

THE ROLE OF INTERPERSONAL TOXICITY ON HEALTHCARE STUDENTS' WELL-BEING

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- Talia Sierra, MPAS, PA-C;
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Learning Objectives

By the end of the session, attendees should be able to

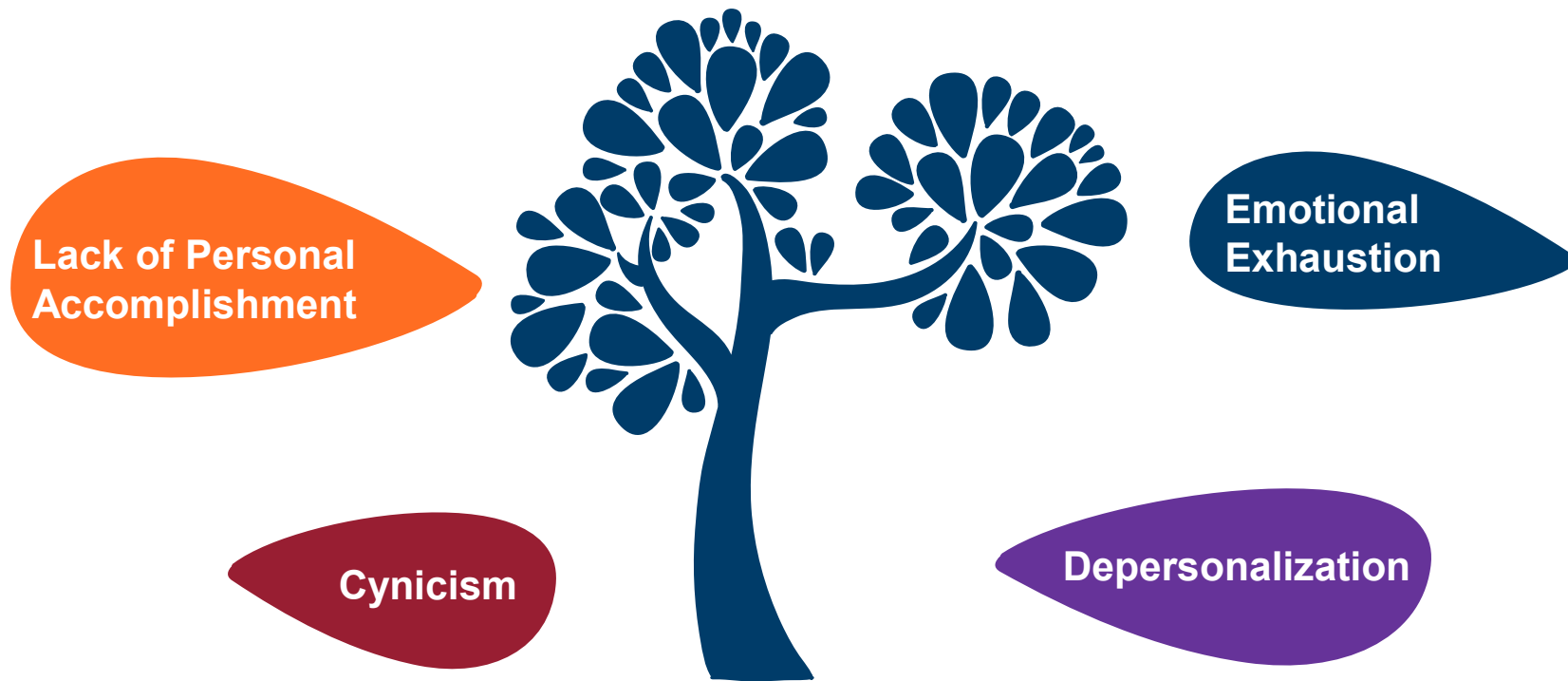
- 1 Describe prevalence and rates of PA student stress, symptoms of burnout, and well-being
- 2 Describe the relationship between experiences of interpersonal toxicity and abuse and symptoms of burnout in PA students

BACKGROUND

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What is Burnout



Burnout in Medical Students (MS)



Almost **50%** of MS may be affected by burnout in the US.

MS **start with lower rates** compared other college graduates; **surpasses peers** once in school.



Correlated with

- **Level of support from faculty and staff** (MS1, MS2)
- **Medical organizations** (MS3, MS4)
- **Exposure to cynical residents** (MS3, MS4)

MS are 2 to 3 times more likely to have **suicidal ideations** in the past (11% overall)



Without intervention, only 15 to 25% of them will recover within 1 to 2 years.

