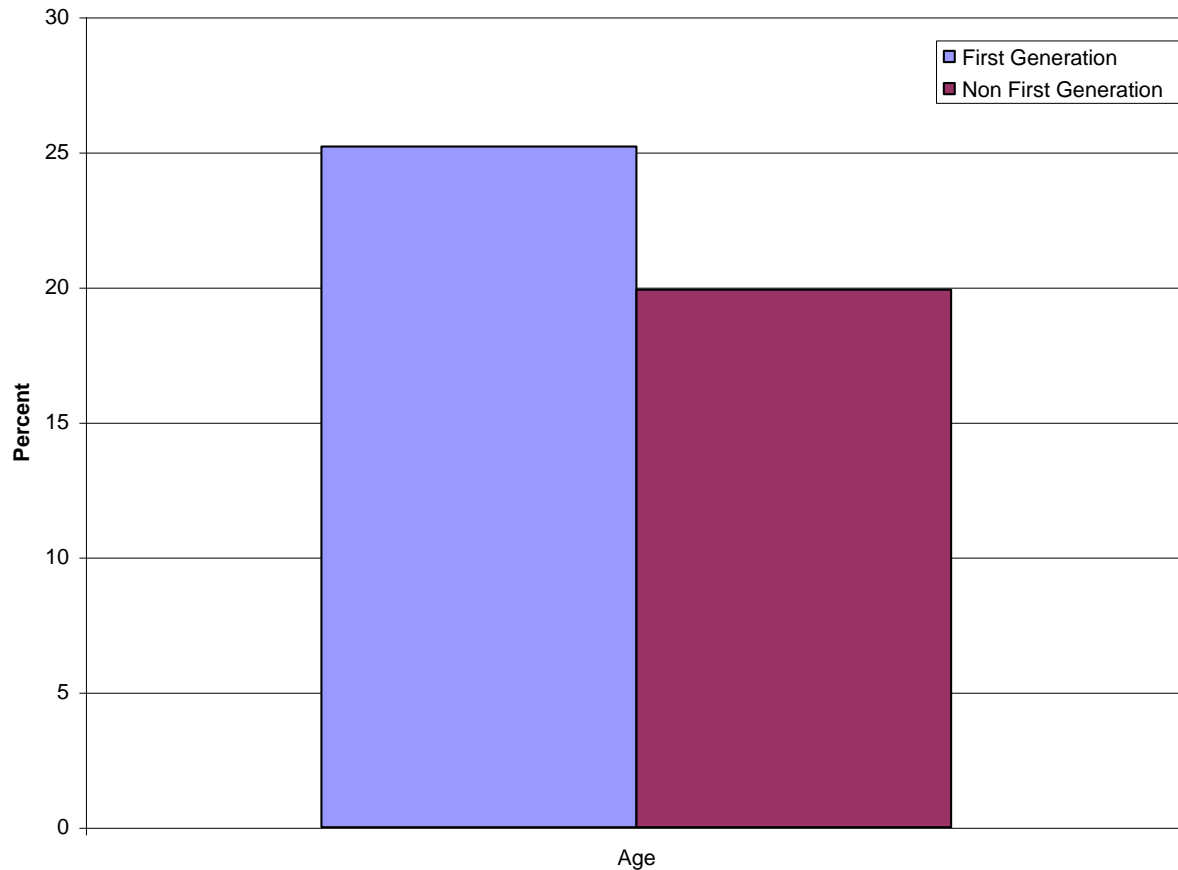
Average Entering Age of First Generation, Moderate, and High Parental Levels of Education

	Age as of 12/31/95
Total	22.6
Either parent-highest education level	
First Generation (N=770)	25.2
Moderate Parental Level of Education (N=346)	20.3
High Parental Level of Education (N=497)	19.4

Source: U.S. Department of Education, National Center for Education Statistics, 1995–96 Beginning Postsecondary Students Longitudinal Study, Second Follow-up (BPS:96/01).

Phase I Results : Average Entering Age for First Generation vs. Non First Generation Community College Students

Entering Age of First Generation and Non-First Generation Freshmen



Average Parental Income of First Generation, Moderate, and High Parental Levels of Education

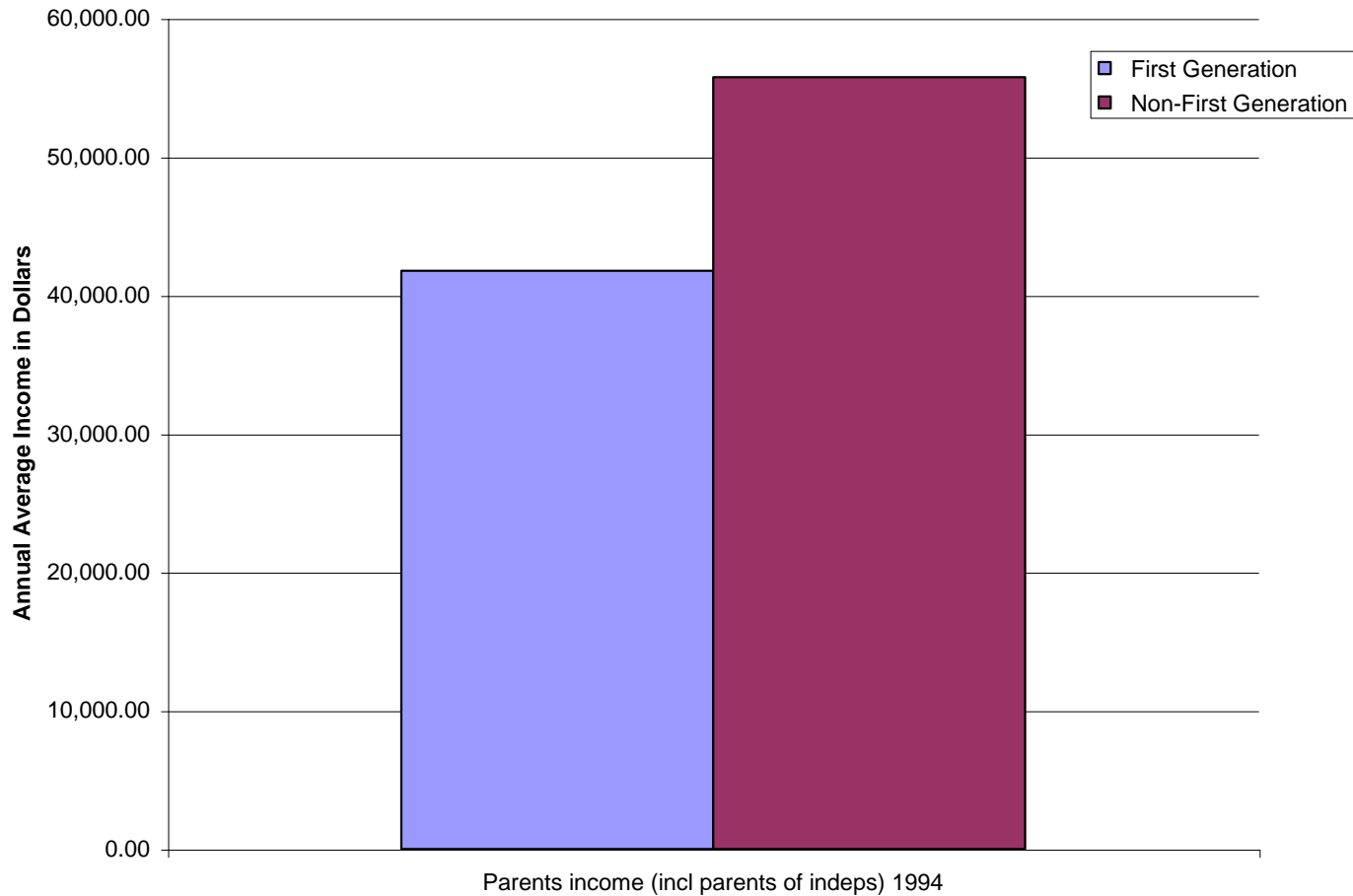
	Parents income (incl parents of indeps) 1995	sd
Total	50,928.00	2,953.40
Either parent-highest education level First Generation (N=433)	41,774.20	4,532.10
Moderate Parental Level of Education (N=267)	45,858.20	2,208.20
High Parental Level of Education (N=432)	63,504.00	4,299.00

Source: U.S. Department of Education, National Center for Education Statistics,
1995–96 Beginning Postsecondary Students Longitudinal Study, Second Follow-up
(BPS:96/01).

