



# Pharmacy Students' Perceptions of Coping Mechanisms and Resources Provided by their Institution

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## Objective

To examine pharmacy students' perceptions on mental health and wellness, coping mechanisms, and resources provided by Midwestern University Chicago College of Pharmacy (MWU-CCP).

## Background Information

Pursuing a degree in medicine, pharmacy, and other health professions requires considerable time and dedication. Previous studies have shown students in medical programs to report higher incidence of developing mental health issues. Poor mental health has been associated to poor academic performance, interference with personal or professional growth, and alcohol or substance abuse.

➤ Studies assessing pharmacy students' perceptions on mental health & wellness, coping mechanisms, and resources are lacking.

## Methods

### Survey Design

- SurveyMonkey® questionnaire including items addressing:
  - Mental health and wellness
  - Coping mechanisms
  - Instruction &/or resources provided by MWU-CCP
  - Student background and demographics
- Class announcements made to 1<sup>st</sup> (P1), 2<sup>nd</sup> (P2), & 3<sup>rd</sup> (P3) year pharmacy students regarding emailed questionnaire during a required winter quarter course
- Reminder sent 2 weeks after original message

### Data Analysis

- Statistical analyses using IBM®SPSS® 24.0
  - Frequencies
  - Comparisons by year in pharmacy school

## Results: Response Rate

	PS1	PS2	PS3
Total e-mailed	183	192	211
Total responses	102	99	49
Response Rate	40.8%	51.6%	23.2%
<b>Total Response Rate</b>	42.7% (n=250)		

## Results: Student Demographics

	Total	P1	P2	P3
Age* (yrs.)	24.0 ± 3 (177)	23.4 ± 3	23.9 ± 3	25.1 ± 3
Caucasian	43.4% (108)	56.8%	51.3%	56.4%
Female	54.8% (137)	66.7%	72.7%	69.2%
Heterosexual	73.2% (183)	96.3%	93.5%	87.2%
Out of state	26.0% (65)	35.8%	26.3%	41.0%
U.S. citizen*	71.2% (178)	84.0%	94.8%	97.4%
Prior degree	61.6% (154)	60.8%	63.6%	59.2%
Class attendance*	84.4% (211)	89.1%	75.5%	95.9%
Hours/wk. studying	20.4 ± 20.4 (239)	22.4 ± 21.9	19.9 ± 21.9	16.98 ± 12.1
Living w/parents*	32.8% (82)	43.2%	46.1%	30.8%
Commute time (min.)	30.4 ± 25.3 (191)	30.4 ± 24.4	32.6 ± 28.3	25.7 ± 20.4
Employed during school*	54.8% (137)	56.3%	77.9%	84.2%
Hours/wk. employed	8.4 ± 6.7 (187)	6.6 ± 6.5	9.7 ± 7.0	9.2 ± 6.0
Student loan debt	~ \$50,000: 12.8% (192)	~ \$25,000: 26.6%	~ \$75,000: 25.7%	~ \$150,000: 23.1%

\*Significant differences between class year were found at  $\alpha = 0.05$ .

## Results: Mental Health & Wellness

Variable (answer)	Total	P1	P2	P3
Importance of mental health & wellness (V. Imp./Important)	86.0% (215)	89.1%	87.5%	83.7%
Experienced a mental health issue (All the time/Freq.)	18.0% (45)	14.0%	21.3%	22.4%
Effectively coped in past academic quarter (Alm. always/Freq.)	35.2% (88)	41.6%	31.2%	32.7%
Know another student who experienced a mental health issue* (Yes)	62.4% (162)	48.5%	77.7%	71.4%

\*Significant differences between class year were found at  $\alpha = 0.05$ .

## Results: Top Coping Mechanisms

	Total	P1	P2	P3
1. Sleeping/napping	45.6% (114)	62.4%	49.4%	41.9%
2. Music	44.8% (112)	47.7%	50.6%	60.5%
3. Isolation/alone time	40.0% (100)	39.5%	51.7%	46.5%
4. Time with family &/or friends	38.4% (96)	49.4%	40.2%	44.2%
5. Venting	36.4% (91)	33.7%	48.3%	46.5%
6. Time mgmt./reorg. schedule	34.8% (87)	45.3%	36.8%	37.2%
7. Binge watching TV/online	34.4% (86)	32.2%	38.9%	45.8%
8. Shopping	29.2% (73)	32.6%	37.9%	27.9%
9. Exercising &/or playing sports	27.2% (68)	34.4%	30.0%	20.8%
10. Binge eating	24.8% (62)	21.1%	27.8%	37.5%
12. Self-blame*	22.0% (55)	18.6%	28.1%	33.3%
13. Healthy diet*	21.6% (54)	25.8%	22.2%	22.9%
14. Study group*	18.4% (46)	26.2%	21.8%	11.6%

\*Significant differences between class year were found at  $\alpha = 0.05$ .

## Results: Students' Perceptions of Resources

Variable (answer)	Total	P1	P2	P3
How well curriculum addresses mental health* (Excellent/V. Good)	10.8% (27)	25.9%	7.8%	0.0%
How often faculty reminds the importance of mental health (Alm. Always/ Freq.)	14.8% (37)	23.4%	15.4%	14.6%
Rating of MWU-CCP resources* (Excellent/V. Good)	13.6% (34)	30.4%	32.2%	0.0%

\*Significant differences between class year were found at  $\alpha = 0.05$ .

## Results: Resources Students May Utilize

	Total	P1	P2	P3
Advisor meetings*	7.2% (18)	6.3%	7.5%	16.7%
Counseling services	4.4% (11)	3.8%	6.3%	7.1%
Classroom course content	13.6% (34)	12.5%	18.8%	21.4%
Learning communities	8.0% (20)	12.7%	7.5%	9.5%
Roundtable discussion	6.8% (17)	8.8%	7.5%	9.5%
Wellness elective*	14.4% (36)	8.8%	22.5%	26.2%

\*Significant differences between class year were found at  $\alpha = 0.05$ .

## Discussion/Conclusion

- Limitations:
  - External validity
  - Non-response bias
  - Social desirability bias
- Students recognize the importance of mental health and wellness yet don't seem to consistently cope effectively
- Students report using mostly positive coping mechanisms
- Students perceive the curriculum and university resources to not adequately address their needs relating to mental health
- This study establishes baseline measures of the extent to which the current pharmacy curricula and university resources address pharmacy student needs relating to mental health and coping mechanisms.
- Additional studies should be conducted once improvements to the curriculum and/or resources are implemented.

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