


The Relationship between FYE, Non-Traditional Factors, & Graduation



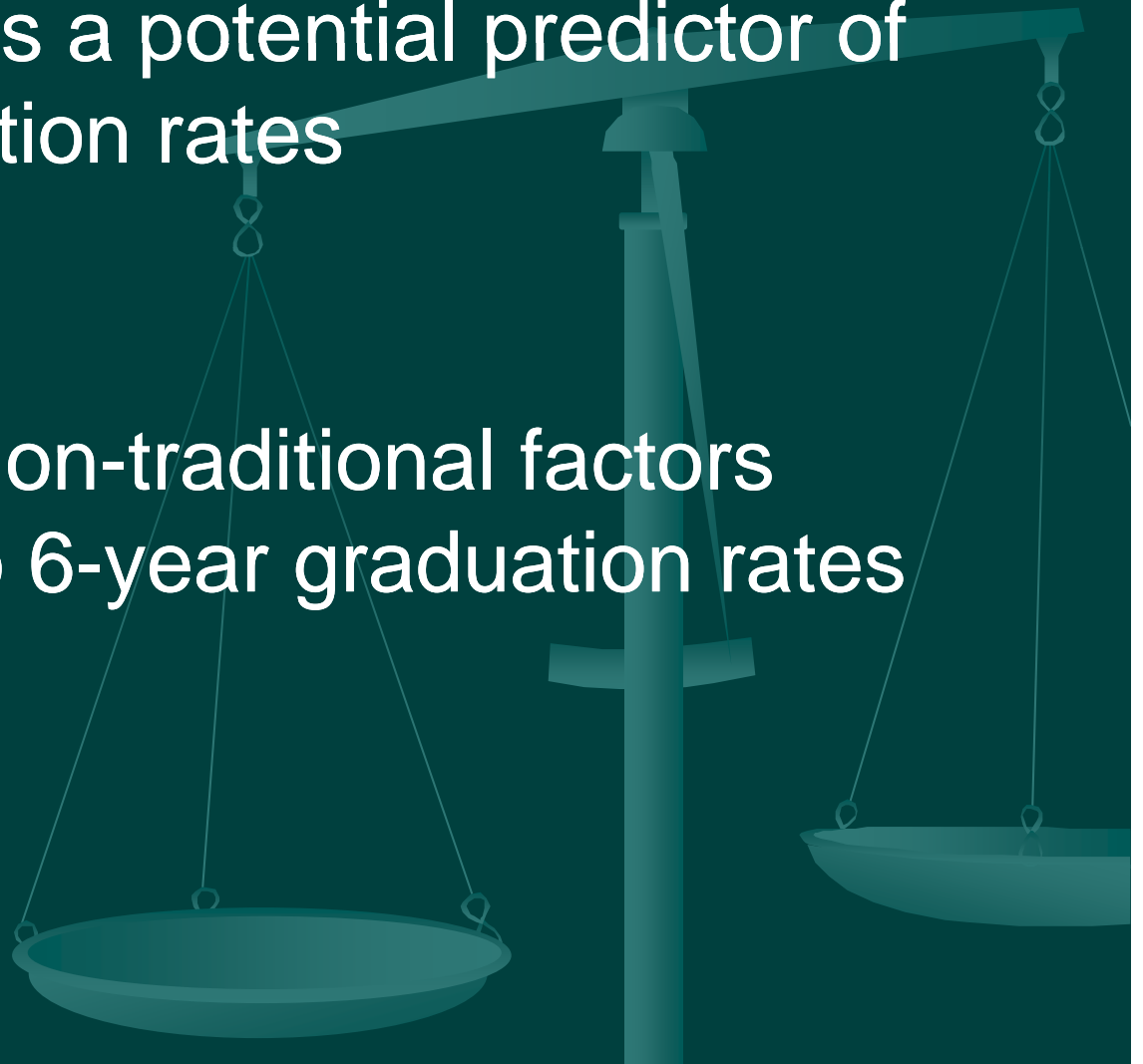
Steve Cavote
University of Nevada, Reno
Association for Institutional Research
Chicago – May 2006

First Year Experience (FYE)