* 1995, includes parents of independent students

Phase I Results : Average Annual Parental Income for First Generation vs. Non First Generation Community College Students

Comparison of Average Parental Income Levels
(Including Parents of Independent Students)



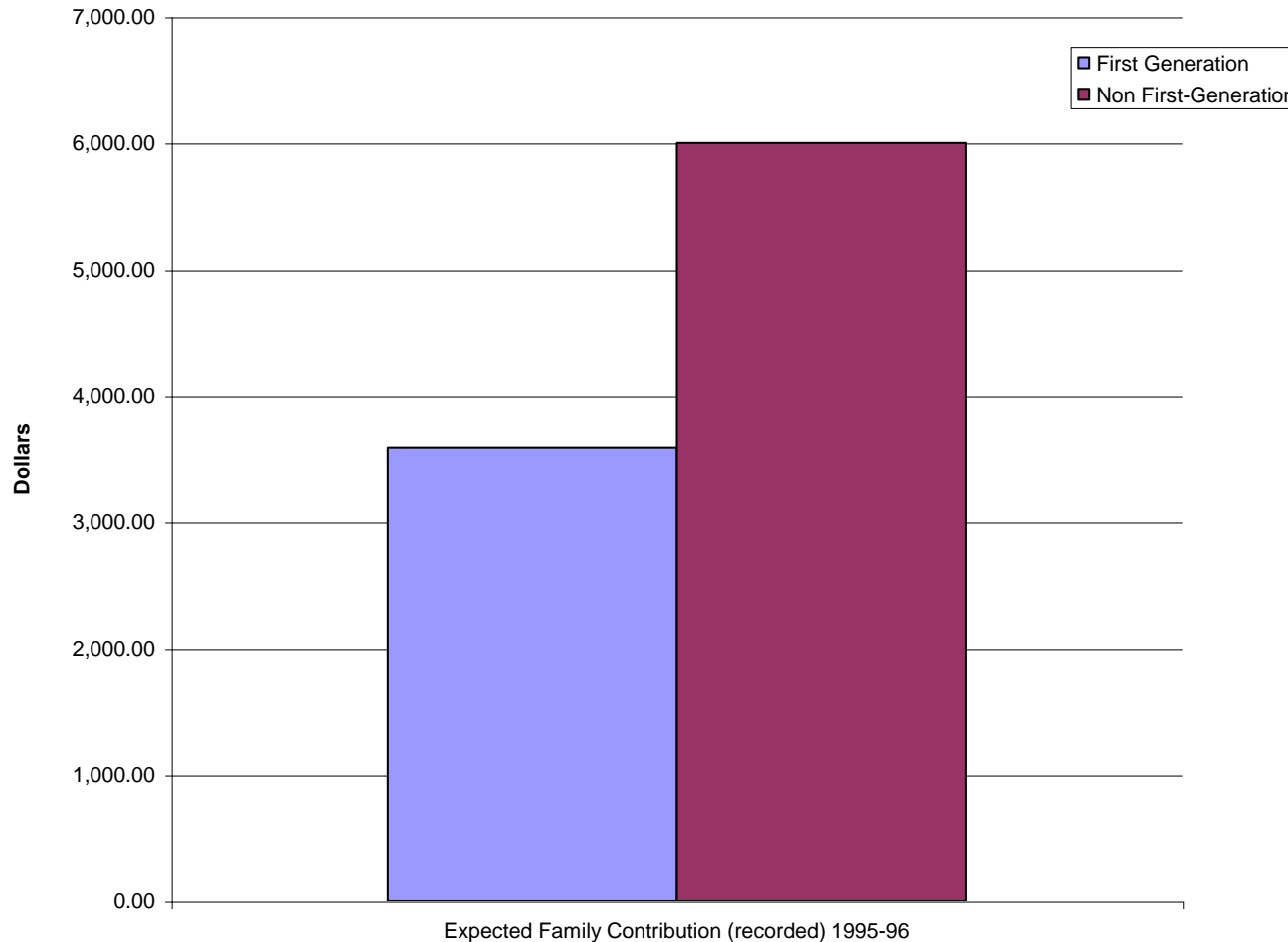
Average* Expected Family Contribution Toward First Year Expenses of First Generation, Moderate, and High Parental Levels of Education

	Expected Family Contribution (recorded) 1995-96
Total	4,916.90
Either parent-highest education level First Generation (N=323)	3,592.70
Moderate Parental Education (N=330)	4,376.50
High Parental Education (N=579)	7,081.00

Source: U.S. Department of Education, National Center for Education Statistics, 1995-96 Beginning Postsecondary Students Longitudinal Study, Second Follow-up (BPS:96/01).

* 0 values are excluded from the mean contribution

Phase I Results : Average* Expected Family Contribution Toward First Year Expenses for First Generation vs. Non First Generation Community College Students



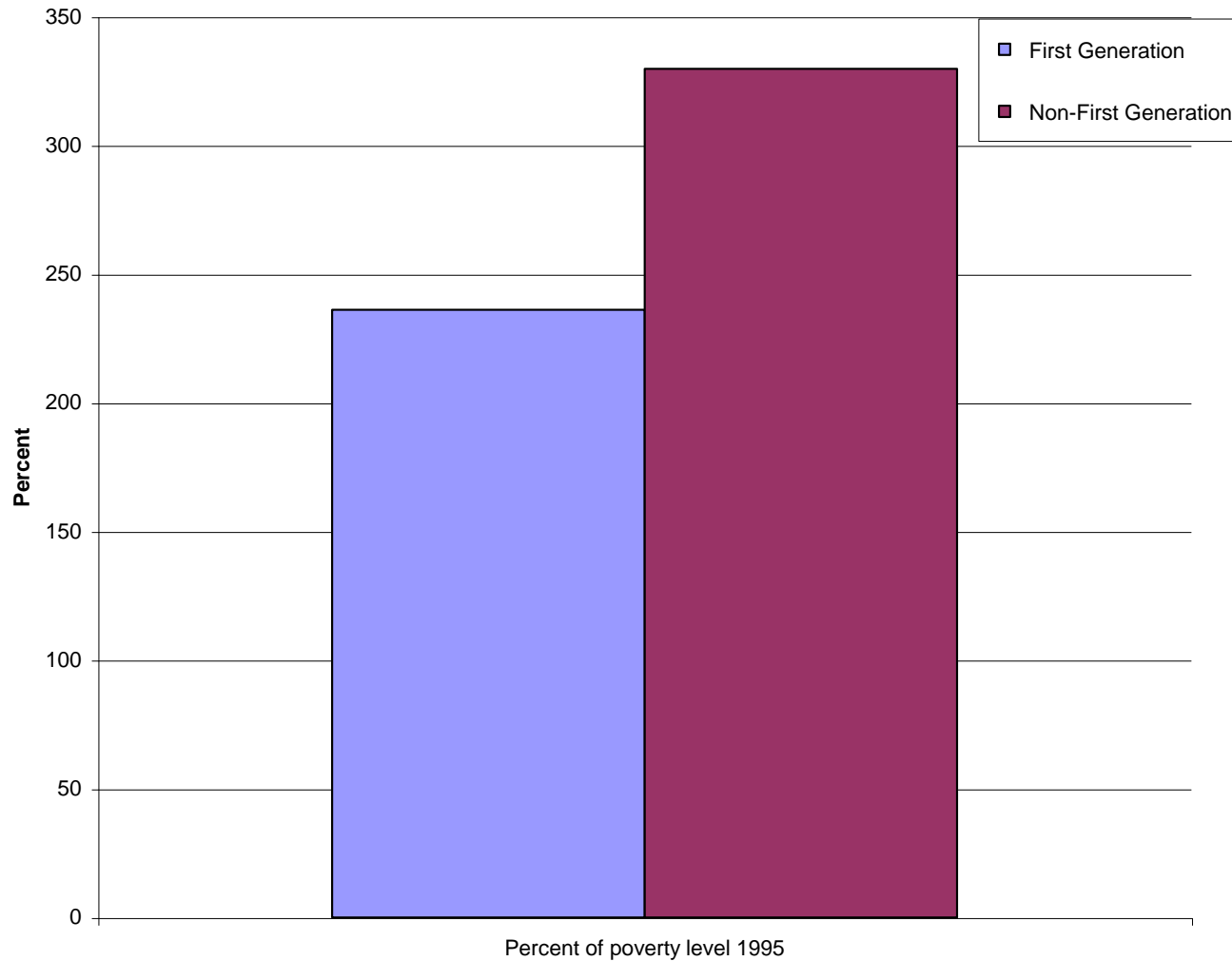
* 0 values are excluded from the mean contribution

