THRIVE AND FLOURISH



A Holistic Approach to Nurturing Wellness and Resilience in Nursing Students through an Immersive Bridge Week Experience, Preliminary Findings

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FIRST YEAR COLLEGE STUDENTS ARE STRESSED.



Significant rates of **perceived stress** among first-year college students



Stress predicted **48-80% of mental health disorders** among first-year students

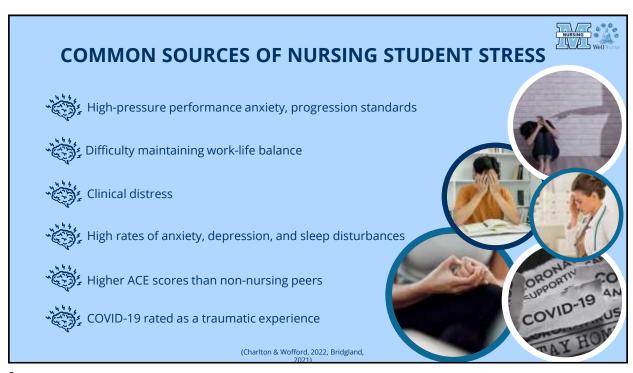


Nursing students report **higher rates** of stress compared to other majors



(Karyotaki et al., 2020, Martin et al., 2022, Urban et al., 2022)





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THERE IS A

30.6 MILLION NURSING SHORTFALL

GLOBALLY.

Increasing stress, burnout, poor working conditions, and unsafe staffing are global emergencies for the profession.

(BUCHAN & CATTON, 2023



STRESS & BURNOUT

NEGATIVE IMPACTS ON STUDENT RETENTION

STRESS AND BURNOUT PREVENTION PROGRAMS MUST BEGIN BEFORE NURSES ENTER THE WORKFORCE.

(BUCHAN & CATTON,

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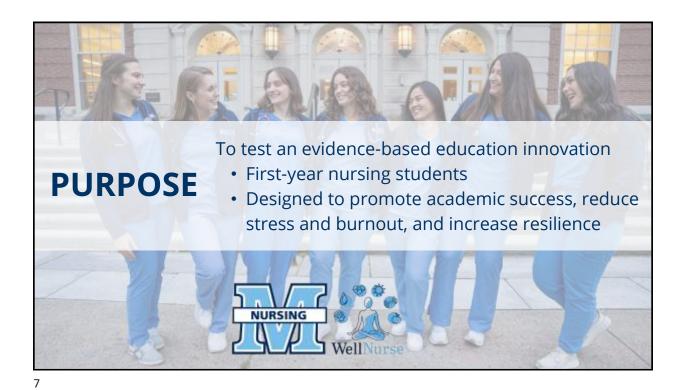
STRESS AND RESILIENCE INFLUENCE RETENTION, ACADEMIC, AND CLINICAL PERFORMANCE.

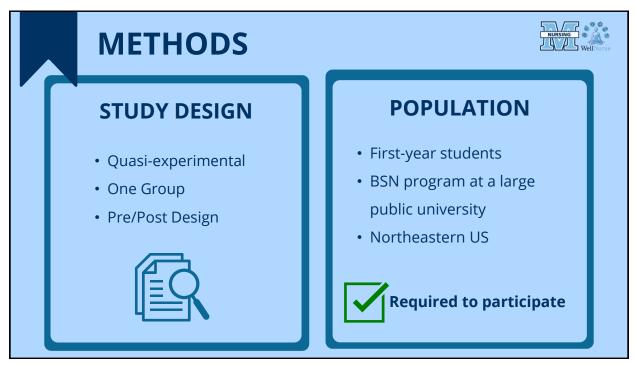


- Inconclusive evidence on what type of intervention is the most effective at managing students' stress
- XABYOTAKI ET AL. 2020: MARTIN ET AL. 2022: SMITH.WACHOLT ET AL. 2019: TURNER & MCCARTHY 2017: HIRRAN ET AL. 202



- More studies are needed to examine effective methods for reducing stress & anxiety in nursing education
 - Longitudinal research designs