Burnout in PA Students (PA-S)

Average levels of

- Emotional exhaustion
- Depersonalization



Depersonalization levels are higher for

- Younger PA-S
- PA-S with children at home

Low levels of

- Personal accomplishment



Personal accomplishment is lower for

- PA-S2 versus PAs1

Interpersonal Toxicity



Interpersonal Toxicity in Medical Students (MS)

50-85% of MS reported being taking advantage of or abused

45% of FM Physicians experienced mistreatment as a resident

84% of all recent medical school graduates (7/2018 to 6/2019) experienced mistreatment at least once in medical school.

Interpersonal Toxicity in PA Students (PA-S)

No research to date

PURPOSE

This research examines the role interpersonal toxicity and abuse play in PA student burnout

METHODOLOGY

Methodology

Sampling

- 17,735 emails delivered plus recruitment online and social media
- 2,783 respondents
- 15.6% estimated response rate;
- Overall margin of error +/- 1.7% at 95% confidence level

Survey

- 2020 AAPA Student Survey
- Personal background
- Burnout (no measure of burnout for healthcare students exists; devised questions to mirror dimensions of burnout for health professionals)
- Life and school satisfaction, stress, and well-being
- All questions optional

Analysis

Descriptive statistics

- Overall levels of satisfaction related to life and school,
- Stress
- Burnout (emotional exhaustion, cynicism, low sense of personal accomplishment, and compassion fatigue)
- Experiences with interpersonal toxicity and abuse among all PA students.

Between groups differences (didactic vs. clinical year)