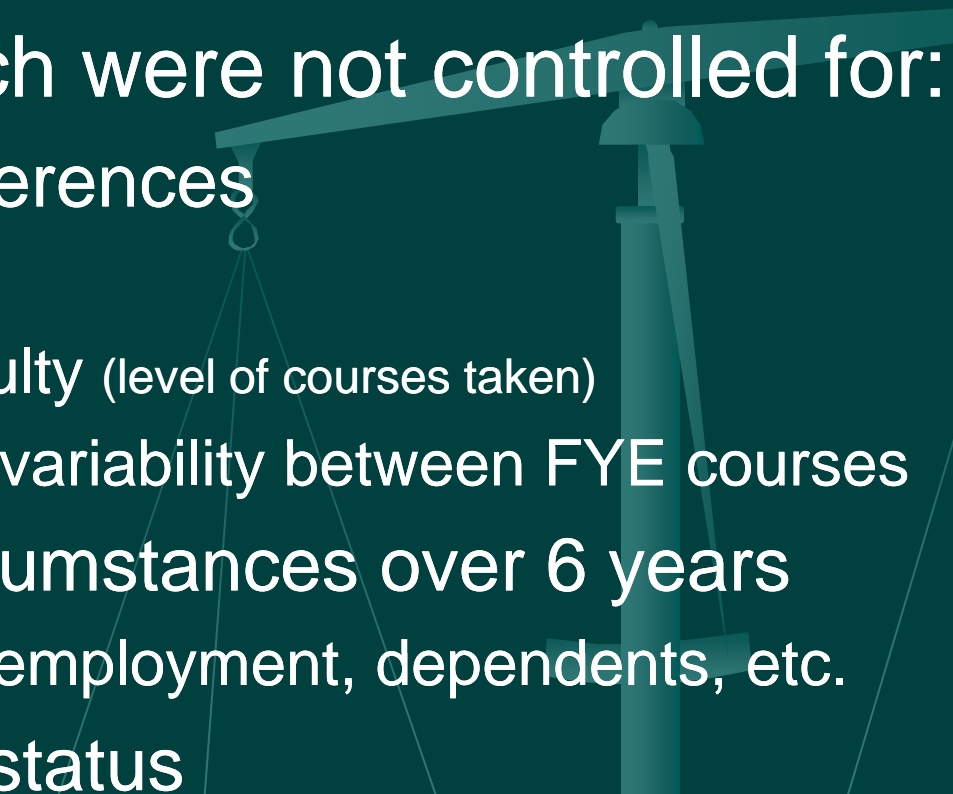
- South Carolina Transition Course Model
 - Brevard Policy Center (<http://www.firstyear.org/>)
 - Publications, Journal, Research & Surveys
 - Center for the Study of College Student Retention
 - Retention Resources (<http://www.cscsr.org/>)
 - Varieties of FYE courses
 - Special Intervention
 - Thematic & Cluster
 - Academic focus
 - Mixed (UNR)
- 

Research Objectives

- Assess FYE as a potential predictor of 6-year graduation rates
- Explore how non-traditional factors might relate to 6-year graduation rates



Some Limitations

- Sample size (n = 711)
 - Variables which were not controlled for:
 - Curricular differences
 - Credit loads
 - Course difficulty (level of courses taken)
 - Pedagogical variability between FYE courses
 - Individual circumstances over 6 years
 - Commuting, employment, dependents, etc.
 - Financial aid status
- 

SAMPLE

- 1999 first term students (n = 711)
 - 17 FYE sections, n = 379
 - 23 Eng Comp sections, n = 332
 - Gender and ethnicity representative of student body
 - ACT & high school GPA were different

Group	N	ACT	HSGPA	F99GPA	Graduated (% of Group)
FYE	379	23.78**	3.42**	2.84	192 (51%)
NFYE	332	22.86**	3.32**	2.79	163 (49%)
Total	711	12 to 36	1.98 to 4.0		355 (50%)

**p < .01

UNR's 6 year graduation rates '95 - 49%, '96 - 47%, '97 - 48%, '98 - 49%

■ Procedure

- Compared **FYE/NFYE** 6-year graduation rates
- Logistic Regression Model Variables
 - ACT & HS GPA, FYE, & F99GPA (1st semester)
 - Graduated (coded 0 or 1) was outcome measure
- Only **1st semester college GPA** was significant

