

Background

The UMES School of Pharmacy is an accelerated three-year program that uses a block model for its curriculum design. The materials for each two-week block is presented in daily 7-hour classes. UMES pharmacy students are expected to show mastery of the material by passing the end-of-block assessments.

Due to the perceived heavy workloads, limited time to master materials and a passing score of 85%, students may possibly experience some level of stress.

The ACPE guidelines encourage assessment of perceived stress in students and provision of mechanisms to address underlying causes that negatively impact learning experiences.¹

There is strong evidence indicating that higher levels of student stress impact academic performance negatively.² Previous studies have identified factors that can cause pharmacy students to be stressed out during their time in school.³⁻⁵

However, no study has been done on the influence of the students' prior educational background on their perceived stress level while in a pharmacy program.

Objectives

To investigate and compare perceived stress of student pharmacists (SP1, SP2, and SP3) who earned or did not earn a bachelor degree prior to enrollment in a 3-year program.

To determine the nature of coping strategies employed by pharmacy students to alleviate stress.

Hypothesis

H0: Students with or without a bachelor degree prior to pharmacy school experience the same level of stress during a 3-year program.

H1: Students without a bachelor degree prior to pharmacy school experience more stress than those who earned one.

Methods

- A link to an online survey was sent to 160 pharmacy students.
- The 13 question survey included the validated 10-item Perceived Stress Scale (PSS),⁶ demographic information, degree status, assessment performance, and major stressors and coping mechanisms.
- The names of students who completed the survey were entered into a drawing to win a gift card.
- SP1 and SP2 students were given time to complete the survey in class. SP3 students were invited to participate via email and completed the survey remotely.
- The survey was kept open for 5 days. Statistical analyses were completed using Minitab.

Demographics:

The response rate was 85%.

Variable	With a Bachelor Degree No. (%)	Without a Bachelor Degree No. (%)
Year in School		
SP1	27 (36.99)	15 (25)
SP2	25 (34.25)	27 (45)
SP3	21 (28.77)	18 (30)
Age		
<21	0 (0)	3 (5)
21-25	22 (30.14)	27 (45)
26-30	24 (32.88)	20 (33.33)
31-35	18 (24.66)	9 (15)
≥ 36	9 (12.33)	1 (1.67)
Sex		
Male	36 (49.32)	23 (38.33)
Female	50.68 (37)	37 (61.67)
Marital Status		
Single	52 (71.23)	45 (75)
Married	20 (27.40)	14 (23.33)
Separated	0 (0)	0 (0)
Divorced	1 (1.37)	1 (1.67)
Have Children		
Yes	19 (26.03)	7 (11.67)
No	54 (73.97)	53 (88.33)

++ Doctor of Pharmacy students at the time of the study

Results and Discussion

Perceived Stress Scale Score

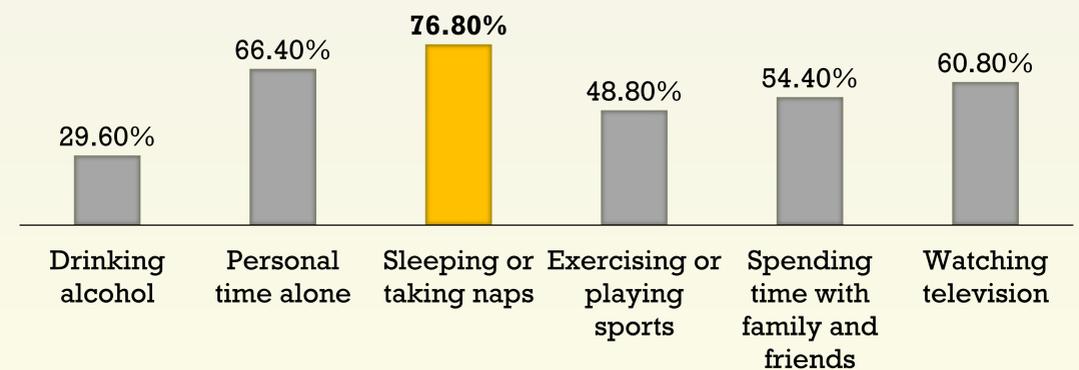
	Median (With the Degree)	Median (Without the Degree)	P-value
PSS scores	18	19.5	0.83

There was no statistically significant difference between students with or without a Bachelor degree in terms of perceived stress levels (p=0.83).

Top Stress Factors

- End-of-block assessments
- Remediation Activities (Reassessment and Extended Learning)
- Financial Concerns
- Health or Maintaining Health

Strategies to Cope with Stress



Norm Group Comparison

	N	Mean PSS Score (SD)
UMES Students	133	19.18 (6.7)
Norm Group (18-29 yo)	465	14.2 (6.2)

The students at UMES School of Pharmacy had more perceived stress as rated by the PPS (mean=19.18) compared to the norm for the 18-29 age group (mean=14.2).

Implications

With a rigorous 3-year concentrated pharmacy program, UMES-SOP should find ways to support and encourage stress relief amongst students. This may include having organized exercise/recreational activities and offering a stress management class.

References

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