Average Student Family Percentage Above Poverty Level for First Generation, Moderate, and High Parental Levels of Education

	Percent of poverty level 1995
Total	287.8
Either parent-highest education level	
First-Generation (N=752)	236.1
Moderate Parental Education (N=340)	281.5
High Parental Education (N=488)	376.6

Source: U.S. Department of Education, National Center for Education Statistics, 1995–96 Beginning Postsecondary Students Longitudinal Study, Second Follow-up (BPS:96/01).

Average Student Family Percentage Above Poverty Level for First Generation and Non First-Generation Students



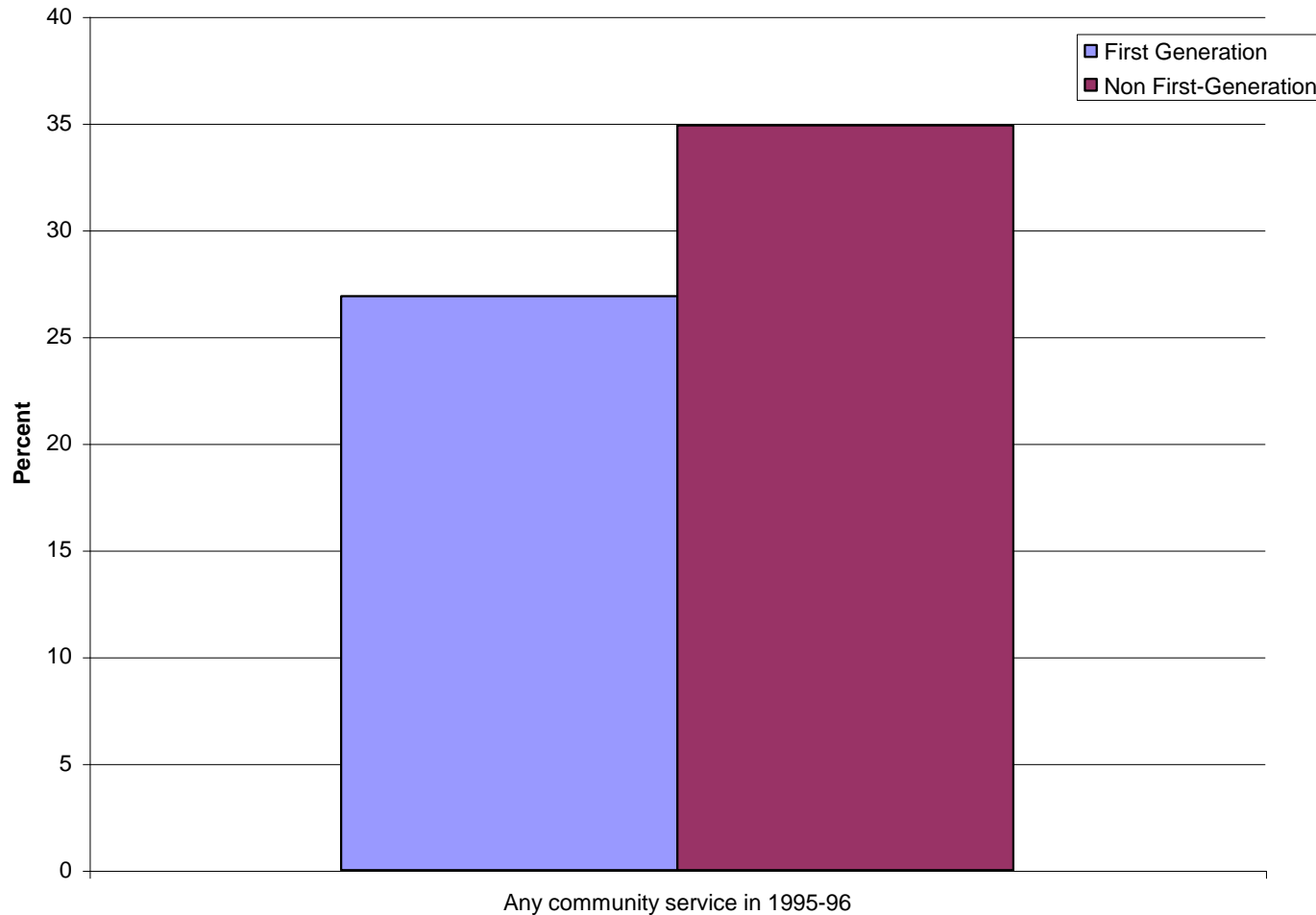
Community Service Participation in High School for First Generation, Moderate, and High Parental Levels of Education

	Any community service in 1995-96	
	No (%)	Yes (%)
Total	69.1	30.9
Either parent-highest education level		
First-Generation (N=740)	73.1	26.9
Moderate Parental Education (N=346)	68.6	31.4
High Parental Education (N=494)	62.9	37.1

Source: U.S. Department of Education, National Center for Education Statistics, 1995–96 Beginning Postsecondary Students Longitudinal Study, Second Follow-up (BPS:96/01).

Community Service Participation in High School for First Generation, Moderate, and High Parental Levels of Education