■ 1st to 2nd Year Persistence

- Graduated – 98.6% returned 2nd fall semester
- Did NOT graduate – 63% returned 2nd fall semester

Graduated	FYE	NFYE	Total	ACT	HSGPA	F99GPA
YES	192	163	355	23.932***	3.480***	3.207****
NO	187	169	356	22.710***	3.258***	2.425****
Total	379	332	711			

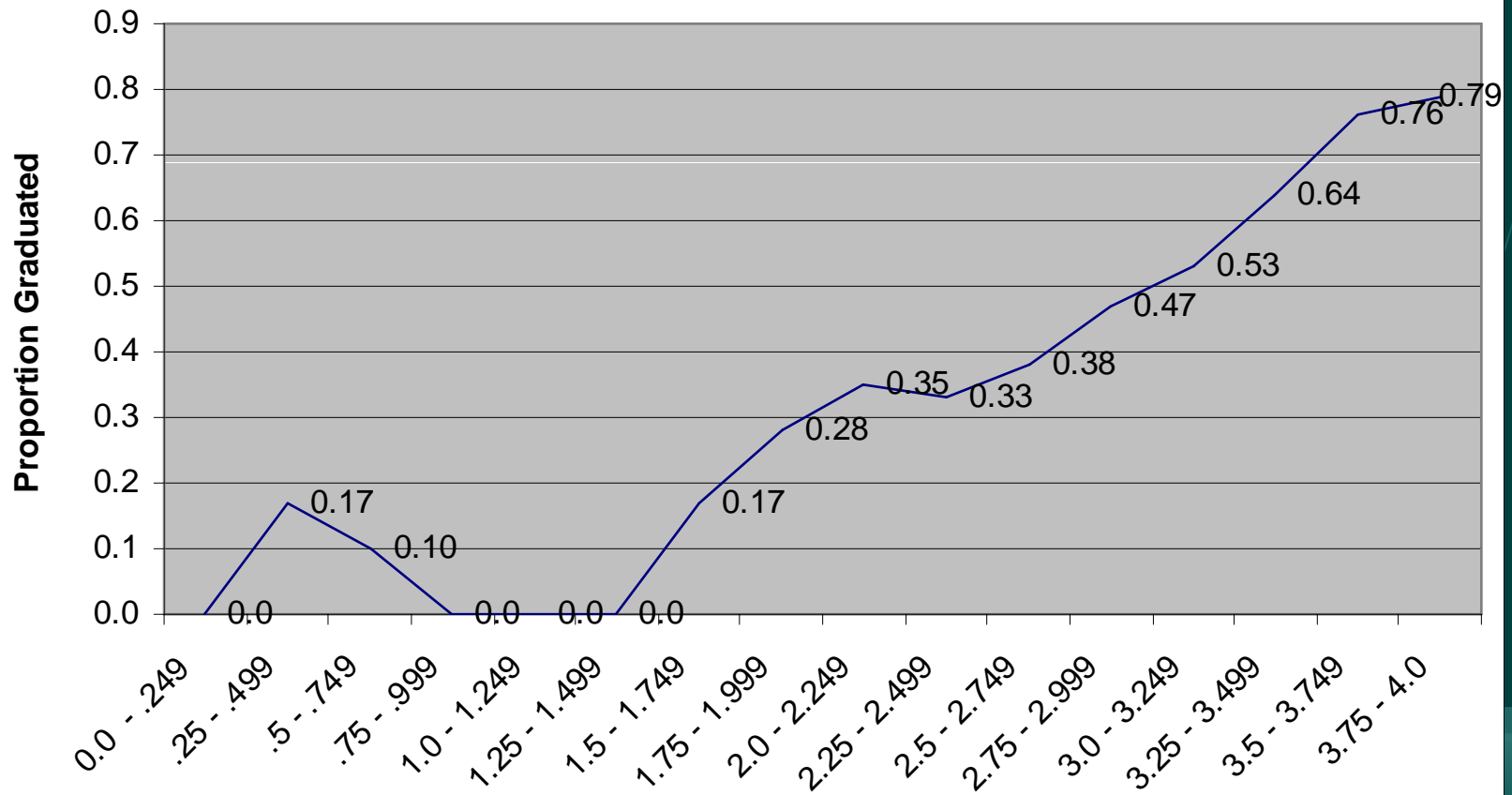
p <.001, *p <.0001

1995 - 1999 UNR Freshman ACT mean = 22

1 st Semester GPA	Grad – NO	Grad – Yes	Graduated %
0.0 – 0.249	14	0	0%
0.250 – 0.499	5	1	17%
0.500 – 0.749	9	1	1%
0.750 – 0.999	6	0	0%
1.000 – 1.249	9	0	0%
1.250 – 1.499	9	0	0%
1.500 – 1.749	25	5	17%
1.750 – 1.999	18	7	28%
2.000 – 2.249	33	18	35%
2.250 – 2.499	33	16	33%
2.500 – 2.749	48	30	39%
2.750 – 2.999	37	33	47%
3.000 – 3.249	37	41	53%
3.250 – 3.499	31	56	64%
3.500 – 3.749	23	74	76%
3.750 – 4.000	19	73	79%

