A Structured Peer-Led Study Session Program Improves Semester Retention and Graduation for Baccalaureate Nursing Students

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Acknowledgements/Conflicts of Interest

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  - Data Analytics & Decision Support Department
  - Peer Mentors
  - Program participants

Purpose

- The purpose of this presentation is to share information about a structured peer-led study session and impact on nursing student retention and graduation rates.

Nursing Student Retention

- National Data (AACN, 2023)

Enrollment Changes: 2021-2022

Entry-Level Baccalaureate	-1.4
RN to Baccalaureate	-16.9
Master's Programs	-9.4
Research-focused Doctorate	-4.1
Doctor of Nursing Practice	+0.6

- SHSU SON
  - Average Attrition from 1st to 2nd semester = 22.81%
    - Range 19%-26%
  - Disaggregation Data (2021)
    - 82.95% graduation rate
    - Downward trends in graduation rates
   - Non-White students 2x more likely not to be successful

Nursing Student Retention

- Contributing Factors
  - Academic Stressors
  - Clinical
  - Personal/Family
  - Financial

- Student Perspective
  - Intrinsic motivation, Procrastination
  - Study strategies used previously don't really work in nursing
  - Competitiveness
  - COVID
  - Travel, etc. to clinical
  - Financial

(Igbo & Sule, 2019; Mumba & et al, 202); Jeffreys 2001)

Success and Wellness Program
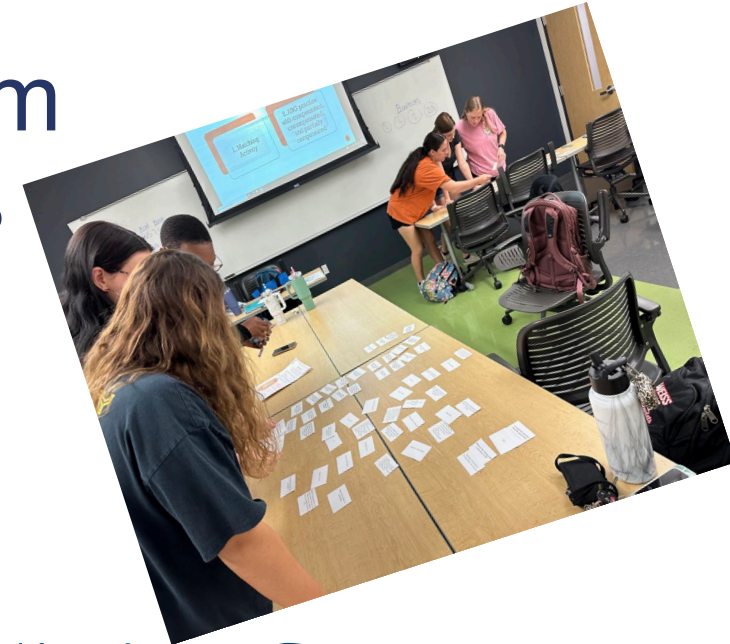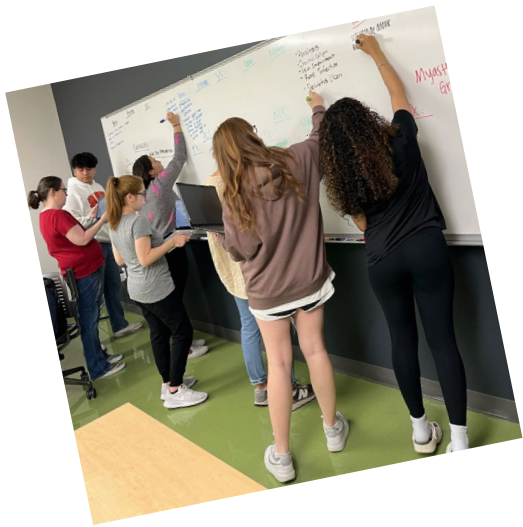## *Academic & Personal Wellbeing*
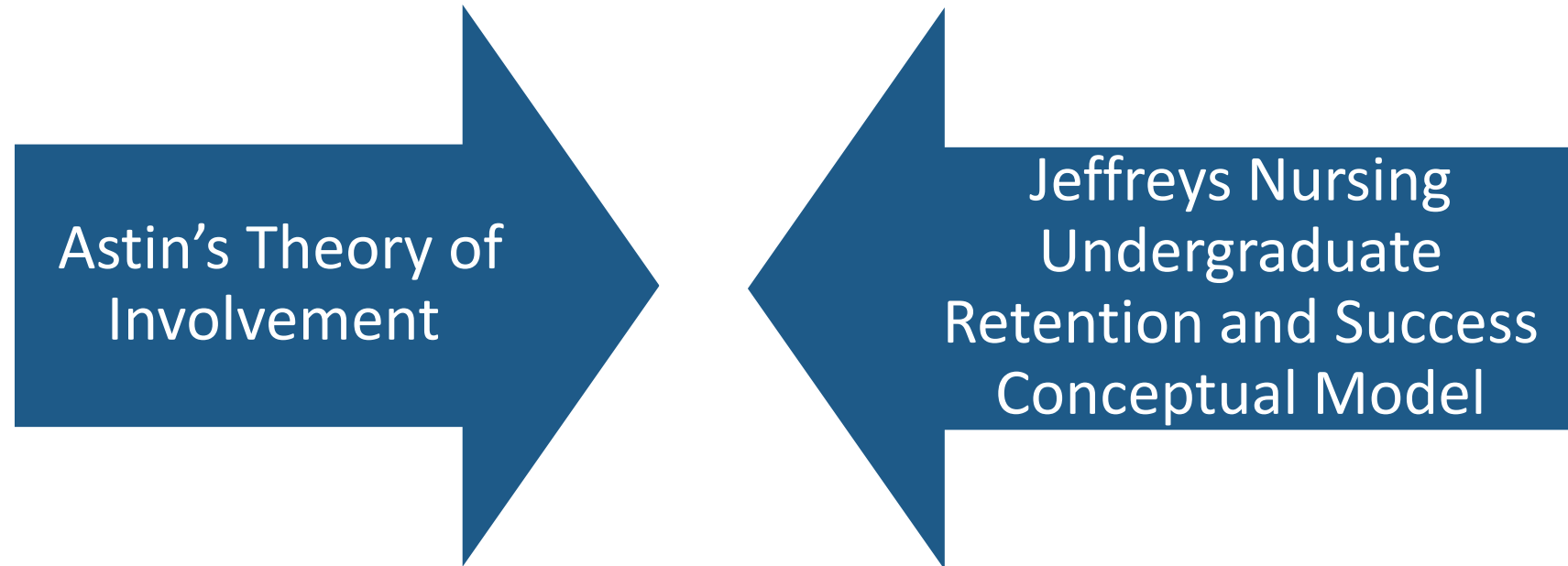
Astin's Theory of Involvement