Community Service Reported in 1995-96 for High School

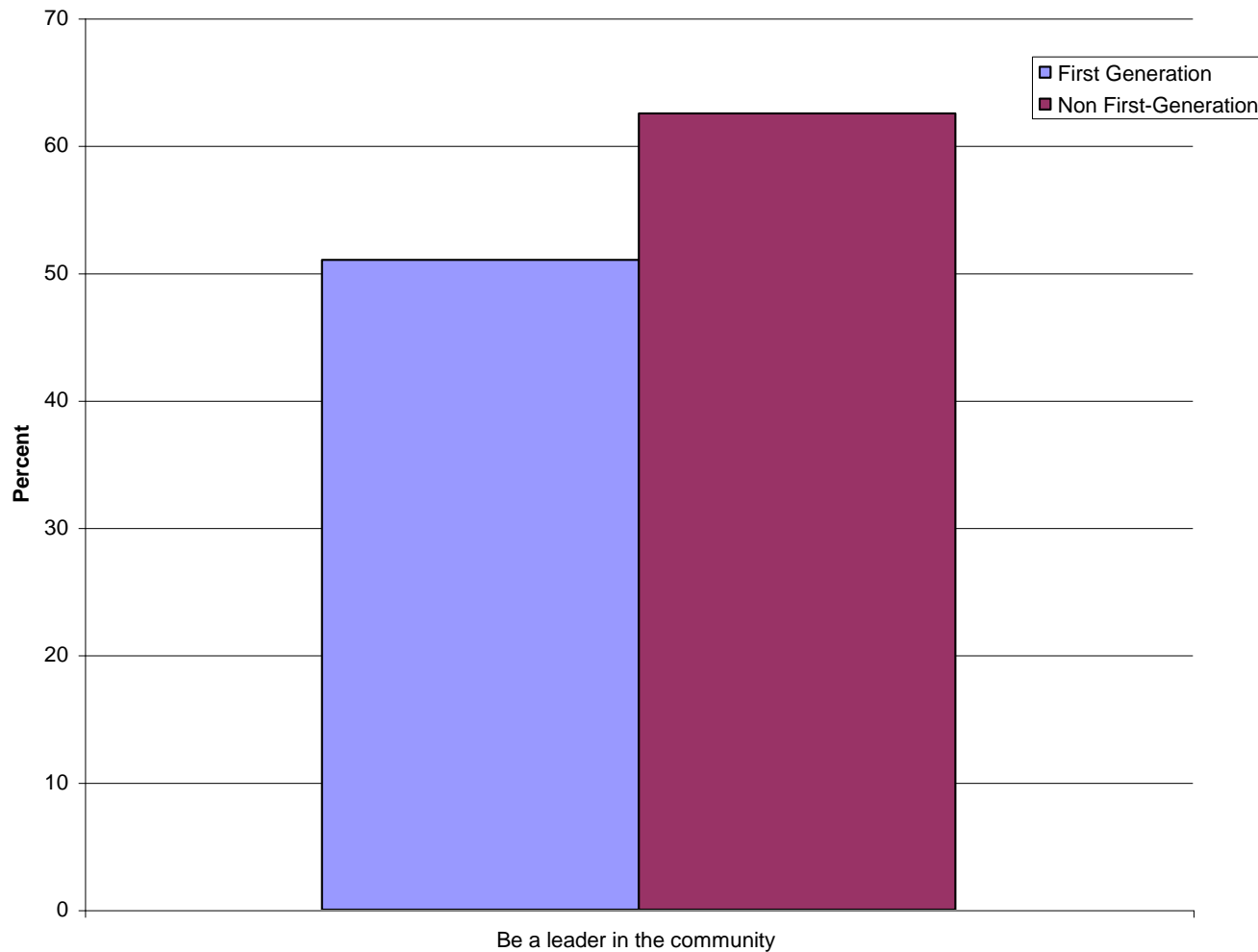


Ambition of being a leader in the community for First Generation, Moderate, and High Parental Levels of Education

Be leader in community 1995-96

	No (%)	Yes (%)
Total	42.9	57.2
Either parent-highest education level		
First Generation	49.0	51.0
Moderate Parental Education	38.3	61.7
High Parental Education	37.4	62.7

Ambition of being a leader in the community for First Generation and Non First Generation Students

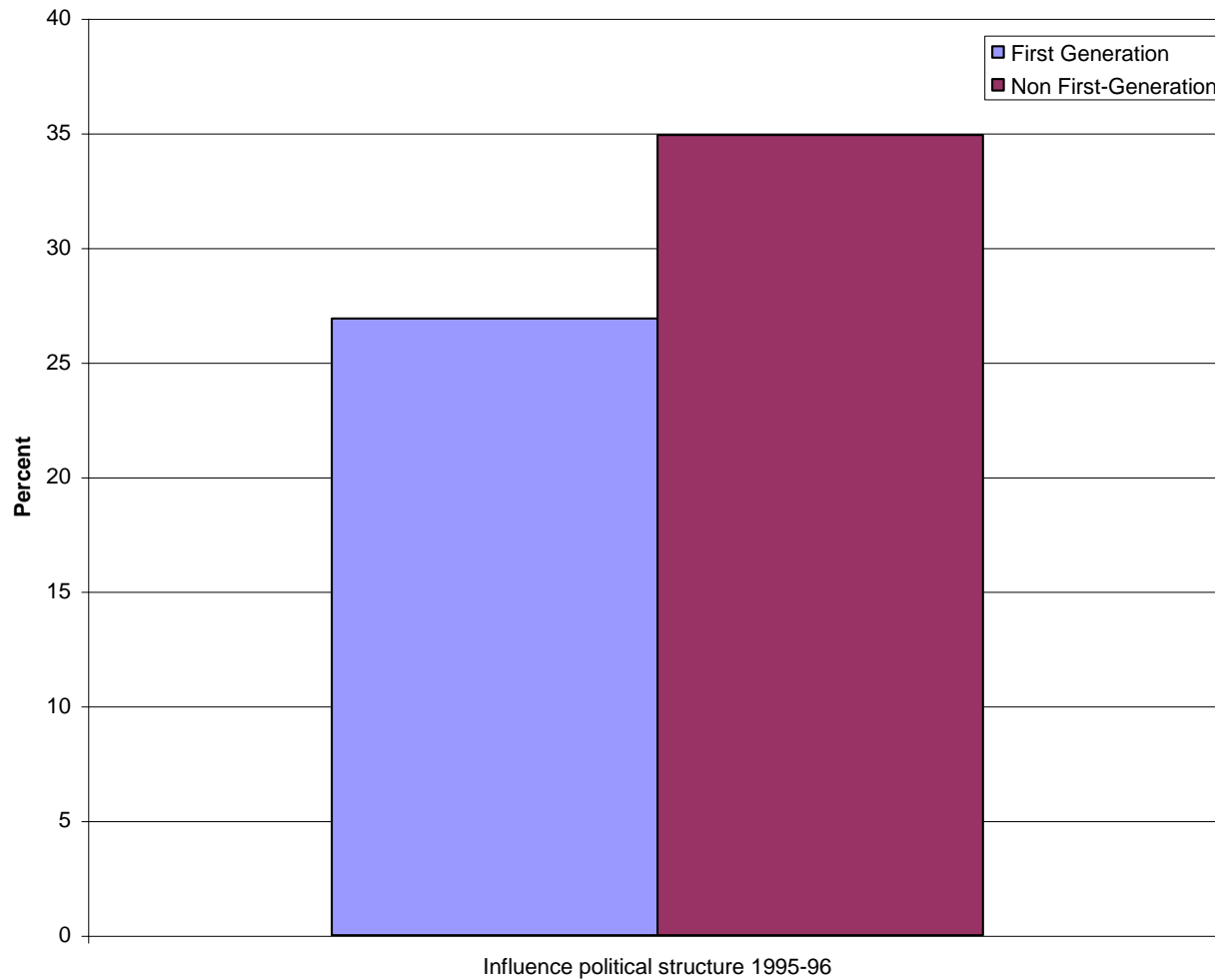


Indicated interest in influencing a political structure for First Generation, Moderate, and High Parental Levels of Education

	Influence political structure 1995-96	
	No (%)	Yes (%)
Total	64.8	35.2
Either parent-highest education level		
First Generation	64.9	35.1
Moderate Parental Education	67.1	32.9
High Parental Education	62.6	37.4

Source: U.S. Department of Education, National Center for Education Statistics, 1995-96 Beginning Postsecondary Students Longitudinal Study, Second Follow-up (BPS:96/01).

Indicated interest in influencing a political structure for First Generation and Non First Generation Students