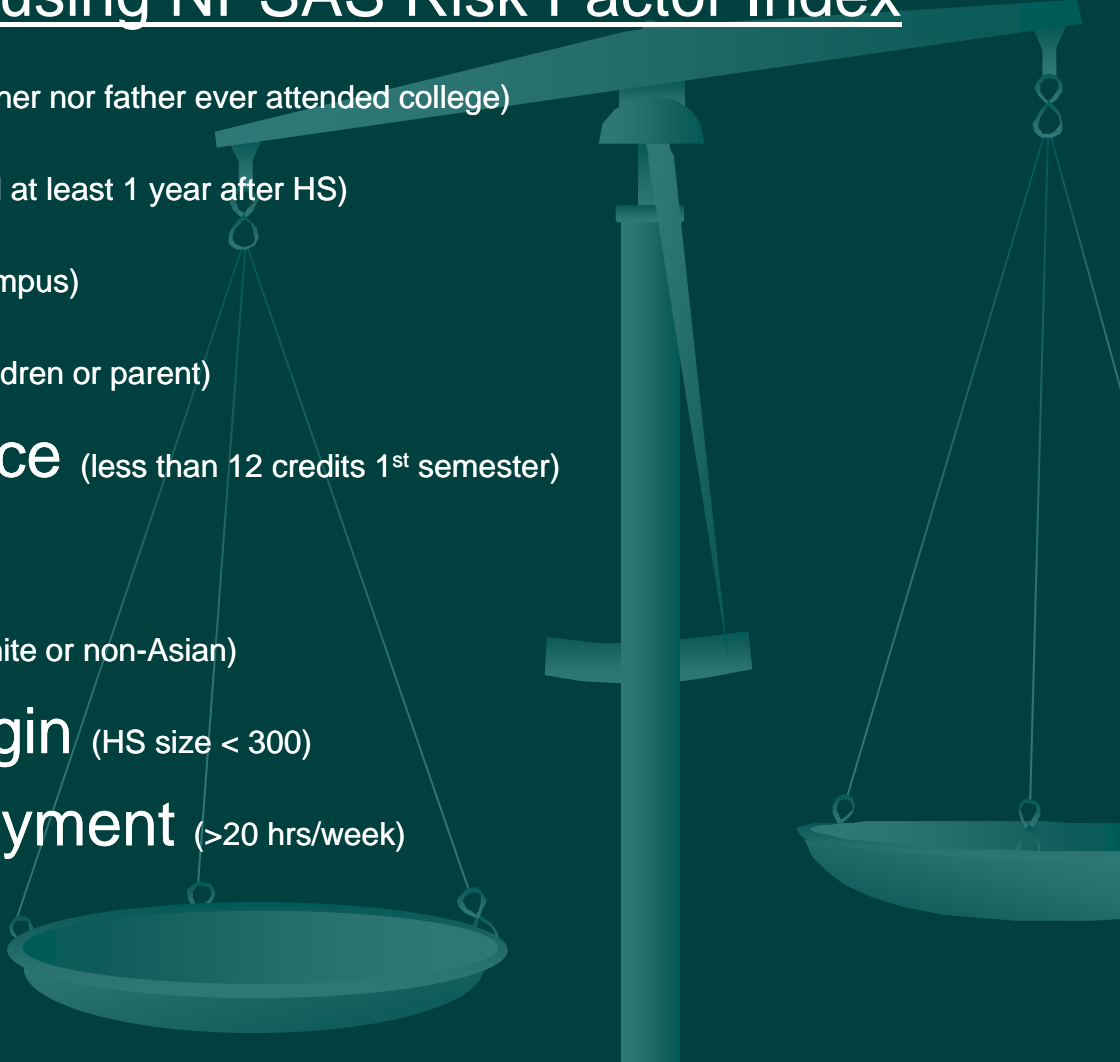
6-Year Graduation Rates

6 -Yr Graduation Proportions by 0.250 GPA intervals



Non-traditional Factors

Sample examined using NPSAS Risk Factor Index

1. **First generation** (mother nor father ever attended college)
 2. **Delayed entry** (skipped at least 1 year after HS)
 3. **Commuters** (drives to campus)
 4. **Dependent care** (children or parent)
 5. **Part-time attendance** (less than 12 credits 1st semester)
 6. **Age** (>23 when first enrolled)
 7. **Race/ethnicity** (non-white or non-Asian)
 8. **High School of Origin** (HS size < 300)