THE INTERVENTION

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IMMERSIVE
BRIDGE WEEK
HOW TO THRIVE
AS A NURSING
STUDENT

NUR150
THE SCHOLARSHIP
OF WELLNESS AND
MINDFULNESS IN
NURSING



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IMMERSIVE BRIDGE WEEK



Interventions

- Mindfulness
- Yoga
- · Belonging activities
- Student Success
- Research
- Mindful physical activity
- Mindful nutrition



Delivery

- 6 days and 40 hours
- All housing and meals provided
- First-year students required to attend

Introduces students to artistic and scientific practices, focusing on their impact on health and well-being. Students participate in evidence-based resilience and well-being interventions (n=1 research study). FitBits are provided to all students for data collection

HOW TO THRIVE AS A NURSING STUDENT OBJECTIVES



Objective #	Objective
1	Define mindfulness and its relationship to stress, eating, fitness, kindness, and compassion
2	Describe the body's reaction to stress
3	Discuss stress in the body
4	Describe the relationship between thoughts, stress, fitness, and eating
5	Introduce eating, movement, breathing, and communication mindfulness practices
6	Define PICOT

Objective #	Objective
7	Develop a PICOT research question
8	Define the Six Dimensions of Wellness
9	Assess Six Dimensions of Wellness
10	Demonstrate the ability to practice basic mindful eating skills, including identification of internal and external influences on food choices
11	Create college-accessible, nutrient-dense recipes
12	Describe strategies on how to incorporate healthy choices and health behaviors despite perceived barriers

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INTRODUCTION TO THE RESEARCH PROCESS



• Completed holistic health assessment

PICOT training

• Created research questions on their health/well-being to study throughout the semester



INTRODUCTION TO MINDFULNESS

- · 6-session Introduction to Mindfulness curriculum,
 - 90 minutes each day
- All participants attended in one group
- Wolf and Serpa's (2015) A Clinician's Guide to Mindfulness
 - Meditation
 - Mindful movement
 - Mindful eating
 - Mindful communication
 - Identifying pleasant and unpleasant experiences
 - Interactive support, taught by two trained mindfulness instructors





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FITNURSE: MINDFULNESS FITNESS PROGRAM

Mindful physical activity involves moving with present-moment awareness.

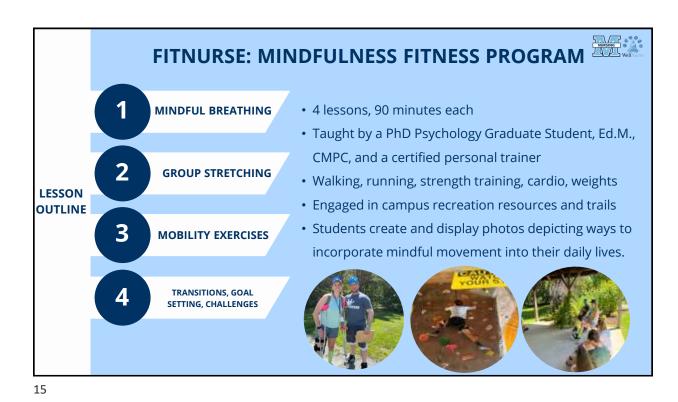
It can reduce anxiety symptoms and aims to foster mindful movement, adapt to change, establish sustainable habits, and strengthen community bonds.







(YIN ET AL.,





YOGA

- 60 minutes each day for 4 days
- Certified yoga instructor

The scientific aspects of yoga substantiate its positive impact on health, resilience, and well-being.





NURSING Well Nurs

(Clark 2018, Swarbrick & Middleton 2023, Dossett, Fricchione & Benson 2020)

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CONNECTION AND BELONGING

NURSING Well Nurse

- 90 minutes, one session
- School of Nursing's Student Success Coordinator
- Academic advisor assesses vulnerabilities and expresses their beliefs, values, and characteristics that make them unique
- Engaged in team-building and trust-building activities
 - Promotes connection and belonging
 - Explore the health benefits of social connectedness



COLLEGE SUCCESS

NURSING Well Nurs

- 90 minutes, one session, Academic Advisor
- Focus on the **intellectual domain** of health
- Identified unique academic strengths
- Explored supportive programs on campus, accessing services and exploring stereotypes related to receiving accommodations
- Evaluated outside engagements and time management
- Encouraged to explore how comparison comes up in life and the dangers of comparing to others