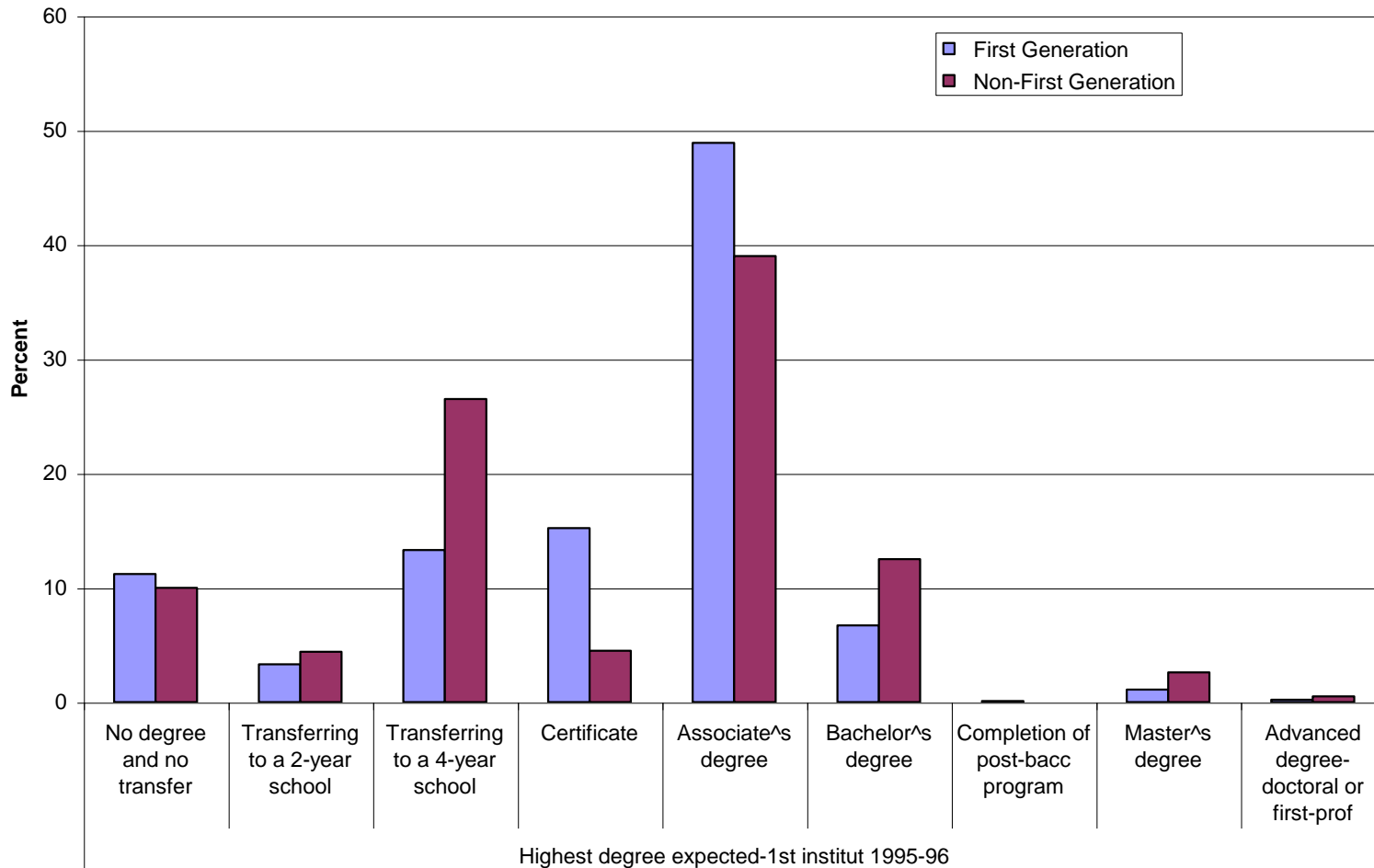
Education Goals at the onset of their college experience (1995) for First Generation, Moderate, and High Parental Levels of Education

	Highest degree expected-1st institut 1995-96								
	No degree and no transfer (%)	Transferring to a 2-year school (%)	Transferring to a 4-year school (%)	Certificate (%)	Associate's degree (%)	Bachelor's degree (%)	Completion of post-bacc program (%)	Master's degree (%)	Advanced degree-doctoral or first-prof (%)
Total	10.9	3.9	20.4	9.4	43.4	9.7	0.1	1.9	0.4
Either parent-highest education level									
First Generation (N=681)	11.2	3.3	13.3	15.2	48.9	6.7	0.1	1.1	0.2
Moderate Parental Education (N=319)	7.7	6	26.3	7.7	39.6	10.8	0	1.6	0.4
High Parental Education (N=473)	10.5	3.4	28	2.2	38.1	14.1	0.1	3	0.7

Source: U.S. Department of Education, National Center for Education Statistics, 1995-96 Beginning Postsecondary Students Longitudinal Study, Second Follow-up (BPS:96/01).

Education Goals at the onset of their college experience (1995) for First Generation and Non First Generation Students

Degree Goals During First Year of College



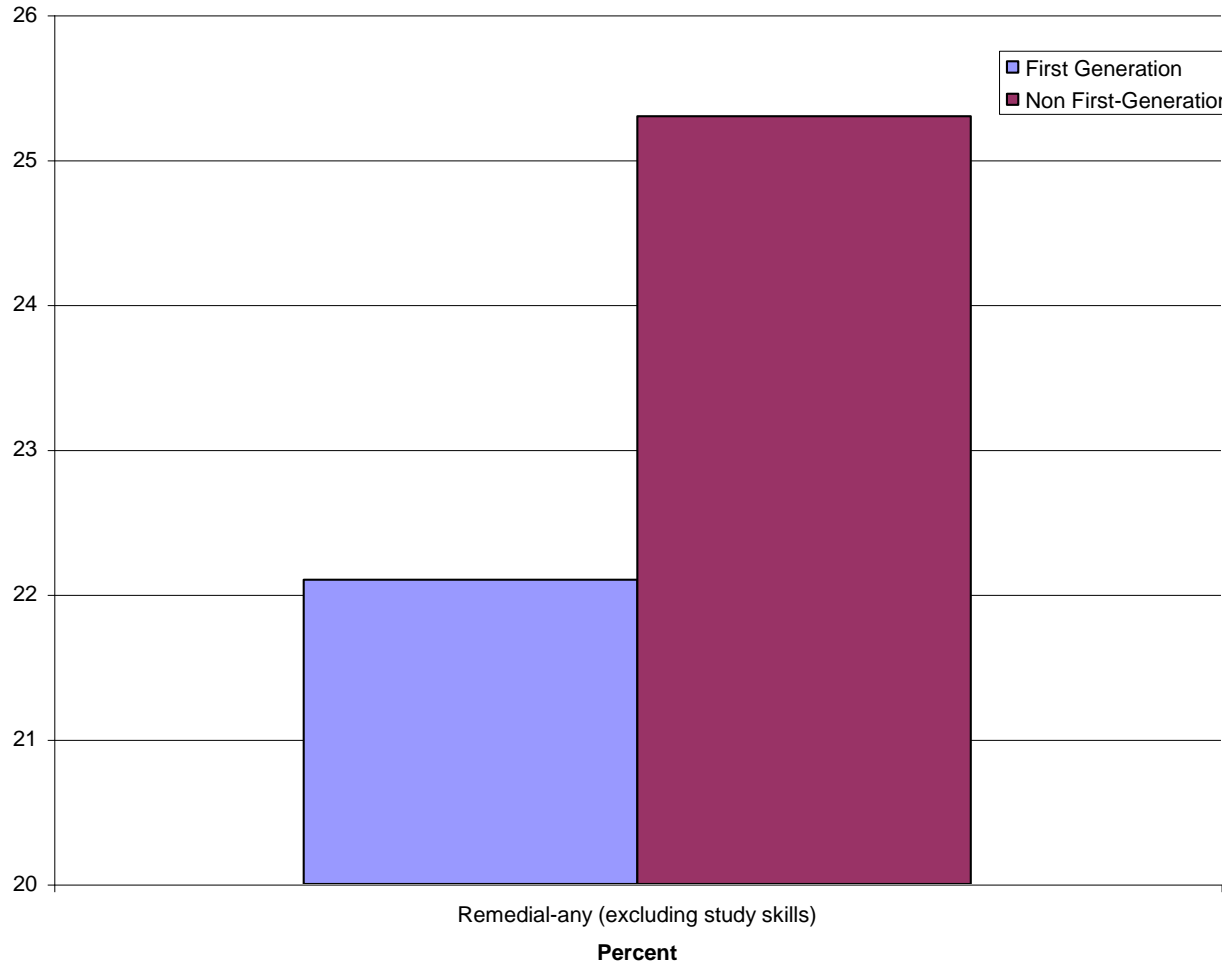
Percentage of Whether or Not Student Required Remedial Coursework in College for First Generation, Moderate, and High Parental Levels of Education

Remedial-any (excl study skills) 1995-96

	No (%)	Yes (%)
Total	76.4	23.6
Either parent-highest education level		
First Generation (N=727)	77.9	22.1
Moderate Parental Education (N=344)	75.7	24.3
High Parental Education (N=486)	75.7	24.3

Source: U.S. Department of Education, National Center for Education Statistics, 1995–96 Beginning Postsecondary Students Longitudinal Study, Second Follow-up (BPS:96/01).