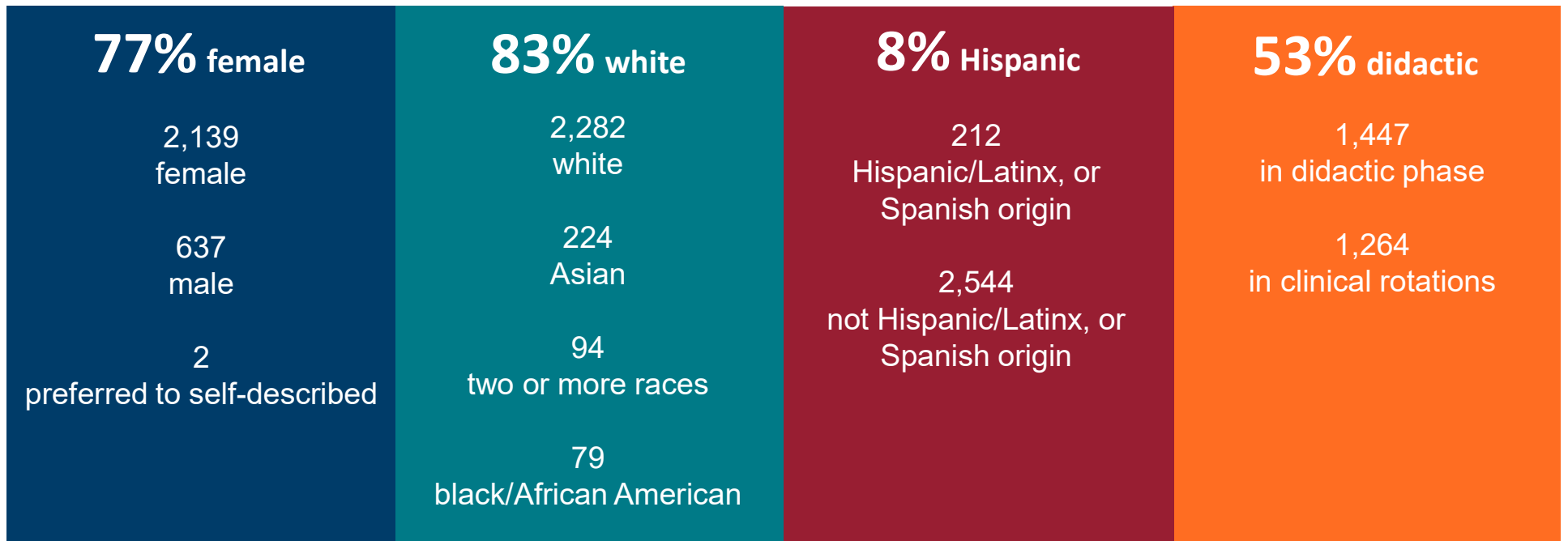
- Nonparametric Mann-Whitney tests

Relationship between interpersonal toxicity and burnout

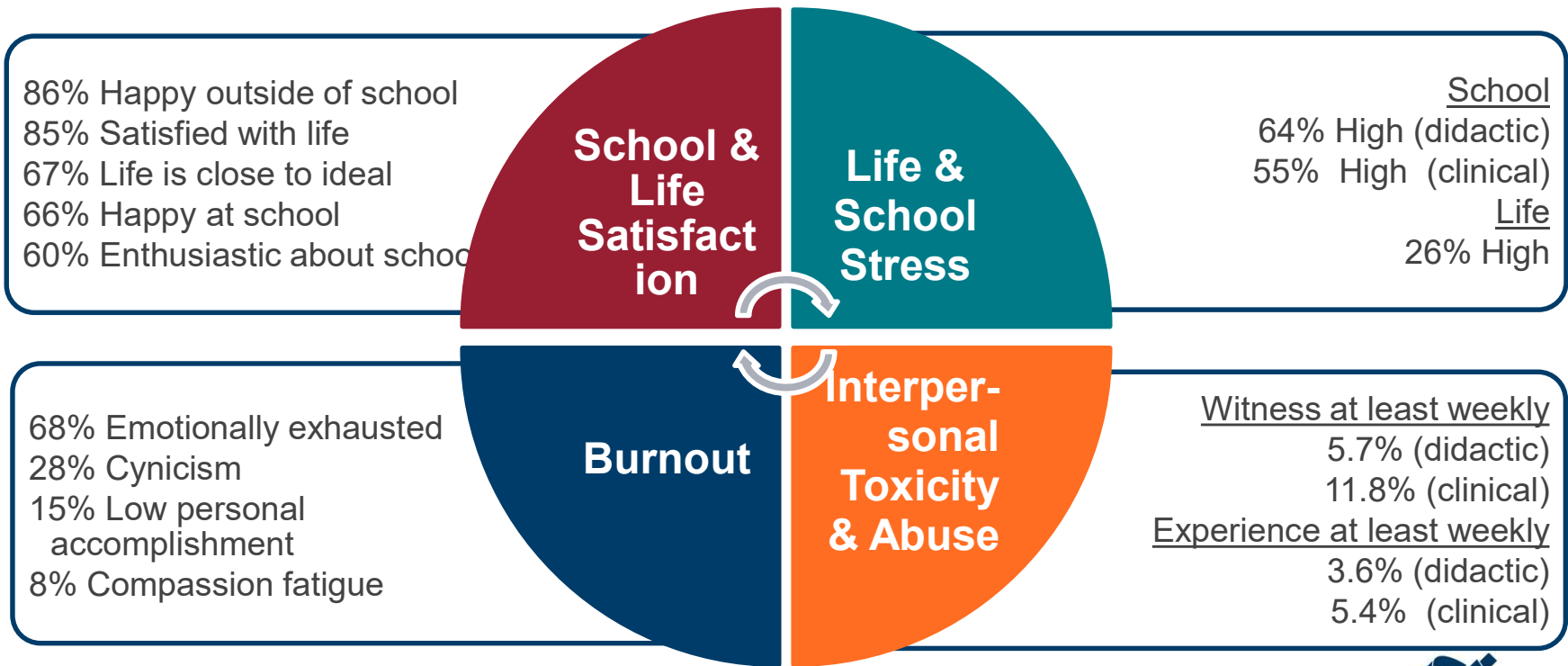
- Ordinal regressions: Frequency of experiencing interpersonal toxicity/abuse to predict the four symptoms associated with burnout.

RESULTS

Student Characteristics



Burnout and Life Stress



Predicting Burnout from Interpersonal Toxicity or Abuse (ITA)

Frequency	Odds Ratio	Confidence Interval	
		Lower	Upper
I am emotionally exhausted from school (n=2,459)			
Daily	5.57	2.50	12.39
Weekly	5.88	3.68	9.39
Monthly	3.37	2.45	4.63
Annually	1.95	1.54	2.47

Feelings of cynicism about school (n=2,456)			
Daily	26.59	12.07	58.57
Weekly	7.36	4.81	11.26
Monthly	4.95	3.61	6.77
Annually	2.09	1.65	2.65

Note: "Never" personally experienced interpersonal toxicity or abuse at school or clinical rotation site is the reference category for each comparison

PA-S who experience ITA compared to those that don't experience any ITA...

WEEKLY: have **5.88** higher odds of saying they are **emotionally exhausted** from school

ANNUALLY: have **1.95** higher odds of saying they are **emotionally exhausted** from school.

