

Non-Academic Screen Time and Accuracy of Perceived Weight Status in Undergraduate Young Adults



Abigail Brown, BS; Maggie Dylewski Begis, PhD, RD, LD; Jesse Stabile Morrell, PhD

Department of Agriculture, Nutrition, and Food Systems; College of Life Sciences and Agriculture; University of New Hampshire

Background

- Mental health is an issue of increasing concern for young adults in the United States, including body image issues.^{1,2} Increased technology usage as associated with decreased mental health status and decreased body satisfaction.^{3-6,8,9}
- Undergraduate young adults are a population of particular concern due to their increased risk of mental health and body image concerns.^{1-4,7,10,11}
- College is a formative period for young adults. Establishing a healthy body perception and healthy lifestyle behaviors is crucial for undergraduate young adults.
- Previous research has investigated the negative psychological and physical impacts of non-academic screen time (NAST).^{3-5,8,9} More research is needed to understand the relationship between NAST and perceived weight status (PWS) accuracy among young adults.

Objective

To explore the relationship between perceived weight status and non-academic screen time among undergraduate young adults (18-24 years of age) at a northeastern public university.

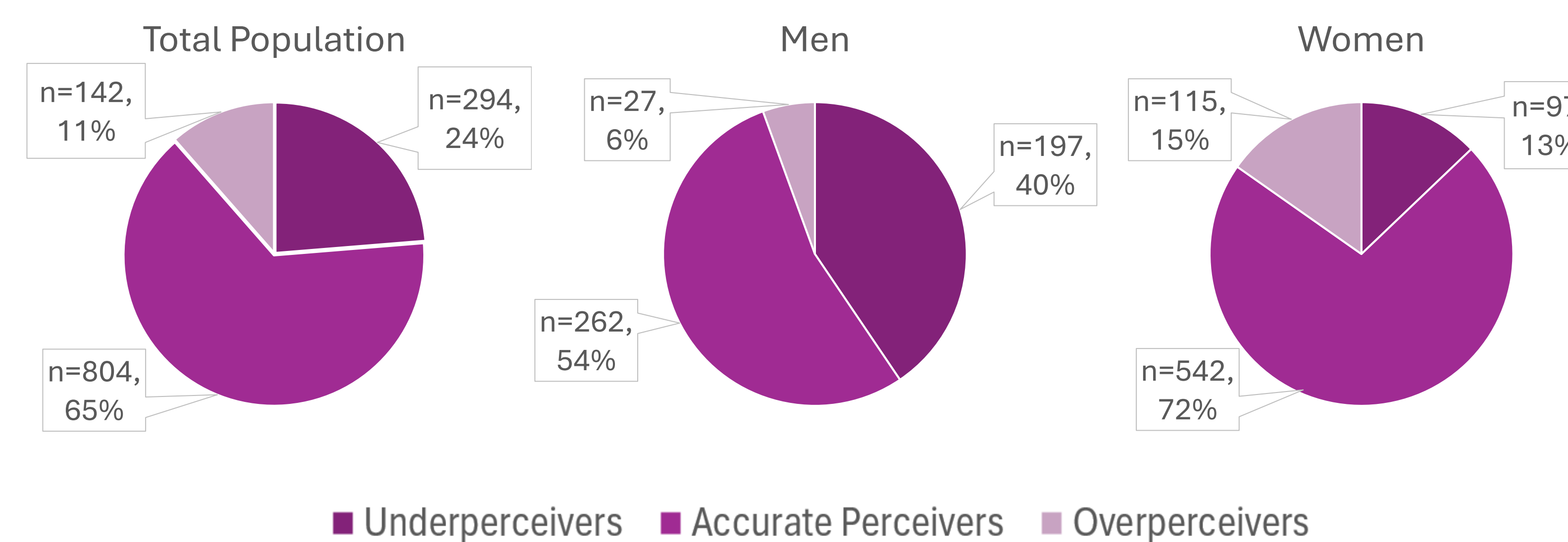
Methods

- Data were collected between 2020-2023 from a cross-sectional study of undergraduates (18-24 years old) at a northeastern university (UNH IRB#5524).
- Analyses were conducted with self-reported NAST and PWS data and measured anthropometrics.
- Self-reported NAST was calculated as the sum of non-academic phone usage, computer and tablet usage, and video game usage.
- Self-reported PWS and NAST were obtained from survey data. BMI (kg/m²) was calculated using measured height and weight.
- PWS was compared to measured BMI; participants were then classified as under-perceivers (UP), over-perceivers (OP), or accurate-perceivers (AP) based on perception accuracy.
- Analysis of variance (ANOVA) assessed differences in NAST among PWS groups, stratified by males and females (SPSS v29).