Percentage of Whether or Not Student Required Remedial Coursework in College for First Generation and Non First Generation Students

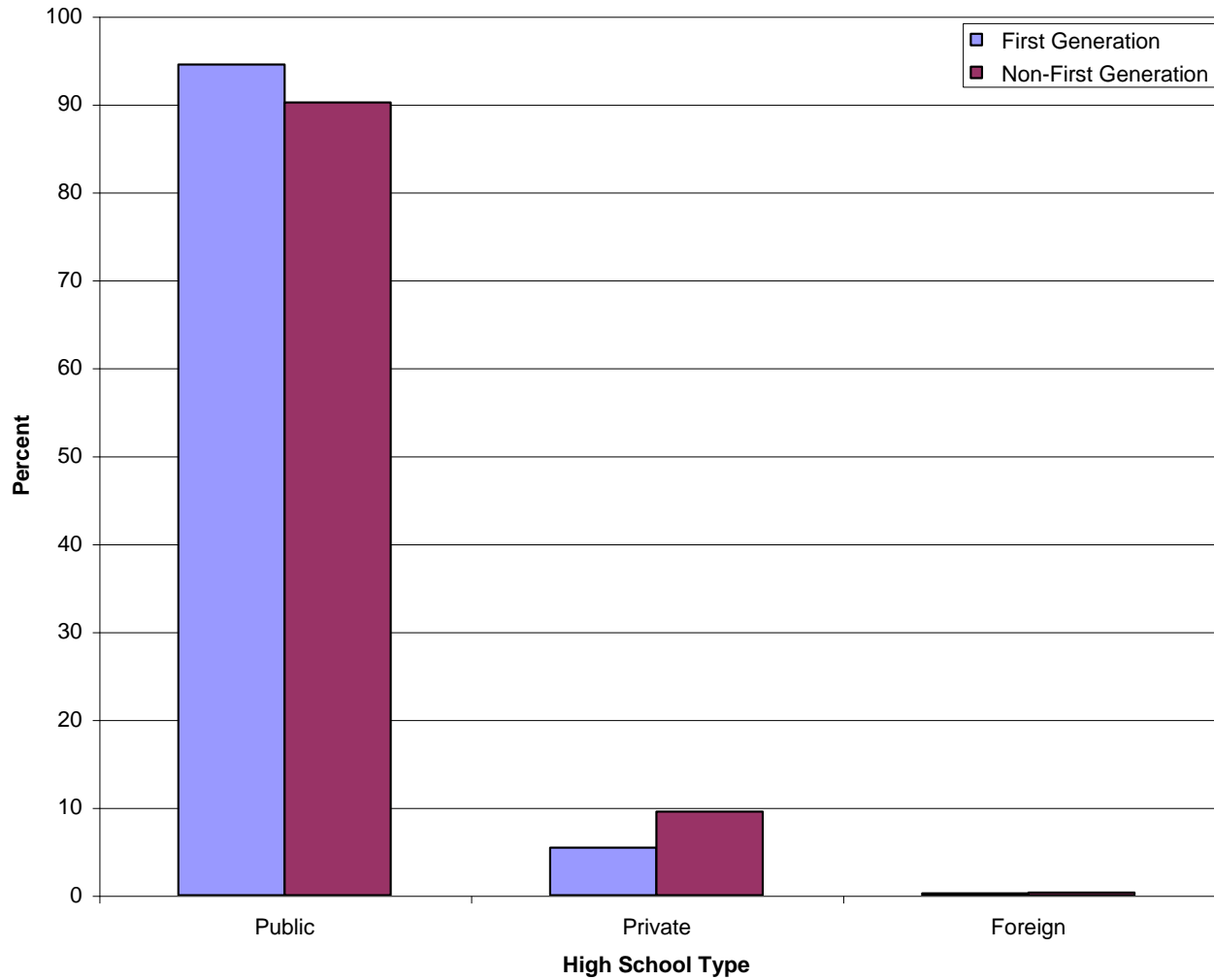


High School type attended for First Generation, Moderate, and High Parental Levels of Education

	Type of high school (student-reported)		
	Public (%)	Private (%)	Foreign HS (%)
Total	92.2	7.6	0.2
Either parent-highest education level			
First Generation (N=686)	94.5	5.4	0.2
Moderate Parental Education (N=309)	92.6	7.5	0
High Parental Education (N=463)	88	11.6	0.5
Standard Error (BRR)			

Source: U.S. Department of Education, National Center for Education Statistics, 1995–96 Beginning Postsecondary Students Longitudinal Study, Second Follow-up (BPS:96/01).

High School type attended for First Generation and Non First Generation Students



College budget per student adjusted for full-time and part-time attendance for First Generation, Moderate, and High Parental Levels of Education

**Total student budget
(attendance adj) 1995-96**

Total 5,571.00

Either parent-highest education level

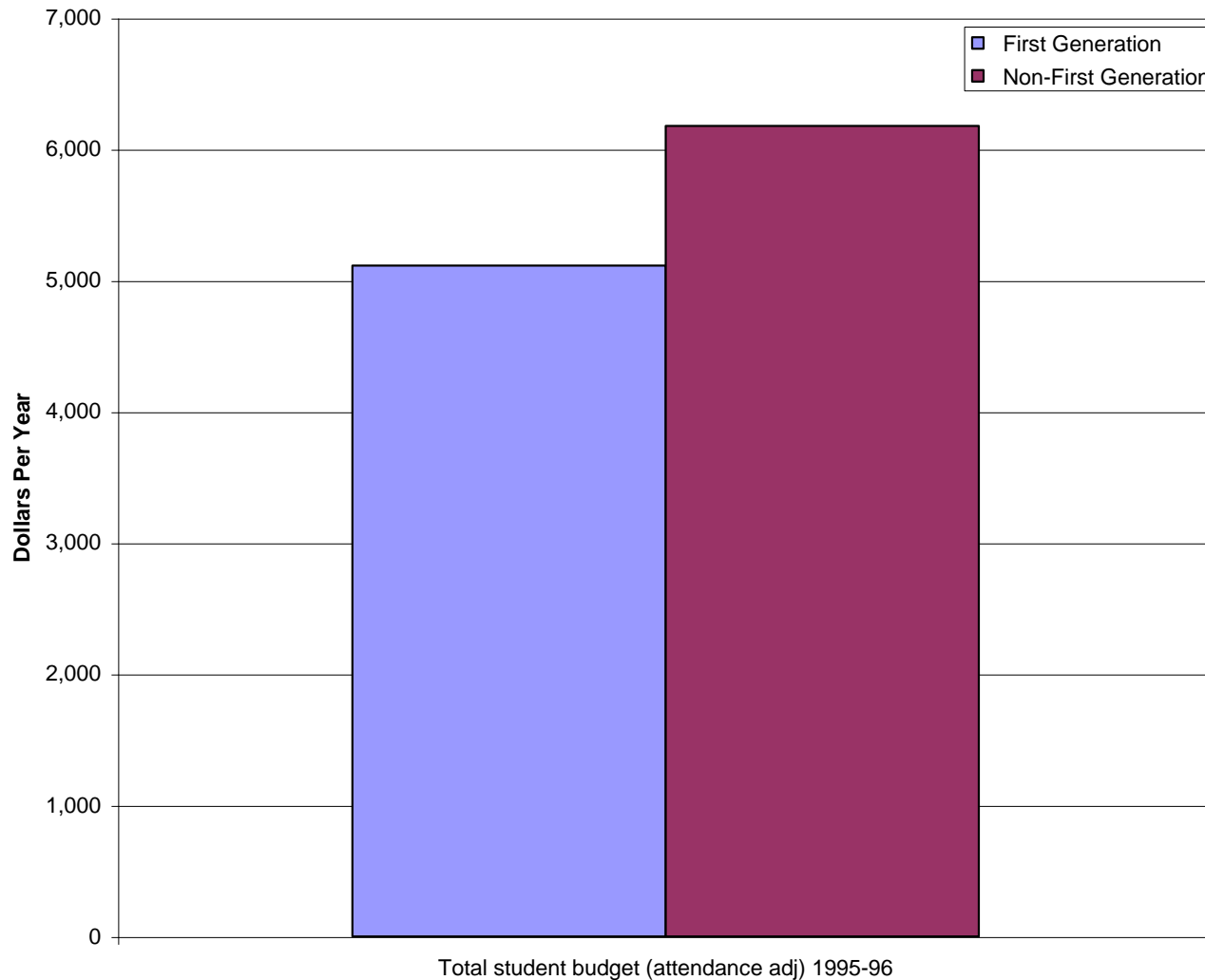
First Generation (N=762) 5,113.10

Moderate Parental Education (N=346) 5,556.30

High Parental Education (N=496) 6,596.90

Source: U.S. Department of Education, National Center for Education Statistics, 1995-96 Beginning Postsecondary Students Longitudinal Study, Second Follow-up (BPS:96/01).

