# HOT VINYASA YOGA, SAVORING, AND PSYCHOLOGICAL WELL-BEING

## Lillian B. Reid & Patrick R. Harrison



### INTRODUCTION

- Savoring, the ability to mindfully notice and appreciate positive experiences, reinforces positive affect.
- Both savoring and some forms of yoga are effective positive psychology interventions and are linked by their shared results of an improved well-being.
- Very limited research has been done on specific types of yoga.
  To our knowledge, this is the first study conducted on hot vinyasa yoga, savoring, and wellbeing.
- We investigated the relationship between vinyasa yoga, savoring/ mindfulness, and attention to proprioception in a yoga intervention.

## METHODS

- Hot vinyasa yoga practitioners (N = 22, 86.4% female, 95.5% white,  $M_{\rm age}$  = 38.3 years)
- Quasi-experimental intervention (pre-test/post-test survey design) included verbal yoga cues targeted at proprioception to promote physical savoring/mindfulness.
- Participants completed measures of PANAS, PSS, FFMQ, SWL, GHQ, QEWB, Flourishing Scale, and SBI to determine psychological well-being.

#### RESULTS

- The hypotheses were not supported by the data, except for GHQ and QEWB, which had significant positive and negative differences, respectively, between pre- and post-test.
- However, perceived instructor knowledge significantly correlated most consistently with all of the measures of well-being, with the exceptions of PANAS (positive subscale) and GHQ.

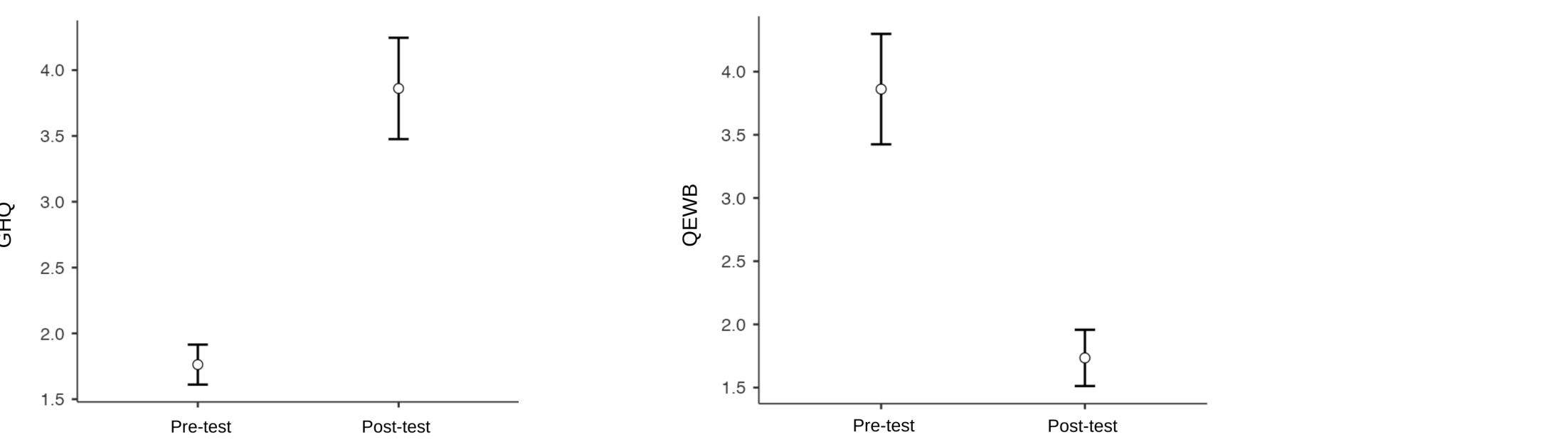
Table 1. Correlations Between Study Variables at Pre-Test