WEEKLY: Have **7.36** higher odds of saying they have feelings of **cynicism** about school.

ANNUALLY: Have **2.09** higher odds of saying they have feelings of **cynicism** about school.

Predicting Burnout from Interpersonal Toxicity or Abuse (ITA)

Frequency	Odds Ratio	Confidence Interval	
		Lower	Upper
Low sense of personal accomplishment (n=2,456)			
Daily	6.43	2.81	14.71
Weekly	2.89	1.88	4.43
Monthly	3.62	2.64	4.97
Annually	1.83	1.46	2.30

Compassion fatigue (n=2,450)			
Daily	1.83 *	0.85	3.97
Weekly	2.37	1.61	3.49
Monthly	1.92	1.43	2.57
Annually	1.99	1.58	2.5

* Not significant; all other results are significant p<0.001.

Note: Results displayed are for 4 separate ordinal logistic regressions. "Never" personally experienced interpersonal toxicity or abuse at school or clinical rotation site is the reference category for each comparison

PA-S who experience ITA compared to those that don't experience any ITA...

WEEKLY: have **2.89** higher odds of saying they have **low sense of personal accomplishment**.

ANNUALLY: have **1.83** higher odds of saying they have **low sense of personal accomplishment**.

WEEKLY: Have **2.37** higher odds of saying they have **compassion fatigue**.

ANNUALLY: Have **1.99** higher odds of saying they have **compassion fatigue**.

Results



Satisfaction and Happiness

PA students report high levels of satisfaction and happiness related to both school and life



Enthusiasm for School

Clinical students have lower enthusiasm for school compared to those in the didactic phase



Burnout

More than two in three PA students reported some symptoms of burnout



Interpersonal Toxicity and Abuse (ITA)

Clinical students reported witnessing and experiencing ITA more often than didactic students

Among all students, experiencing ITA predicted all four symptoms of burnout examined, highlighting that those who experience ITA have higher odds of being at risk for burnout.

DISCUSSION

Discussion



Satisfaction and Happiness

PA students report high levels of satisfaction and happiness related to both school and life
YET... High levels of stress among PA students exist.

CONSIDER... PA programs are notoriously high stress, high stakes environments. This makes these findings unsurprising.



Enthusiasm for School

Clinical students have lower enthusiasm for school compared to those in the didactic phase
CONSIDER... As time passes, PA students may lose the excitement for this new phase of their burgeoning career, wearing down their enthusiasm.

Discussion



Burnout

More than two in three PA students reported some symptoms of burnout

YET... Despite high stress and burnout, PA students are generally satisfied with school and life.

CONSIDER...A similar phenomenon is seen in the PA profession, where PAs have high career satisfaction as well as significant rates of burnout.

CAUTION...High levels of emotional exhaustion and to a smaller degree cynicism may be a sign that PAs are starting their careers already displaying some symptoms of burnout.

NEXT STEPS...Monitoring burnout in PA students and interventions when needed may mitigate the effects burnout may have on future clinicians and their patients.

Discussion

Interpersonal Toxicity and Abuse (ITA)

Clinical students reported witnessing and experiencing ITA more often than didactic students. Among all students, experiencing ITA predicted all four symptoms of burnout examined, highlighting that those who experience ITA have higher odds of being at risk for burnout.

CONSIDER... Experiencing a toxic environment in PA school at some point is associated with higher odds of reporting burnout symptoms.

NEXT STEPS... PA programs should provide a supportive environment to ensure long-term career success.

NEXT STEPS... PA programs should provide education for PA students to confront uncomfortable situations to address interpersonal toxicity.

Future Research



Development of a better instrument to measure student burnout

Development and evaluation of educational interventions to address burnout

Development and evaluation of educational interventions to arm PA students with the skills to address interpersonal toxicity and abuse

Limitations



Survey bias: Self-selection bias; socially desirable responding.

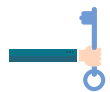


No validated measure of PA student burnout.

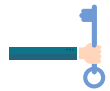
Key Take Home Points



Like past PA research has shown, the majority of PA students exhibit at least one sign of burnout (i.e., 68% report emotional exhaustion) simultaneously with reporting the majority of PA students reporting high life (86%) and school (66%) satisfaction.



Many PA students in their clinical year are witnessing (11%) or experiencing (6%) interpersonal abuse or toxicity.



When PA students experience interpersonal toxicity or abuse, they have greater odds of burnout across all dimensions, and this occurs when they experience it just once a year.

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Questions

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