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PART 2

NUR150 Scholarship of Wellness and Mindfulness Course

- Meets university artistic and creative expression and quantitative literacy general elective (one credit)
- Capped at 20 students per section
- Taught by faculty in progress with MBSR or Insight Meditation teacher certification(s)

*In progress

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COURSE DESCRIPTION

- Students engage and critique the practices through the lens of holistic health
- Examine their effects on a range of personal
 quantitative and qualitative health variables
- Practice mindfulness
- Discuss research design and analysis
 - Personal Fitbit data



COURSE OBJECTIVES AND CCNE ESSENTIALS

Domain 4
Scholarship for the nursing discipline

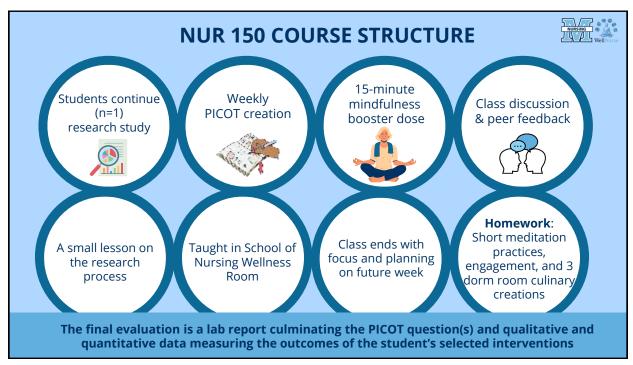
Describe the basic principles of the research process and the role of scholarship in nursing practice, policy, and education.

Domain 10
Personal,
professional and
leadership
development

Describe the relationship between personal health and well-being, professionalism, and leadership.



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MEASURES

Timing

- (1) After students moved into campus and consented before intervention started
- (2) Again at the end of the week of the intervention
- (3) At the end of the semester



Main Outcomes Measured

- Perceived Stress Scale (PSS)
- Five Facets of Mindfulness Questionnaire
- Satisfaction with Life Scale (SWLS)
- Pittsburg Sleep Quality Index
- Brief Resilience Scale
- Oldenburg Burnout Inventory
- Fitbits
 - Sleep score, stress score, step count, daily active minutes

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Nutritic

Nutrition and Physical Activity Measures

State Mindfulness Scale for Physical Activity

International Physical Activity Questionaire

Short Healthy Eating Index

Food Preparation and Confidence

Body Appreciation Scale

Weight Satisfaction

Mindful Eating Questionnaire

Healthy Eating and Weight Self Efficacy Scale

Young Adult Nutrition Literacy Tool

MEASURES CONTINUED



- Qualitative program evaluation questions at end of Bridge Week
- Focus groups at end of semester

RESULTS PARTICIPATION & ATTENDANCE



- 93 eligible
- 78 attended (83%)



Reasons of non-attendance

- Unknown
- Student athlete
- Marching Band
- Orientation at hospital
- Penobscot Fire Academy
- Nontraditional transfer students who chose not to attend

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RESULTS - DEMOGRAPHICS



BRIDGE WEEK PARTICIPANTS' DEMOGRAPHIC INFORMATION (N=65)

Variable	<u>n ,</u> %		
Age (mean)	18.3		
Gender			
Female	56, 86.2		
Male	8, 12.3		
Other	4, 6.1		
Ethnicity			
White	58, 89.2		
Non-White	7, 10.4		
Meal plan			
Yes	56, 86.2		
No	9, 13.8		
Housing			
On-campus	57, 87.7		
Off-campus	8, 12.3		

RESULTS - HEALTH OUTCOMES (BRIDGE WEEK)



Measured at the Beginning and End of Bridge Week



Mean PSS scores did not significantly improve over the week
 (p=0.167)

Predictors of PSS at follow-up: baseline (p < 0.0001) and gender

 Females had, on average, a PSS score 5.26 points higher than males at follow-up, given the same baseline score (p = 0.007)



- Mean SWLS scores significantly increased by 1.25 over the week (p=0.010)
- Follow-up was predicted by baseline SWLS scores (p < 0.0001)

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• BRS (resilience) scores did not significantly change (p=0.288)



 Mindful eating scores (MEQ) significantly increased by an average of 2.7 points (p = 0.0001); Scores up to 5