Jeffreys Nursing Undergraduate Retention and Success Conceptual Model

"amount of physical & psychological energy expended on academics directly affect student success" (Zinn, Kastler, & Vander Stucken, 2020, p. 377)

"high levels of academic achievement only result in continued attendance when accompanied by positive psychological outcomes" (Jeffreys, 2001, p. 143)

Success & Wellness Program
Peer-Led Study Sessions
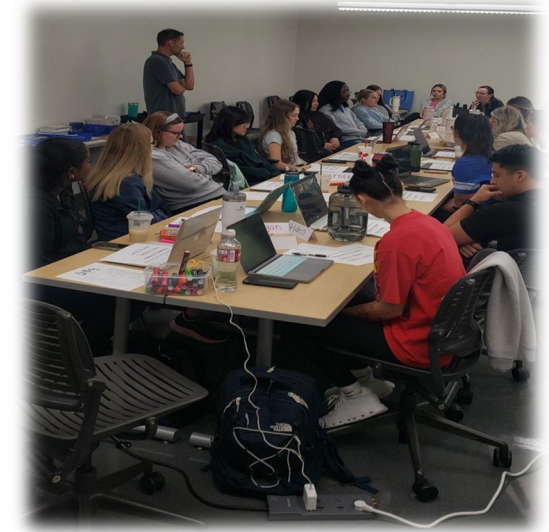

Academic Success Components

- Academic Success
  - Time Management
  - Study Strategies
  - Testing Strategies
  - Content/Concept Reinforcement

Personal Wellbeing Components

- Resilience Building
  - Social Support
  - Self-Care Techniques
  - Anxiety Management
  - Burn-out Prevention

Success and Wellness Program
Peer-Led Study Sessions

- Peer Leader Training
  - 7-hr mandatory meeting
    - Mentor Led
  - Facilitation
  - Active/Engaged Learning
  - Socratic Method
  - Mentor vs Friend
  - Soft Skills
  - Difficult situations/students
  - Role play