	Hot Yoga	Room-Temp Yoga	PreInstructor	PreClassExcitement	PrePANAS (+)	PrePANAS (-)	PrePSS	PreFFMQ	PreSWLS	PreGHQ	PreQEWB	PreFlourishing
Hot Yoga	_											
Room-Temp Yoga	0.406	_										
PreInstructor	-0.093	-0.052	_									
PreClassExcitement	-0.116	-0.202	0.332	_								
PrePANAS (+)	-0.196	0.164	0.284	0.383	_							
PrePANAS (-)	0.136	-0.135	-0.205	0.232	-0.156	_						
PrePSS	0.075	-0.013	-0.271	0.150	-0.144	0.229	_					
PreFFMQ	-0.036	0.158	0.604 **	0.028	0.435 *	-0.401	-0.505 *	_				
PreSWLS	-0.178	-0.291	0.259	0.164	0.155	0.244	-0.720 ***	0.412	_			
PreGHQ	0.052	-0.273	-0.284	-0.136	-0.537 *	0.296	0.484 *	-0.675 ***	-0.527 *	_		
PreQEWB	-0.108	-0.182	0.384	0.259	0.296	0.123	-0.439 *	0.432	0.815 ***	-0.491 *	_	
PreFlourishing	0.117	0.057	0.367	0.170	0.298	0.071	-0.572 **	0.588 **	0.805 ***	-0.710 ***	0.855 ***	_
PreSBI	0.041	0.150	0.364	0.219	0.351	-0.075	-0.468 *	0.548 *	0.490 *	-0.586 **	0.568 **	0.701 ***

Table 2. Correlations Between Study Variables at Post-Test

Correlation Matrix													
	Hot Yoga	Room-Temp Yoga	PostInstructor	PostClassExcitement	Attendance	PostPANAS(+)	PostPANAS(-)	PostPSS	PostFFMQ	PostQEWB	PostGHQ	PostSWL	PostFlourishing
Hot Yoga	_												
Room-Temp Yoga	0.406	_											
PostInstructor	0.128	0.464	_										
PostClassExcitement	0.084	0.298	0.829 ***	_									
Attendance	0.310	0.189	-0.151	0.082	_								
PostPANAS(+)	0.021	0.112	0.481	0.650 *	-0.076	_							
PostPANAS(-)	0.207	-0.281	-0.735 **	-0.535	0.419	-0.319	_						
PostPSS	-0.081	-0.110	-0.690 **	-0.417	0.423	-0.523	0.686 **	_					
PostFFMQ	0.391	0.539	0.598 *	0.237	-0.136	0.244	-0.624 *	-0.777 **	_				
PostQEWB	0.168	-0.118	-0.682 *	-0.584 *	0.259	-0.639 *	0.594 *	0.705 *	-0.369	_			
PostGHQ	0.045	-0.237	0.467	0.482	-0.187	0.543	-0.076	-0.449	0.199	-0.405	_		
PostSWL	0.113	0.046	0.680 *	0.447	-0.171	0.536	-0.274	-0.734 **	0.500	-0.670 *	0.768 **	_	
PostFlourishing	0.254	0.136	0.762 **	0.605 *	-0.050	0.638 *	-0.347	-0.672 *	0.481	-0.679 *	0.792 **	0.955 ***	_
PostSBI	0.160	0.351	0.885 ***	0.665 *	-0.269	0.453	-0.659 *	-0.807 **	0.781 **	-0.565	0.677 *	0.747 **	0.790 **

*Note.* \* p < .05, \*\* p < .01, \*\*\* p < .001



## REFERENCES

https://docs.google.com/document/d/1G4Sm69GRqw7l1BhAxoJSaTiMBNdwKkDxEFHmFFDbpoM/edit?usp=sharing

#### DISCUSSION

- The hypotheses were not supported by the data perhaps because yoga is too distinctive from savoring/mindfulness, or perhaps because yoga and mindfulness are so closely interconnected that studying them in isolation is rather difficult.
- We found a positive effect in the differences between pre- and post-test for GHQ but a negative effect in the differences between pre- and post-test for QEWB, suggesting that these may be that spurious findings/false positives.
- Correlations were stronger at post-test - perhaps because of the testing effect.
- The research suggests that participants may not have been consciously aware of the proprioceptive cues themselves and instead heightened their perception of instructor knowledge, attributing the differences in speech to the instructors themselves, rather than isolating them to their speech patterns.
- It is important to remember the limitations this study had, such as its quasi-experimental design, individual variability, instructional variability, small sample size, and selection and/or non-response biases.