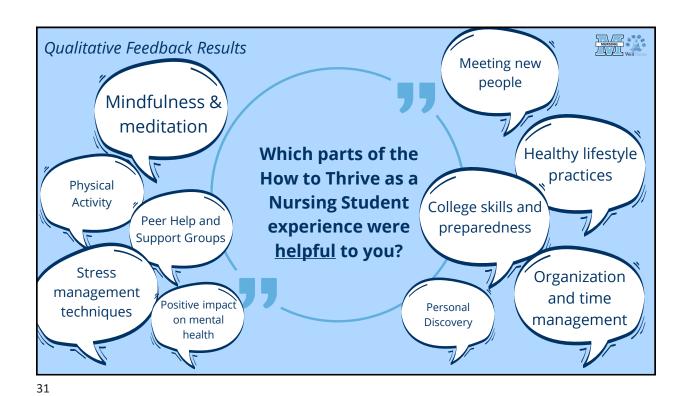


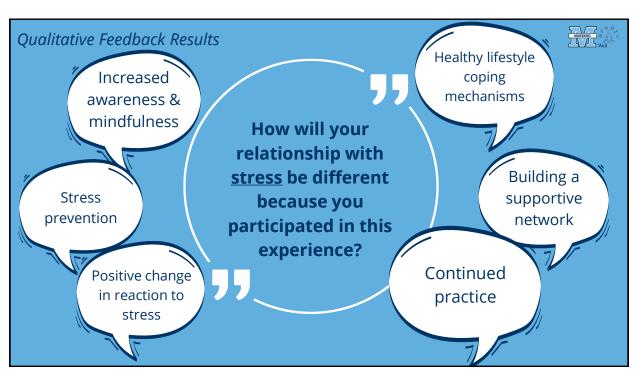
 Healthy eating self-efficacy significantly increased by average of 2.6 points (p < 0.0001)



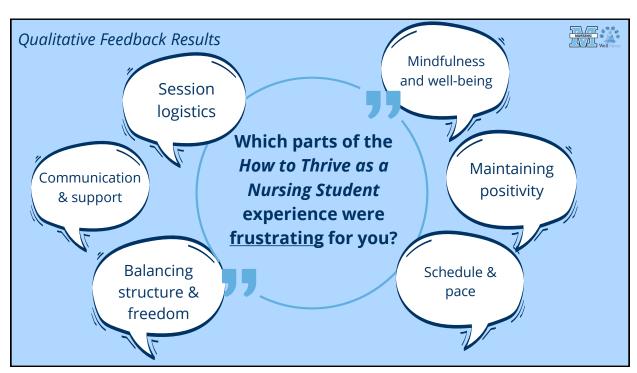
• FFQM (Mindfulness) significantly increased by the end of the week by an average of 3.96, p = 0.0001.

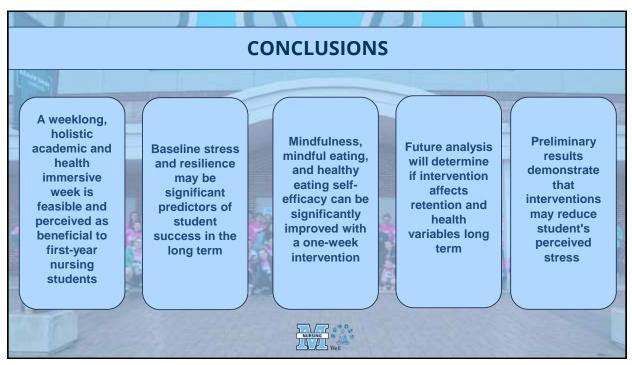
All measures at the end of the week had significant positive associations with the baseline measure.