WEEK	HEALTH ASSESSMENT		FUNDAMENTALS		PHARMACOLOGY	Peer-led Session
	Didactic	Lab	Didactic	Lab	Didactic	Resilience Building
1 8/22	Evidence-Based Assessment The Interview Complete Health History Assessment Ch. 1,3,4	Intro to Lab Interview & getting a history	Module 1 Readings: Ch. 2, 3, 20	Hand hygiene; moving patients; ambulation	Pharm Basics, Drugs that Affect the Autonomic Nervous System Ch. 1, 2, 3, 18, 19, 20, 21	
2 8/29	Techniques & Safety General Survey & Measurement Vital Signs Pain Assessment Ch. 8 - 11	VS, pain, SBAR Case Study: Comfort/Pain *Review Check-off #1 Rubric*	Module 1 Readings: Ch. 21, 22, 29	Restraints; bathing; PPE; bed making; monitoring devices	*Quiz #1* Analgesic Drugs Ch. 10, 11, 44	
3 9/5	*Quiz 1* Mental Status Assess, Neurological Assess (motor, reflexes) Ch. 5, 24	Mental Status, Neuro (include cranial nerves) *Review Check-off #1 Rubric*	*Module 1 Exam*	Medication administration	Antiepileptic, Anti-Parkinson's and Psychotherapeutic Ch. 14, 15, 16	Session 1: In-Session Group Discussion
4 9/12	HEENT Ch. 14-17	HEENT (cranial nerves included) Vital Signs From due *Review Check-off #1 Rubric*	Module 2 Readings: Ch. 23, 17	Check off #1	*Exam #1* Cardiovascular Drugs Ch. 22, 23, 24	Check Journaling
5 9/19	*Exam #1* Breast & Regional Lymphatics	Voff 1– Gen survey, neuro, HEENT Breast & Regional	Module 2 Readings: Ch. 27, 28	Medications (injections, IV push)	*Quiz #2* Cardiovascular Drugs Swift River Med-Pass 1 Ch. 25, 27, 28	Session 2: In-Session Group Discussion

Statistical Analysis

- A 1-sided Z-test of proportions was utilized to compare retention and graduation rates of new nursing students who participated in the program compared to their non-program counterparts

$$H_0: \mu_{Program} <= \mu_{No\text{-}Program}$$
$$H_1: \mu_{Program} > \mu_{No\text{-}Program}$$

Participant Demographics

Cohort	Male	Female	Minority Status	First Generation
Fall 2020	16%	84%	40%	45%
Spring 2021	10%	90%	31%	47%
Fall 2021	7%	93%	30%	48%
Spring 2022	8%	92%	48%	44%
Fall 2022	22%	78%	36%	39%
Spring 2023	12%	88%	48%	44%

Overall Retention Outcomes

Entering Nursing Cohort	Completed Success and Wellness Program						P-Value
	Yes			No			
	Headcount	# Retained	Retention Rate	Headcount	# Retained	Retention Rate	
Fall 2020	14	14	**100%**	74	64	**86%**	**0.07**
Spring 2021	43	42	**98%**	55	35	**64%**	**0.00**
Fall 2021	37	37	**100%**	50	39	**78%**	**0.00**
Spring 2022	57	53	**93%**	34	21	**62%**	**0.00**
Fall 2022	67	67	**100%**	18	15	**83%**	**0.00**

Retention Rates: First-Generation

Retention Rates by Ethnicity

| Entering Nursing Cohort | Official Race | Completed Success and Wellness Program | | | | | | P-Value |
| | | Yes | | | No | | | |
		Headcount	# Retained	Retention Rate	Headcount	# Retained	Retention Rate	
Fall 2020	Hispanic	3	3	100%	20	20	100%	
	White	5	5	100%	37	30	81%	0.14
Spring 2021	Hispanic	10	10	100%	11	8	73%	0.04
	White	20	19	95%	23	17	74%	0.03
Fall 2021	Hispanic	12	12	100%	6	4	67%	0.02
	White	18	18	100%	29	21	72%	0.01
Spring 2022	Hispanic	16	16	100%	8	6	75%	0.02
	White	22	20	91%	12	7	58%	0.01
Fall 2022	Hispanic	15	15	100%	3	3	100%	
	White	28	28	100%	8	7	88%	0.03

Overall Perfect Graduation Rates

| Entering Nursing Cohort | Completed Success and Wellness Program | | | | | | P-Value |
| | Yes | | | No | | | |
	Headcount	Graduated Within 5 Terms	Perfect Graduation Rate	Headcount	Graduated Within 5 Terms	Perfect Graduation Rate	
Fall 2020	14	11	**79%**	74	48	**65%**	**0.16**
Spring 2021	43	32	**74%**	55	20	**36%**	**0.00**