College budget per student adjusted for full-time and part-time attendance for First Generation and Non First Generation Students



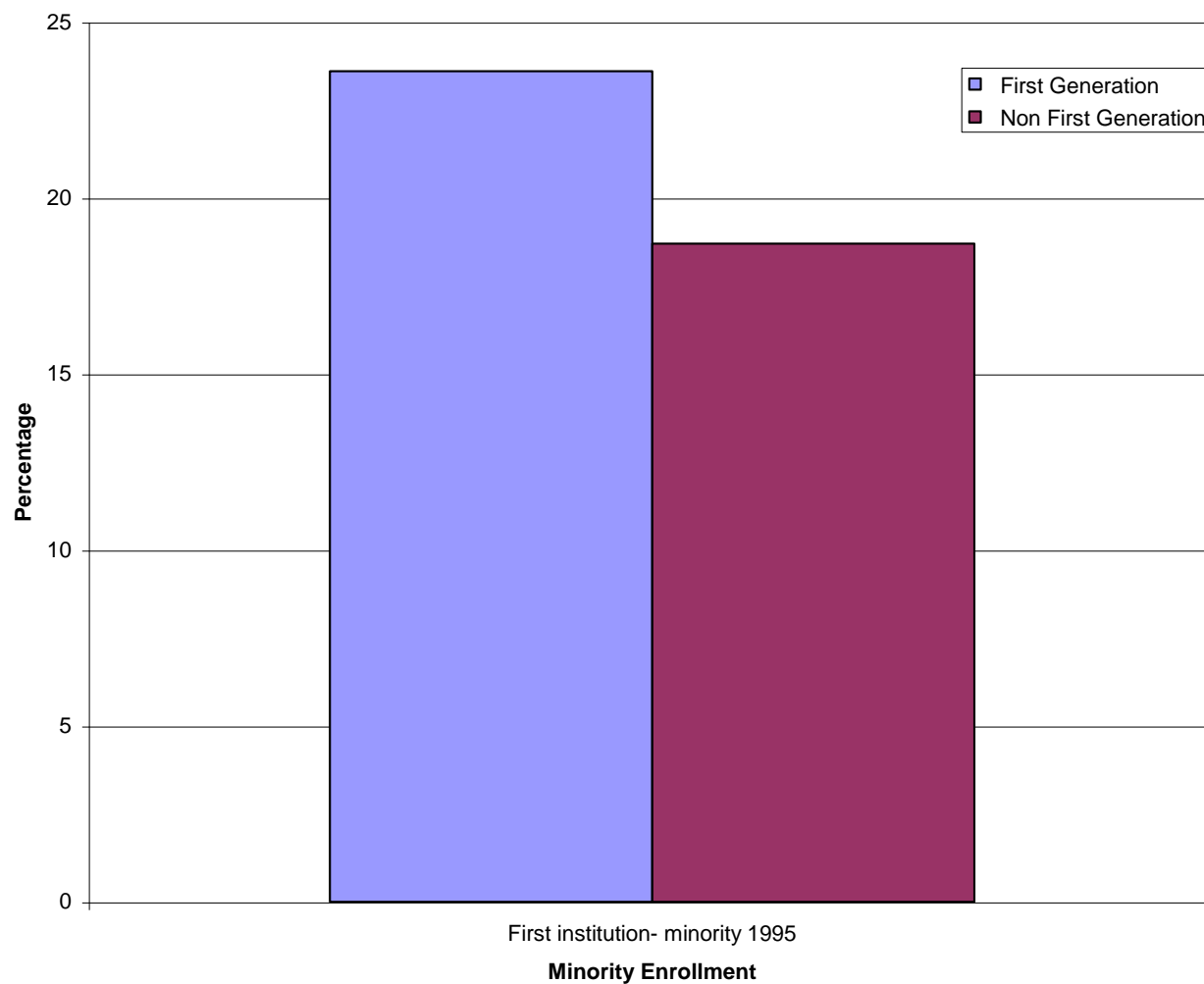
Percentage of Minorities enrolled at the first institution attended for Moderate, and High Parental Levels of Education

First institution- minority 1995

Total	21.0
Either parent-highest education level	
First Generation (N=764)	23.6
Moderate Parental Education (N=344)	19.4
High Parental Education (N=497)	18.2

Source: U.S. Department of Education, National Center for Education Statistics, 1995–96 Beginning Postsecondary Students Longitudinal Study, Second Follow-up (BPS:96/01).

Percentage of Minorities enrolled at the first institution attended for First Generation and Non First Generation Students



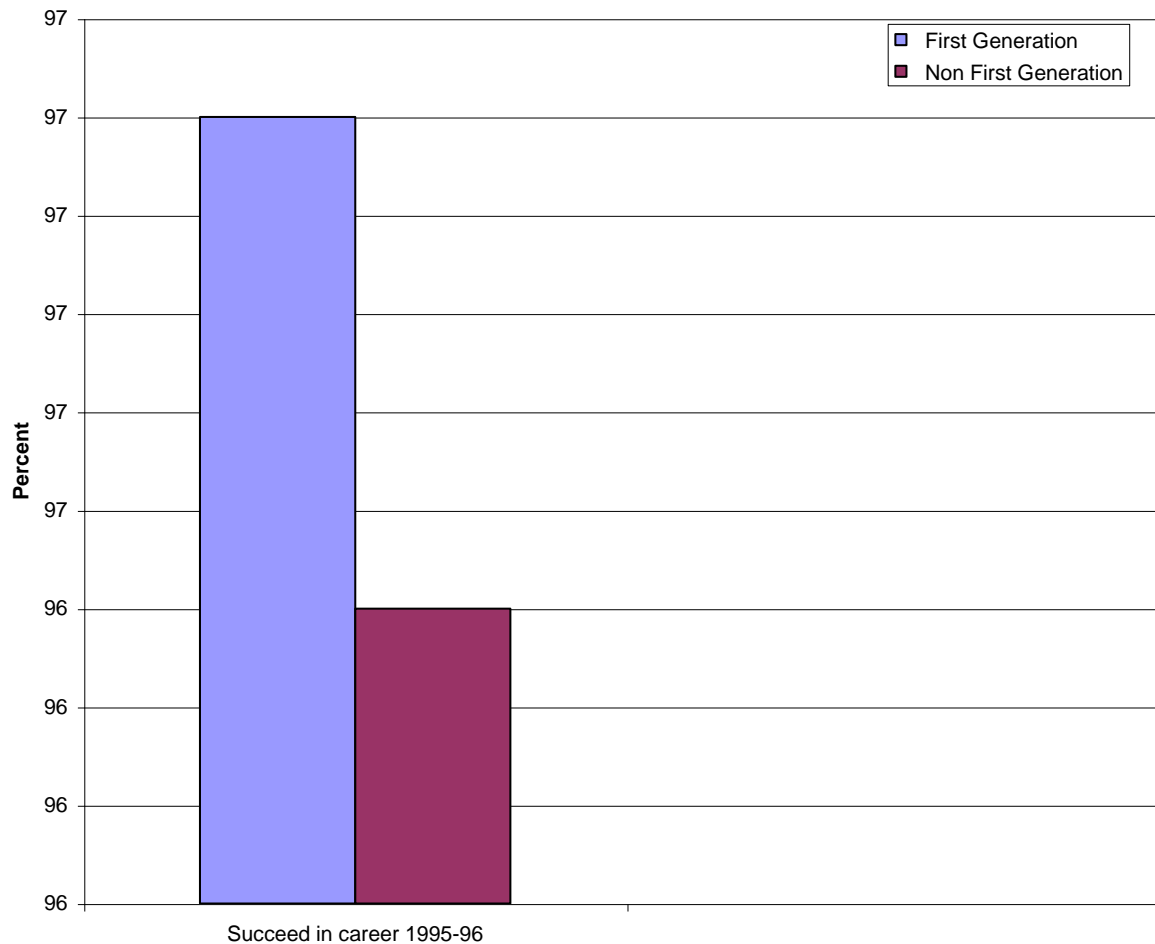
Percentage of Students Indicating Purpose of Enrollment in College was to Succeed in their Career for First-Generation, Moderate, and High Parental Levels of Education