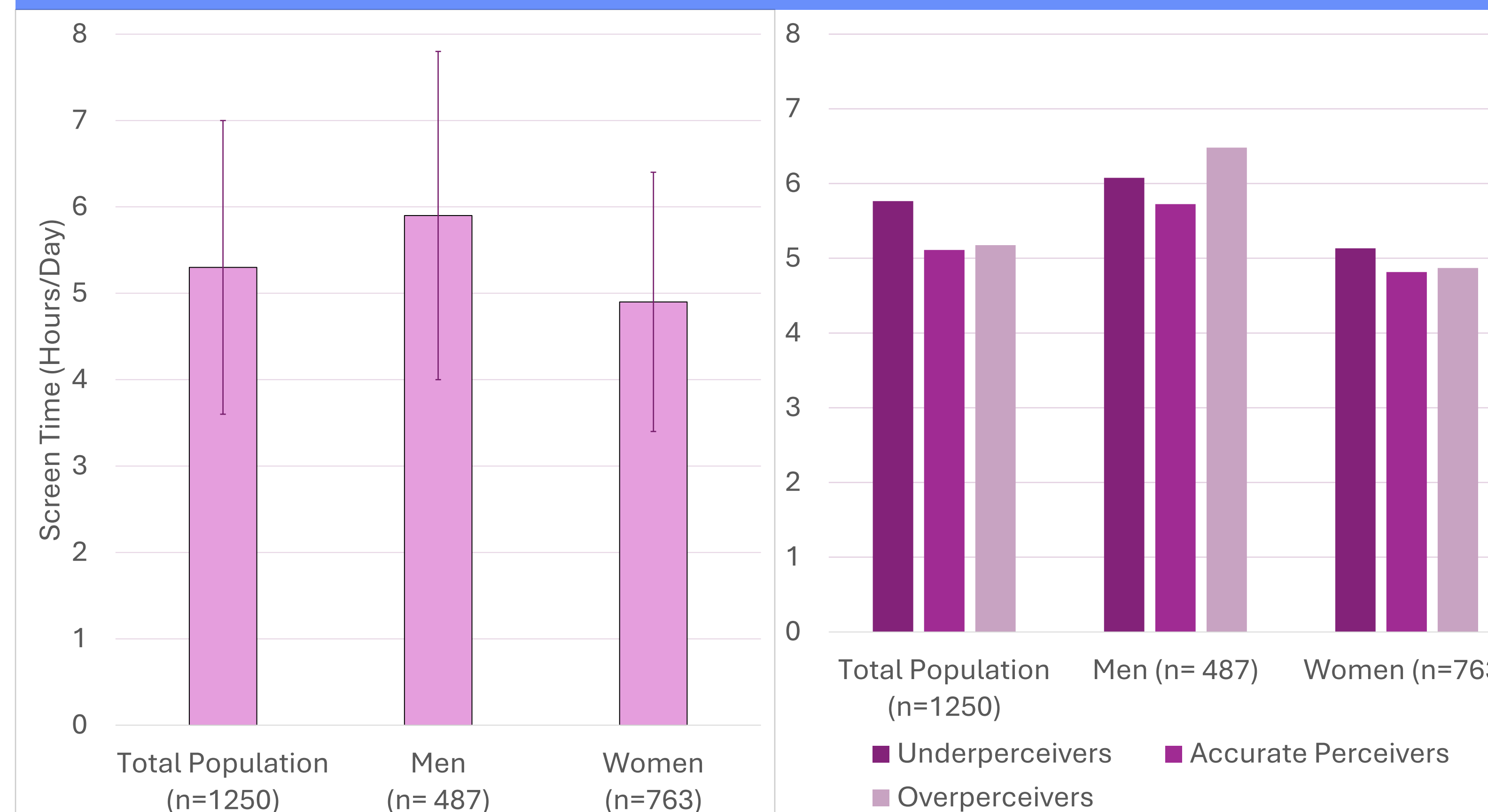
Participant Characteristics

	Total population	Men	Women
n=	1250	487	763
Hispanic/Latino (%)	4	2	61
White (%)	94	36	2
Black/African American (%)	2	1	58
American Indian/Alaska Native/Asian/Pacific Islander (%)	7	2	5
Nutrition or Allied Health Major (%)	25	6	19
Non-Nutrition or Allied Health Major (%)	75	33	41
BMI <18.5 (Underweight) (%)	4	1	3
BMI 18.5-24.9 (Normal) (%)	67	23	44
BMI 25-29.9 (Overweight) (%)	22	12	10
BMI >30 (Obese) (%)	6	3	3

Distributions of Underperceivers, Overperceivers, and Accurate Perceivers



Non-Academic Screen Time by Gender and Perception Accuracy Groups



Key Findings

- The final sample (n=1250) identified as mostly female (56%), white (94%) and as non-allied health or nutrition majors (75%); Mean age was 19.1±1.1 years.
- Most (66.8%) had a normal BMI (18.5-24.9 kg/m²), and 61.7% reported their weight as “about the right weight”.
- Participants had an overall mean NAST of 5.3±1.7 hr/day. Males had a higher mean NAST vs. females (5.9±1.9 vs. 4.9±1.5 hr/day, p<.001).
- Males were more likely than females to be categorized as UPs (40.5% vs. 12.9%); females were more likely than males to be OPs (15.3% vs 5.6%), both p<.001.
- Among males, UPs reported higher NAST vs. OPs and APs (5.8±1.8 vs. 5.2±1.8 and 5.1±1.6 hours, respectively, p<.001).
- No significant differences were seen between UPs, APs, and OPs among females (p>.05).