 9. **Off Campus employment** (>20 hrs/week)
- 

Non-traditional Factors

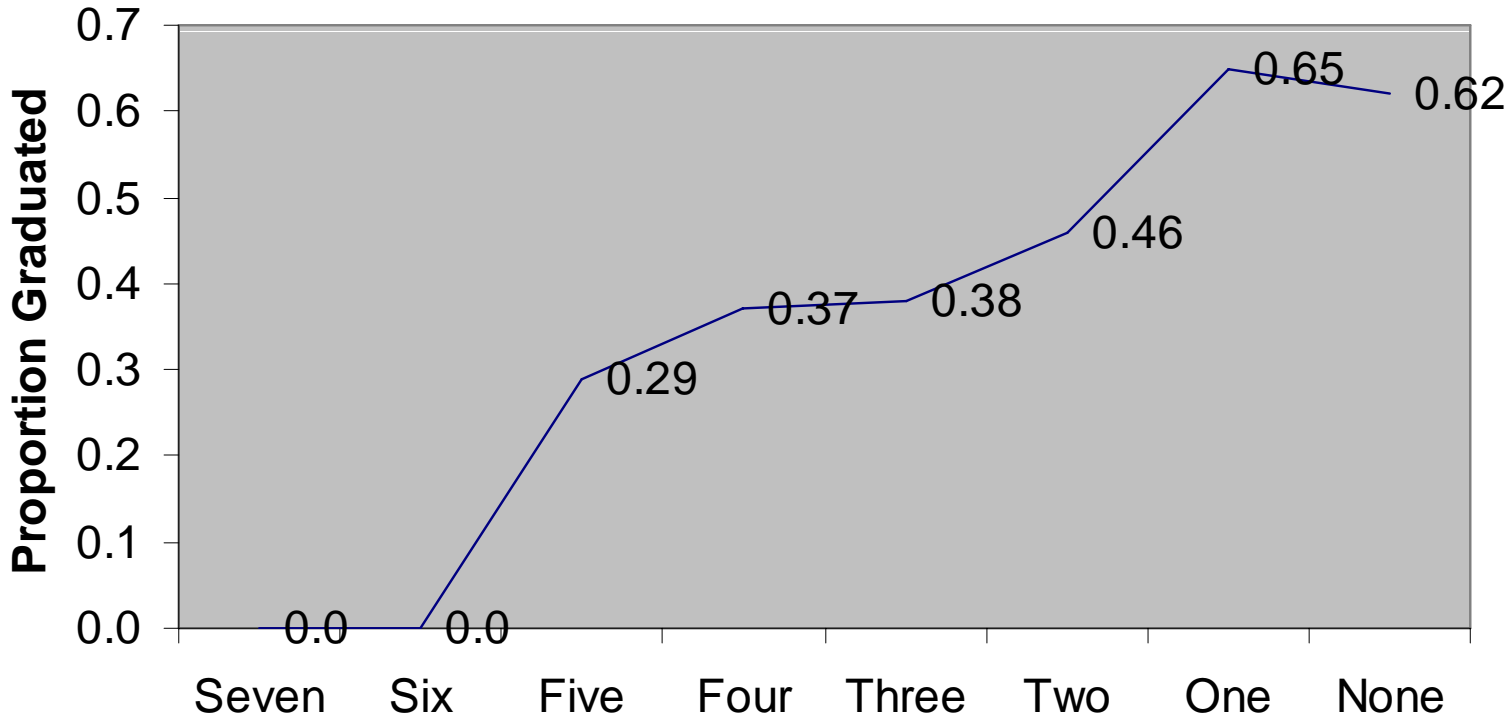
<u>Non-traditional factor</u>	N	% with	Grad	% Grad
Commuter	383	54%	176	46%
Off-Campus Employment 20+ hrs	319	45%	129	40%
1 st Semester 12+ months post HS Grad	262	37%	114	44%
Neither Parent Attended College	207	29%	101	49%
(Student Body=11%) Non-White	93	13%	34	37%
Part-Time Enrollment	52	7%	6	12%
HS Size < 328	26	4%	12	46%
Parent or Child Caregiver	24	3%	12	50%
Age (24+)	18	3%	7	39%
Graduated within 6 Years/n	355/711			
6 Year Graduation Rate	50%			

