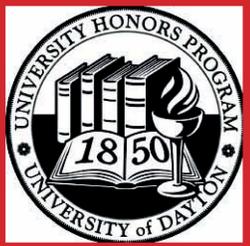




How Academic and Extracurricular Workload and Stress Impacts The Mental and Physical Health of College Students



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Background

College students experience unique types of stressors (Murff, 2005)

- Stressors may include being in a new environment, being far from home, and trying to make new friends
- The most common and influential stressor a college student will encounter is academics

Academics have been shown to induce stress in college students (Murff, 2005)

- Stress has been shown to be connected with physical and mental health (Peer, Hillman, Van Hoet, 2015), (Murff, 2005)
- decreased immune system function, high blood pressure, and impaired emotional health (Largo-Wight, Peterson, Chen, 2005)
- Stress and academics are associated based on past research, as well as stress and health (Peer, Hillman, Van Hoet, 2015)

This study aimed to explore which aspects of academics and stress are associated with mental and physical over time.

The Current Study

Participants

- 76 UD undergraduate students participated in the study

Procedure

- Longitudinal design: approximately one-month between Time 1 and Time 2 assessments

Method (continued)

- Time 2: questionnaires and baseline saliva

Stress:

- Self-reported stress: Perceived Stress Scale (Cohen, Kamarck, & Mermelstein, 1983)
- Physiological stress: baseline cortisol (Saliva Sample #1) and stress reactivity (Sample #2 cortisol – Sample #1 cortisol)

Physical Health:

- Self-reported physical health: MOS 36-Item Short Form Health Survey (Ware & Sherbourne, 1992)

Mental Health:

- Self-reported depression: CES-D scale (Radloff, L. S., 1977)

Workload:

- Average # of hours spend on schoolwork and extracurricular activities per week

Academic Difficulty:

- Participants rated how difficult their major is for them on a 1-6 scale

Results

Analysis:

- Time 1: Regressed each dependent measure (physical health, depression) separately onto Time 1 stress, workload, & academic difficulty
- Time 2: Regressed each dependent measure (physical health, depression) separately onto Time 1 stress, workload, academic difficulty, and that health measure at Time 1.
- Results reported controlling for other variables in the model

Results

Source	b	SE	t	p
Physical Health – Time 1				
Intercept	3.59	0.11	31.33	<.0001****
Perceived Stress	-0.70	0.27	-2.46	0.02*
Workload	0.01	0.01	0.72	0.47
Perceived Major Difficulty	0.12	0.08	1.45	0.15
Physical Health – Time 1				
Intercept	3.55	0.12	29.67	<.0001****
Baseline Physiological Stress	-0.36	0.38	-0.94	0.35
Workload	0.00	0.02	0.28	0.78
Perceived Major Difficulty	0.03	0.09	0.37	0.71
Physical Health – Time 1				
Intercept	3.54	0.12	29.50	<.0001****
Stress Reactivity	-0.36	0.40	-0.89	0.38
Workload	0.00	0.02	0.18	0.86
Perceived Major Difficulty	0.04	0.09	0.49	0.62
Depression – Time 1				
Intercept	1.97	0.09	23.08	<.0001****
Perceived Stress	0.89	0.20	4.47	<.0001****
Workload	0.01	0.01	0.91	0.37
Perceived Major Difficulty	-0.11	0.063	-1.83	0.07
Depression – Time 1				
Intercept	2.04	0.10	20.83	<.0001****
Baseline Physiological Stress	0.36	0.31	1.16	0.25
Workload	0.01	0.08	1.50	0.14
Perceived Major Difficulty	0.01	0.07	0.10	0.92
Depression – Time 1				
Intercept	2.04	0.10	20.65	<.0001****
Stress Reactivity	0.22	0.33	0.65	0.52
Workload	0.01	0.01	1.55	0.13
Perceived Major Difficulty	-0.00	0.07	-0.06	0.95

Note: df = 44.

- Higher perceived stress, poorer physical health at Time 1.
- Higher perceived stress, higher depression at Time 1.
- Higher baseline physiological stress at Time 1 associated with higher depression at Time 2

- Higher academic difficulty at Time 1 associated with higher depression at Time 2

Source	b	SE	t	p
Physical Health – Time 2				
Intercept	3.47	0.07	47.63	<.0001****
Perceived Stress	-0.16	0.17	-0.96	0.35
Workload	-0.00	0.01	-0.66	0.51
Perceived Major Difficulty	0.07	0.05	1.32	0.20
Perchealth_t1	0.82	0.10	8.30	<.0001****
Physical Health – Time 2				
Intercept	3.46	0.07	47.19	<.0001****
Baseline Physiological Stress	-0.01	0.21	-0.58	0.57
Workload	-0.01	0.01	-0.89	0.38
Perceived Major Difficulty	0.04	0.05	0.83	0.42
Perchealth_t1	0.81	0.11	7.54	<.0001****
Physical Health – Time 2				
Intercept	3.46	0.07	47.48	<.0001****
Stress Reactivity	0.23	0.27	0.83	0.41
Workload	-0.01	0.01	-1.06	0.30
Perceived Major Difficulty	0.05	0.05	1.10	0.28
Perchealth_t1	0.84	0.10	8.70	<.0001****
Depression – Time 2				
Intercept	1.80	0.10	17.21	<.0001****
Perceived Stress	0.04	0.30	0.12	0.91
Workload	0.01	0.01	0.77	0.45
Perceived Major Difficulty	0.10	0.08	1.24	0.23
Depression	0.43	0.19	2.23	0.04*
Depression – Time 2				
Intercept	1.82	0.09	19.46	<.0001****
Baseline Physiological Stress	0.56	0.24	2.36	0.03*
Workload	0.01	0.01	0.77	0.45
Perceived Major Difficulty	0.13	0.06	2.11	0.05*
Depression	0.36	0.14	2.62	0.02*
Depression – Time 2				
Intercept	1.80	0.10	17.41	<.0001****
Stress Reactivity	-0.21	0.38	-0.57	0.57
Workload	0.01	0.01	0.86	0.40
Perceived Major Difficulty	0.10	0.07	1.49	0.12
Depression	0.45	0.15	3.09	0.01**

Note: df = 22

Discussion

- With a few exceptions, stress, academic difficulty, and workload were not strong predictors of concurrent or future physical or mental health
- Future research would benefit from examining these questions among a larger sample of participants, and perhaps over a longer period of time.