Succeed in career 1995-96

	No (%)	Yes (%)
Total	3.3	96.7
Either parent-highest education level		
First Generation (N=726)	3.1	96.9
Moderate Parental Education (N=346)	4.1	95.9
High Parental Education (N=489)	3.5	96.5

Source: U.S. Department of Education, National Center for Education Statistics, 1995-96 Beginning Postsecondary Students Longitudinal Study, Second Follow-up (BPS:96/01).

Percentage of Students Indicating Purpose of Enrollment in College was to Succeed in their Career for First Generation and Non First Generation Students



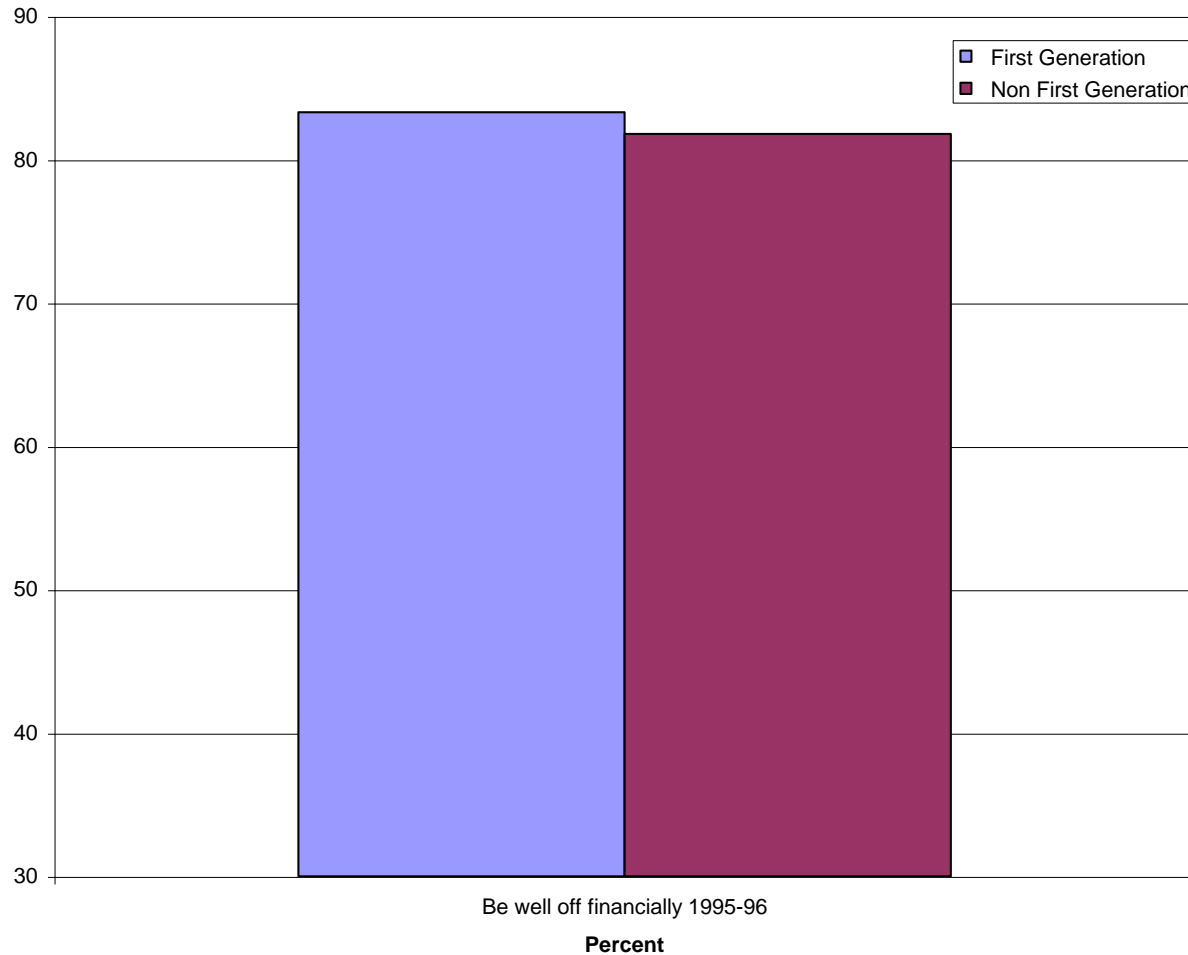
Percentage of First-Generation, Moderate, and High Parental Levels of Education Students Indicating Purpose of Enrollment in College was to “Be Well Off Financially”

Be well off financially 1995-96

	No (%)	Yes (%)
Total	17.4	82.6
Either parent-highest education level		
First Generation (N=724)	16.7	83.3
Moderate Parental Level of Education (N=346)	19.2	80.8
High Parental Level of Education (N=488)	17.8	82.2

Source: U.S. Department of Education, National Center for Education Statistics, 1995–96 Beginning Postsecondary Students Longitudinal Study, Second Follow-up (BPS:96/01).

Percentage of First-Generation, Moderate, and High Parental Levels of Education Students Indicating Purpose of Enrollment in College was to “Be Well Off Financially”



Phase II Results

Estimated Effects of Level of Parental Postsecondary Education (versus First-Generation Students) on Phase II Outcomes

Group	Degree Attainment		Academic Success		Salary		Number Months Enrolled in College	
	Beta ^b	Significance	Beta ^b	Effect Size	Beta ^b	Effect Size	Beta ^b	Effect Size
High Parental Education Level ^a	0.038	p<.05	0.67	p<.01	0.072	p<.01	0.05	p<.05
Moderate Parental Education Level ^a	-0.046	p<.05	0.57	p<.01	0.031	p<.05	0.073	p<.05
Model R ²	0.10		0.11		0.11		0.17	

^a Comparison group is first-generation community college students

^b Equations also includes controls for: all other factors introduced into the research design

Phase III Results

Estimated Effects of Level of Parental Postsecondary Education (versus First-Generation Students) on Phase II Outcomes

Group	College Satisfaction		Social Integration into College		Academic Acclimation at the College		Intellectual Growth		Volunteerism (2001)	
	Beta ^b	Significance	Beta ^b	Significance	Beta ^b	Significance	Beta ^b	Significance	Beta ^b	Significance
High Parental Education Level ^a	0.038	p<.05	0.084	p<.05	0.06	p<.05	-0.121	p<.05	0.12	p<.01
Moderate Parental Education Level ^a	0.04	p<.05	0.066	p<.05	0.015	p<.05	-0.056	p<.05	0.16	p<.01
Model R ²	0.05		0.15		0.14		0.071		0.09	

^a Comparison group is first-generation community college students

^b Equations also includes controls for: all other factors introduced into the research design