Number of Non-traditional Factors

<u>No. of Non-traditional factors</u>	N	%	Grads	% Grads of Factor
None (0)	96	14%	59	62%
One (1)	184	26%	119	65%
Two (2)	197	28%	91	46%
Three (3)	154	22%	59	38%
Four (4)	40	8%	22	37%
Five (5)	17	2%	5	29%
Six (6)	2	.3%	0	0%
Seven (7)	1	.1%	0	0%
Total	711	100%	355	50%

Graduation Rate by NT Factors

6-Year Graduation Rate by Number of NT Factors



Risk Factor Index (*NPSAS)

Status Group	N	Sample	*NPSAS	Grads (%)
Traditional	96	14%	70%	59 (61%)
Minimally Non-Traditional (NT)	184	26%	18%	119 (65%)
Moderately NT	351	49%	8%	150 (43%)
Highly NT	80	11%	5%	27 (35%)
TOTAL	711			355 (50%)

*Figure 3. (page 4)

Status Group	TOTAL	Grads (%)
Traditional	280	178 (64%)
Non-Traditional	431	177 (41%)
TOTAL	711	355 (50%)

Traditional v Non-Traditional

Group	N	ACT	HSGPA	F99GPA	Graduated (% Group)
Traditional	96	23.83*	3.397	3.035*	59 (61%)
Minimally NT	184	23.93*	3.411	2.958*	119 (65%)
Moderately NT	351	23.12	3.359	2.742	150 (43%)
Highly NT	80	21.88*	3.267	2.549*	27 (35%)
TOTAL	711				355 (50%)