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Perfect Graduation Rates: First-Generation
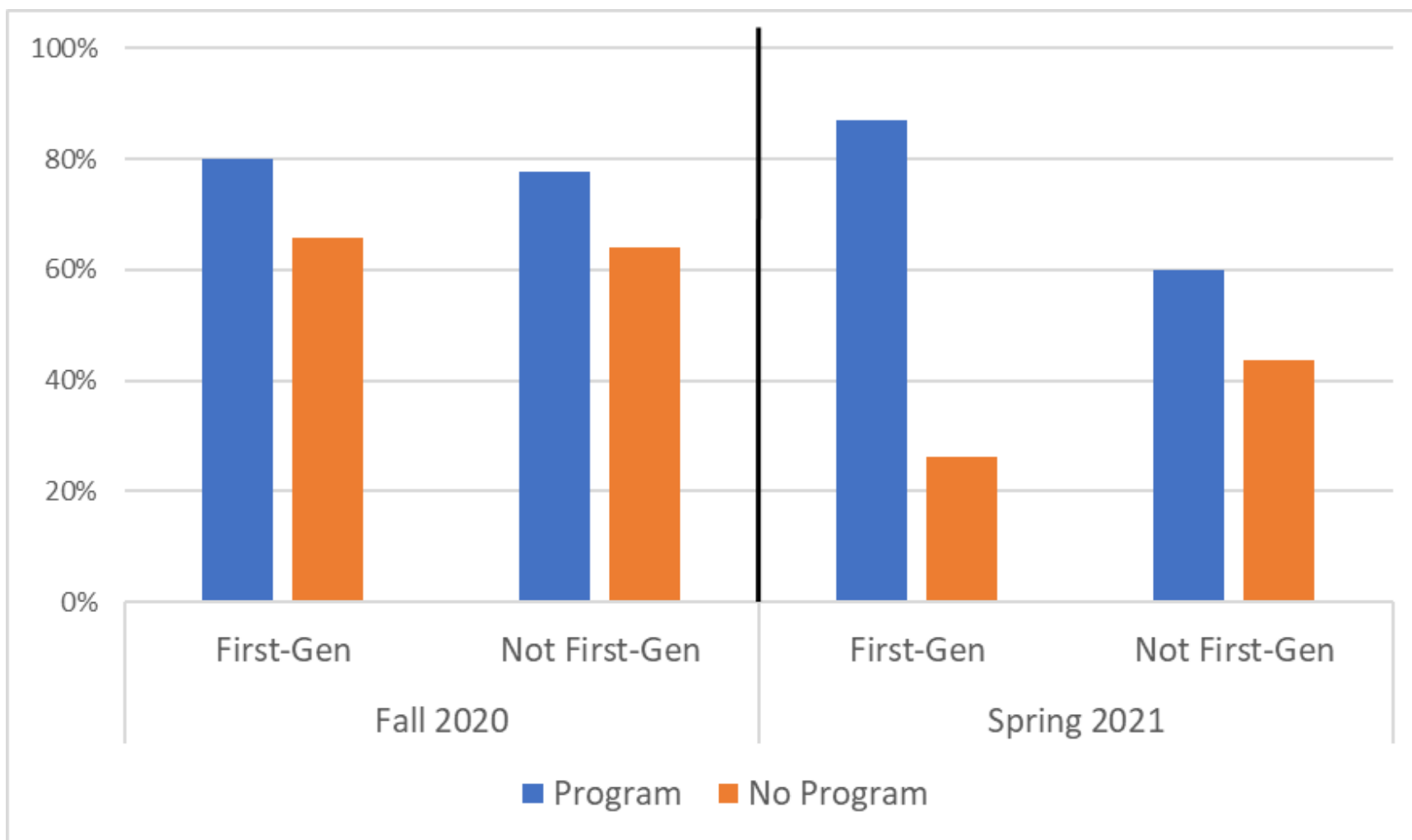
Perfect Graduation Rates by Ethnicity

| Entering Nursing Cohort | Official Race | Completed Success and Wellness Program | | | | | | P-Value |
| | | Yes | | | No | | | |
		Headcount	Graduated Within 5 Terms	Perfect Graduation Rate	Headcount	Graduated Within 5 Terms	Perfect Graduation Rate	
Fall 2020	Hispanic	3	3	100%	20	14	70%	0.13
	White	5	4	80%	37	24	65%	0.25
Spring 2021	Hispanic	10	7	70%	11	3	27%	0.03
	White	20	14	70%	23	9	39%	0.02

Conclusion/Discussion

- Participation in PLSS program
  - Improves semester-to-semester retention for 1st & 2nd semesters
  - First-generation student retention & perfect graduation improved
  - Improved semester-to-semester & perfect graduation for Hispanic students

Implications

- Increase recruitment of diverse peer mentors

- Survey graduated participants regarding retention in nursing workforce

- Grant funding to provide pre-start boot camp

- Curriculum revisions – Recitation & Wellness class across curriculum to implement PLSS program strategies & integrate PMs as Teaching Assistants

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Thank You

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