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REFERENCES

Bridgland, V. M. E., Moeck, E. K., Green, D. M., Swain, T. L., Nayda, D. M., Matson, L. A., Hutchison, N. P., & Takarangi, M. K. T. (2021). Why the COVID-19 pandemic is a traumatic stressor. PloS one, 16(1), e0240146. https://doi.org/10.1371/journal.pone.0240146

Bothan, J., & Catton, H. (2023. March). Recover to rebuild: Investing in the nursing workforce for health system effectiveness. International Council of Nurses. https://www.icn.ch/sites/default/files/2023-

Buchan, J., & Catton, H. (2023, March), Recover to rebuild: Investing in the nursing workforce for health system effectiveness. International Council of Nurses. https://www.icn.ch/sites/default/files/2023-07/ICN. Recover-to-Rebuild report EN. pdf
Charlton, A. C., & Wofford, L. G. (2022), Maladaptive coping behaviors in pre-licensure nursing students: An integrative review. Journal of Professional Nursing, 39, 156-164.
https://doi.org/10.1016/j.profinus.2022.01.011
Clark C. S. (2018), A radical RN-BS nursing class: Outcomes from an integrative yoga elective. International journal of nursing education scholarship, 15(1), /j/jipes.2018.15.issue-1/jipes-2017-0073/jipes-2017-0073.xml, https://doi.org/10.1515/jipes-2017-0073
Swell, Hu., Frinchione, G. L., & Benson, H. (2020), A New Era for Mind-Body Medicine. The New England journal of medicine, 382(15), 1390-1391. https://doi.org/10.1056/NEJMp1917461
Karyotaki, E., Cuijpers, P., Albor, Y., Alonso, J., Auerbach, R. P., Bantjes, J., Bruffaerts, R., Ebert, D. D., Hasking, P., Kiekens, G., Lee, S., McLafferty, M., Mak, A., Mortier, P., Sampson, N. A., Stein, D. J., Vilagut, G., & Kessler, R. C. (2000). Sources of stress and their associations with mental disorders among college student initiative. Frontiers in Psychology, 11. https://doi.org/10.3389/fpsyg.2020.01759
Martin, S., Zagoen, L., & Rogus, S., (2022). Nutrion label literacy and food choices among mobile food pantry participants. Health Behaviour Journal of functional morphology and kinesiology, 6(1), 19.

Roychowdhury D. (2021). Moving Mindfully: The Role of Mindfulness Practice in Physical Activity and Health Behaviours. Journal of functional morphology and kinesiology, 6(1), 19. https://doi.org/10.3390/fink6010019
Smith-Wachol, H. C., Wetmore, J. P., Conway, C., & McCarley, M. (2019). Retention of Nursing Students: An Integrative Review. Nursing education perspectives, 40(6), 328–332. https://doi.org/10.1097/01.NEP.0000000000000000077

https://doi.org/10.1097/01.NEP.0000000000000000000000000077
Strout, K., Schwartz-Mette, R., McNamara, J., Parsons, K., Walsh, D., Bonnet, J., O'Brien, L. M., Robinson, K., Sibley, S., Smith, A., Sapp, M., Sprague, L., Sabegh, N. S., Robinson, K., & Henderson, A. (2023). Wellness in Nursing Education to Promote Resilience and Reduce Burnout: Protocol for a Holistic Multidimensional Wellness Intervention and Longitudinal Research Protocol For a Holistic Multidimensional Wellness Intervention and Longitudinal Research Study Design in Nursing Education. MR Research Protocols, 12, e49020. https://doi.org/10.21964/9020
Swarbrick, M., & Middleton, A. (2023). Voga Practice: The Role of Nursing in Promoting Workforce Wellness. Journal of psychosocial nursing and mental health services, 61(8), 5–7. https://doi.org/10.1095/nep.2502.20222.202
Turner, K., & McCarthy, V. L. (2017). Stress and anxiety among nursing students: A review of intervention strategies in literature between 2009 and 2015. Nurse education in practice, 22, 21–29. https://doi.org/10.1016/j.nepr.2016.11.002
Urban, R. W., Jennings, L. A., & Cipher, D. J. (2022). Relationships among resilience, stress, and persistence in prenursing students during COVID-19. Nurse Educator, 47(2), 102–107. https://doi.org/10.1097/nne.000000000001146
Wattick, R. A., Hagedorn, R. L., & Olfert, M. D. (2018). Relationship between Diet and Mental Health in a Young Adult Appalachian College Population. Nutrients, 10(8), 957. https://doi.org/10.2390/nn.3390/nn10080957
Wolf, C., & Serpa, J. G. (2015). A clinician's guide to teaching mindfulness: The comprehensive session-by-session program for mental health professionals and health care providers. New Harbinger Publications, Inc.