

# Assessment of Burnout and Personality Traits in Pharmacists Practicing at Health Systems with Pharmacy Residency Programs

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*This study has been reviewed and approved by the Ascension Genesys Hospital IRB, with reliance with the University of Cincinnati IRB.*

## Background

- As recognized by ASHP, the National Academy of Medicine (NAM), and the Institute for Healthcare Improvement (IHI), clinician burnout poses significant risks to patient safety and healthcare quality.<sup>1</sup>
- Addressing burnout is especially critical to organizations which offer pharmacy residency training, and ASHP residency program standards have been recently updated to have programs consider addressing burnout with incoming residents during the initial orientation; encourage education to preceptors on burnout syndrome, the risks, and mitigation strategies; and suggest the provision of education to all staff on burnout syndrome, the risks, and mitigation strategies.<sup>2</sup>
- Prior studies in other disciplines of healthcare practice outside of pharmacy have identified that some personality traits may be protective to burnout, while others may increase susceptibility to burnout.<sup>3,4</sup>
- This research project seeks to:
  - Assess burnout in pharmacists practicing at health systems with pharmacy residency programs.
  - Evaluate the relationship between pharmacist personality traits and reported burnout rates for emotional exhaustion, depersonalization, and personal accomplishment.

## Methods

### Inclusion Criteria

- Health system pharmacists practicing within an Ascension Michigan hospital or clinic who serve as a residency preceptor, residency preceptor-in-training, or residency program leader
- Residency-trained pharmacists practicing within an Ascension Michigan hospital or clinic with a residency training program

### Survey Components

- Consent to participate in the survey
- Demographic information questionnaire
- Maslach Burnout Inventory Human Service Survey for Medical Personnel (MBI-HSS [MP])
- 16 Personalities Personality Test

