PURPOSE

• To examine the relationship between two Undergraduate Studies (UGS) programs (LEAP First Year Experience and Honors) and retention to the second year of college while controlling for the effect of other explanatory variables.

• A **secondary purpose** of this analysis is **methodological:** to show the difference between taking a **univariate** vs. **multivariate** approach to examining retention. Including alternative explanatory variables increases validity of the analysis.

BACKGROUND

In order to evaluate academic outcomes for students participating in UGS programs, we have been assembling a dataset that merges UGS program participation data with enrollment, demographic, and graduation data from OBIA.

METHOD

Subject Selection:

• The dataset represents all students enrolling in the University of Utah from 1999 through 2009 who were **first-time** (fewer than 13 credits from another college), **full-time** (enrolled in at least 12 credits their first semester) students.
This was done to isolate the impact of the University of Utah on new undergraduates.

• While the dataset goes through 2009, only those enrolling prior to the fall of 2007 are used in this particular analysis. One of the control variables used is **participation in advising** (proxy for motivation) and starting in 2007, advising became mandatory.

• Students were also selected who had completed at least two semesters at the University because LEAP students were defined as those who have completed the two semesters of LEAP. This explains the higher than normal retention rates.

Models: Because retention to second year is so impacted by missions for men, a separate analysis was conducted for men and women.

Variables:

1. Admissions Index –High school GPA and ACT score.
2. Family Income – Using the zip code from students' permanent address on application. Used as a proxy for socioeconomic status (SES). [May have error because it's for whole zip code.]
3. Advising – An indicator of whether the student voluntarily signed up for advising at the end of 1st semester to get priority registration slots for second semester. Proxy for motivation.
4. 2nd Semester GPA.

ANALYSIS

Two analyses were performed:
1. The **univariate analysis,** compared LEAP and non-LEAP and Honors and non-Honors students on their **academic indexes** and **second year retention**.
2. In the **multivariate analysis**, a logisti
were built – one with LEAP as a variable ar

The models were designed to predict reten
LEAP or Honors, and three variables repres
explanations for retention: **academic abi
motivation**.

The regression allows for an examination o
while controlling for the impact of other ex
other words, it simulates what the effect o
all other variables were held constant (had

UNIVARIATE RESULTS

1. Both male and female students who c
come to the University with **lower ac**
measured by high school GPA and AC
2. Women in **LEAP are more likely to**
second year than women not in L
between LEAP and non-LEAP men on
3. Same pattern holds in **Honors–Wom**
retained at higher levels than wo
is not true of men.

MULTIVARIATE RESULTS

LEAP

1. **Women** with **higher GPA's,** who pa
signed up for **advising** were **signifi
return** for their second year than wo
of these characteristics. *The regressi
is true when statistically "pretending
have any differences on the other va*

2. Men are more likely to return if they
GPA's and come from **higher media
not because of LEAP.**

HONORS

1. Using Honors in the regression, **wom
if they have a **higher GPA,** signed u
**from higher median income zip c
Honors.**
2. **Men** were more likely to return if the
they **came from higher income zip
Honors.

EPILOGUE (TAKE HOME MESSAGE)

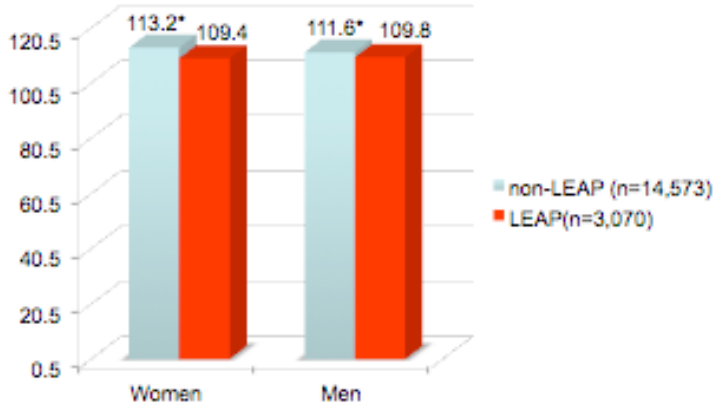
1. In the LEAP regression model, LEAP c
the explanation of why students retu
even when controlling for 2nd semest
motivation. This is not true for men.
2. With Honors in the regression model
explained by GPA, motivation and fam
GPA and family income for men, but

The Relationship of Two High Impact Programs to Retention Before and After Controlling for Academic Ability, SES, and Motivation - Mark St. André (mark.standre@utah.edu), Assistant Dean of Undergraduate Studies, Univ. of Utah