*p<.05

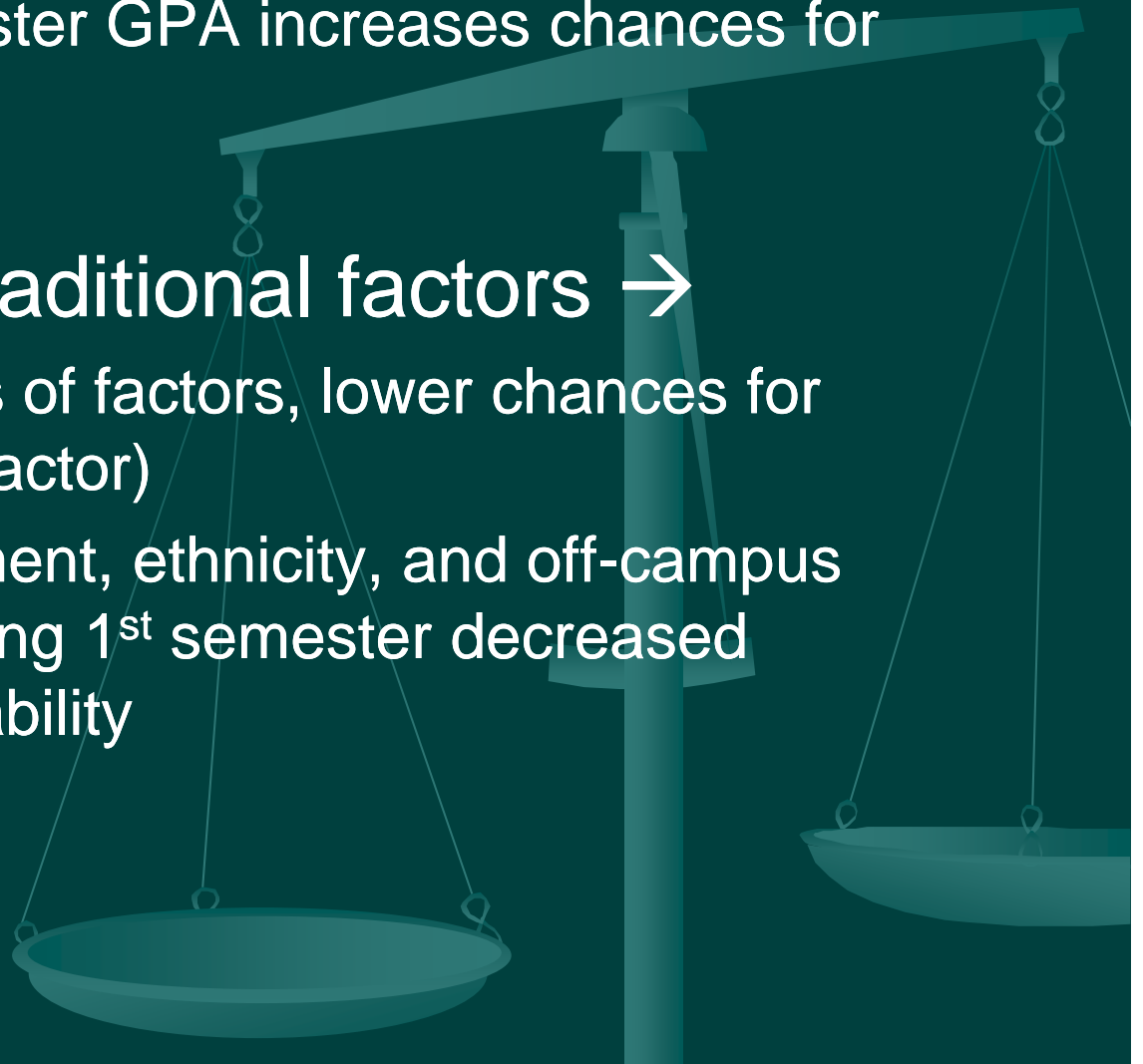
Group	N	ACT	HSGPA	F99GPA	Graduated (% Group)
Traditional	280 (39%)	23.89**	3.41	2.985***	178 (64%)
Non-Traditional	431 (61%)	22.93**	3.35	2.706***	177 (41%)
Total	711				355

p<.01,*p <.001

1995 - 1999 UNR Freshman ACT mean = 22

Findings

- 1st Semester college GPAs (T & NT)
 - Higher 1st Semester GPA increases chances for graduation
- Number of non-traditional factors →
 - Greater numbers of factors, lower chances for graduation (>1 factor)
 - Part-time enrollment, ethnicity, and off-campus employment during 1st semester decreased graduation probability



Conclusions

College advancement in the first year is a **critical** determinant of persistence, hence

- **Persistence appears to be important**
 - Graduated = 98% persisted into 2nd fall semester
 - Did **NOT** Graduate = 63% persisted into 2nd fall semester
 - 50% of undergraduates take 6 years to earn degree
- FYE courses need to be examined with an eye to meeting the **varied demands** of diverse students
- NT students would most likely benefit from a **varied set** of 1st year college experiences (**one course does not fit ALL**)

Thank you

Steve Cavote
scavote@unr.edu