Conclusion

Results suggest a relationship between NAST and PWS accuracy, particularly among college men. Findings may help to inform health initiatives aiming to improve physical and mental health and reduce NAST among young adults.

Take Away

Undergraduate young adults are utilizing non-academic screen times at an average rate of over 5 hours per day. Many undergraduate young adults do not have an accurate perception of their weight status. During a stage of life at which developing healthy understandings of food, body, and activity are crucial, nutrition and healthcare professionals have the opportunity to help young adults develop healthy relationships with media and their bodies.

Acknowledgements

Funded by New Hampshire Agricultural Experiment Station, USDA National Institute of Food and Agriculture Project 1010738, and the state of New Hampshire.

References

- Lepp et al. *Comput Human Behav.* 2014;31:343-350.
- Mojtabai et al. *Pediatrics.* 2016;138(6).
- Koronczi et al. *Eur Psychiatry.* 2022;65(S1).
- Bailey et al. *Body Image.* 2017;23:69-79.
- Jenaro et al. *Addict Res Theory.* 2007;15(3).
- Dwyer et al. *Atl Econ J.* 2020;48(4).
- Xu et al. *J Obes.* 2018;2018:e3547856.
- Rotondi et al. *J Econ Psychol.* 2017;63:17-26.
- Ozturk et al. *Cogent Psychol.* 2022;9(1).
- Robinson et al. *Obes Rev.* 2017;18(10).
- Dohnt et al. *J Youth Adolescence.* 2006;35(2).