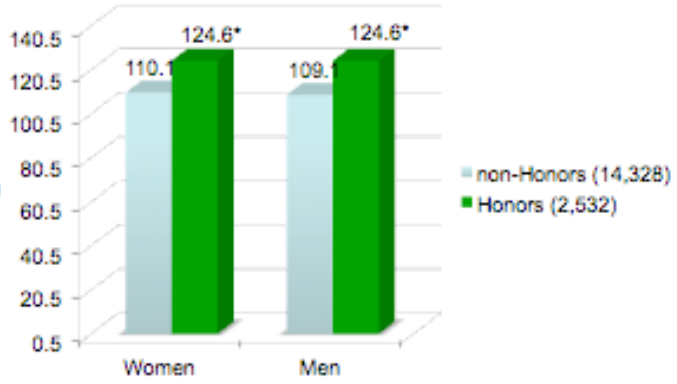
LEAP – First Year Experience

Honors College

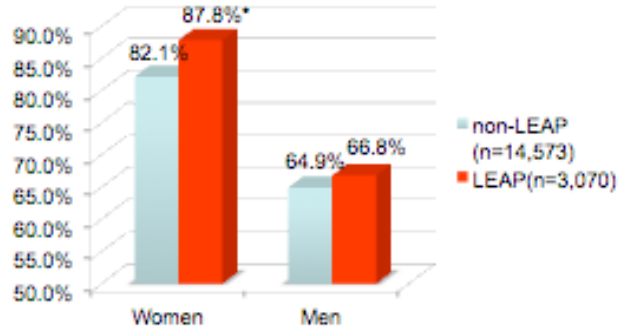
Admissions Index: LEAP vs. non-LEAP
1999-2006: *= p<.05



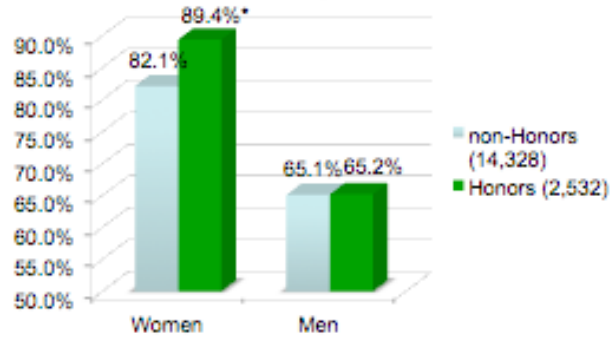
Admissions Index: Honors vs. non-Honors
1999-2006: * = p<.05



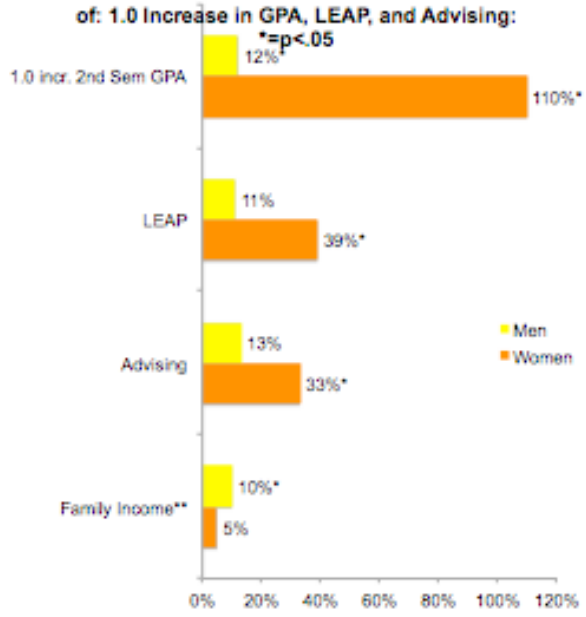
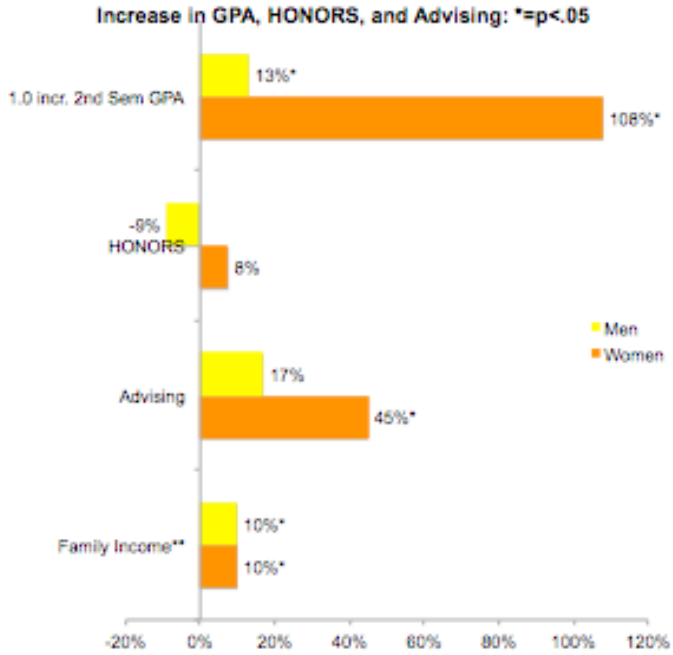
Retention: LEAP vs. non-LEAP
1999-2006: *= p<.05



Retention: Honors vs. non-Honors
1999-2006: * = p<.05



Percent Increase in Retention as the Result of: 1.0 Increase in GPA, LEAP, and Advising: *=p<.05



Percent Increase in Retention as the Result of: 1.0 Increase in GPA, HONORS, and Advising: *=p<.05