## Methods (continued)

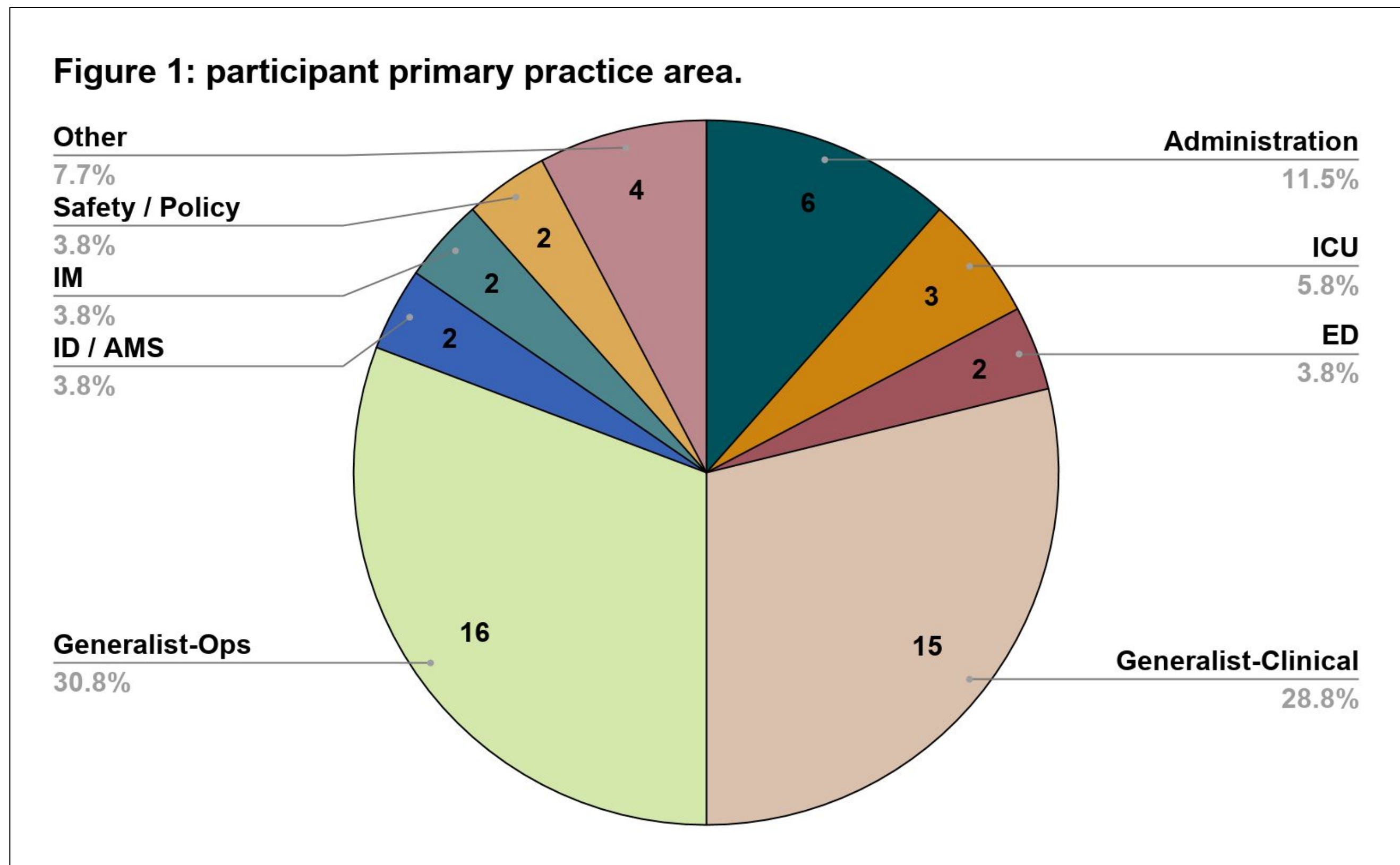
### Statistical Analysis

- Descriptive statistics such as means and standard deviations were used for the three burnout domains.
- Categorical data of the personality types were described using frequencies and percentages.
- Bivariate statistics included Student’s t-test.
- The difference in personality group means were compared using one-way ANOVA for quantitative variables.
- A p-value of less than 0.05 was used to determine statistical significance.

## Results

### Participant Demographics

- Of 96 participants invited, 52 (54.2%) completed all components of the survey.
  - 36 participants (69.2%) completed at least one year of residency training.
  - 29 participants (55.8%) indicated their time in practice was 10 years or less.
  - 32 participants (61.5%) indicated a role as a preceptor or preceptor-in-training.



## Results (continued)

### Results for Maslach Burnout Inventory Human Services Survey for Medical Personnel

Table 1: MBI-HSS (MP) results for participants from all sites.			
Burnout Domain	Low level of burnout (%)	Moderate level of burnout (%)	High level of burnout(%)
Emotional Exhaustion	20 (38.5%)	19 (36.5%)	13 (25%)
Depersonalization	31 (59.7%)	19 (36.5%)	2 (3.8%)
Personal Accomplishment	14 (26.9%)	26 (50%)	12 (23.1%)
High level of burnout in at least one domain (%)			18 (34.6%)
High level of burnout in all three domains (%)			0 (0%)

### Burnout Results by 16 Personalities Personality Trait Groupings

Table 2: comparison of burnout rates between personality groupings and traits.			
Groups Compared, n (%)	Emotional Exhaustion Mean ± SD p-value	Depersonalization Mean ± SD p-value	Personal Accomplishment Mean ± SD p-value
Sentinels (S): 30 (57.6%) Diplomats (D): 16 (30.8%)	S: 18.57 ± 9.930 D: 20.94 ± 9.469  p = 0.44	S: 5.40 ± 4.048 D: 6.81 ± 3.953  p = 0.26	S: 35.50 ± 6.725 D: 35.25 ± 6.836  p = 0.91
Introverted (I): 37 (71.2%) Extroverted (E): 15 (28.8%)	I: 20.73 ± 8.903 E: 18.67 ± 12.591  p = 0.51	I: 6.08 ± 3.730 E: 6.07 ± 6.364  p = 0.99	I: 33.86 ± 6.945 E: 37.40 6.479  p = 0.10
Observant (S): 35 (67.3%) Intuitive (N): 17 (32.7%)	S: 19.03 ± 9.473 N: 22.41 ± 11.000  p = 0.26	S: 5.29 ± 4.019 N: 7.71 ± 5.312  p = 0.07	S: 34.66 ± 7.170 N: 35.35 ± 6.633  p = 0.74
Feeling (F): 42 (80.8%) Thinking (T): 10 (19.2%)	F: 19.29 ± 9.171 T: 23.70 ± 12.962  p = 0.21	F: 5.90 ± 4.065 T: 6.80 ± 6.529  p = 0.58	F: 34.98 ± 7.087 T: 34.50 ± 6.637  p = 0.85
Judging (J): 44 (84.6%) Prospecting (P): 8 (15.4%)	J: 20.18 ± 10.625 P: 19.88 ± 6.128  p = 0.94	J: 6.02 ± 4.638 P: 6.38 ± 4.502  p = 0.84	J: 35.18 ± 6.714 P: 33.25 ± 8.396  p = 0.47
Turbulent (T): 31 (59.6%) Assertive (A): 21 (40.4%)	T: 22.13 ± 10.022 A: 17.19 ± 9.485  p = 0.08	T: 6.68 ± 4.593 A: 5.19 ± 4.512  p = 0.25	T: 34.19 ± 6.916 A: 35.90 ± 7.021  p = 0.39

## Discussion / Conclusions

- Despite communication of the survey during the COVID-19 pandemic, burnout rates of pharmacists participating were lower than those reported previously.<sup>5</sup>
- Certain personality traits as depicted by 16 Personalities personality test results were reported more frequently than others, including introverted, observant, feeling, judging, and turbulent.
- While burnout results presented did not indicate a significant difference in burnout domain scores for groups compared, further study inclusive of a broader audience of participants is warranted to evaluate the relationship between personality traits and the three domains of burnout.
- Evaluation of demographic information collected and comparison of burnout rates between identified groups (e.g., time in practice, primary practice area, highest level of residency training) is planned.

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