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Identifying the Emergency Medicine Personality: A Multisite Exploratory Pilot Study

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ABSTRACT

Objectives: This study aimed to understand the personality characteristics of emergency medicine (EM) residents and assess consistency and variations among residency programs.

Methods: In this cross-sectional study, a convenience sample of residents ($N = 140$) at five EM residency programs in the United States completed three personality assessments: the Hogan Personality Inventory (HPI)—describing usual tendencies; the Hogan Development Survey (HDS)—describing tendencies under stress or fatigue; and the Motives, Values, and Preferences Inventory (MVPI)—describing motivators. Differences between EM residents and a normative population of U.S. physicians were examined with one-sample t-tests. Differences between EM residents by program were analyzed using one-way analysis of variance tests.

Results: One-hundred forty (100%), 124 (88.6%), and 121 (86.4%) residents completed the HPI, HDS, and MVPI, respectively. For the HPI, residents scored lower than the norms on the adjustment, ambition, learning approach, inquisitive, and prudence scales. For the HDS, residents scored higher than the norms on the cautious, excitable, reserved, and leisurely scales, but lower on bold, diligent, and imaginative scales. For the MVPI, residents scored higher than the physician population norms on altruistic, hedonistic, and aesthetics scales, although lower on the security and tradition scales. Residents at the five programs were similar on 22 of 28 scales, differing on one of 11 scales of the HPI (interpersonal sensitivity), two of 11 scales of the HDS (leisurely, bold), and three of 10 scales of the MVPI (aesthetics, commerce, and recognition).

Conclusions: Our findings suggest that the personality characteristics of EM residents differ considerably from the norm for physicians, which may have implications for medical students' choice of specialty. Additionally, results indicated that EM residents at different programs are comparable in many areas, but moderate variation in personality characteristics exists. These results may help to inform future research incorporating personality assessment into the resident selection process and the training environment.

Understanding and measuring medical student and resident personality characteristics may be helpful to medical educators and program directors in a variety of applications, such as specialty advising, residency selection, mentoring, coaching, and remediation.[1,2] There is a large body of literature suggesting

that there are potential benefits of personality assessment for training and occupational outcomes. Specifically, prior research has demonstrated that personality characteristics can predict performance, both within and outside the field of medicine, and meta-analytic evidence supports using personality assessments to make managerial decisions, such as staffing.[3–13] At academic medical centers, residents are typically selected through an application process that has traditionally relied on academic records, United States Medical Licensing Examination (USMLE) scores, letters of recommendation, and in-person interviews.[14] However, many elements of a residency application (standardized test scores, clerkship grades, class rank, etc.) offer little insight into the personality traits that contribute to an individual's behavior, including past and future performance. Further, correlating many of these elements with success in residency has proven challenging.[15–17] Although educators may attempt to glean insight into an applicant's personality through qualitative comments and interview performance, little is understood about how to assess and interpret personality traits in this context.

In addition to job performance, personality characteristics can also impact critical interpersonal interactions.[18] This may be particularly important in fields where relationship building is essential, such as emergency medicine (EM), where physicians interact with patients, family members, consultants, prehospital providers, and hospital staff in a fast-paced, time-sensitive environment. Personality characteristics have been associated with medical specialty choices, but research has shown substantial variability.[19–23] Matching the applicant's personality strengths and internal motivations to specific specialties may have the potential to offer trainees a better path to success in their chosen profession and greater career satisfaction.

Personality traits have been shown to vary among students entering different medical schools, but little is known about whether such variability exists among students entering different residency training programs.[24] There are limited data describing the personality characteristics of EM physicians, although prior research indicates that these traits may include a passion for unpredictable situations, optimism, and strong interpersonal skills.[20] Similarly, characteristics seen in EM nurses include excitement seeking, positive emotions, and extraversion.[25] The little available research thus suggests that there may be a personality profile with common traits among physicians and other key medical personnel who work in the field of EM.

Personality assessment also holds the potential to positively impact the medical training environment by enhancing mentorship and remediation, as well as informing the resident selection process.[2,26] An important next step in understanding how personality assessment can be applied to candidate selection and medical education requires first describing the personality characteristics of trainees. The aim of this study was to describe usual dispositions, stress tendencies, and drivers in a multicenter convenience sample of EM residents and to assess if variability exists among trainees at different residency programs.

METHODS

Study Design

This was a cross-sectional observational study of personality characteristics in EM residents. The study was approved by each participating program's institutional review board.

Study Setting and Population

This study was administered at five Accreditation Council for Graduate Medical Education (ACGME)-accredited EM residency programs in the United States. All data were collected from May 2016 through October 2016. Program characteristics are shown in Table 1. All current residents at each program were invited to participate in the study. Participation was voluntary, and each individual's results were confidential.

Study Protocol

Participating residents completed three personality assessments: the Hogan Personality Inventory (HPI)—a measure of usual interpersonal tendencies that includes seven scales; the Hogan Development Survey (HDS)—a measure of interpersonal tendencies under stress or fatigue that contains 11 scales; and the Motives, Values, and Preferences Inventory (MVPI)—a measure of values or drivers consisting of 10 scales.[27–29] Each assessment has been used in numerous validation studies and normed on 50,000 to 150,000 working adults.[27–29] Collectively, the three assessments included 28 scales, with a total of 206 items rated true or false, requiring approximately 20 minutes to complete. The personality measures were

Table 1
Program Characteristics

Variable	N	%
Program region		
Northwest	1	20.0
Southwest	2	40.0
Midwest	0	0.0
Northeast	2	40.0
Southeast	0	0.0
No. of program residents		
25–35	1	20.0
36–45	0	0.0
46–55	3	60.0
56–65	1	20.0
Program format		
1–3 years	2	40.0
1–4 years	3	60.0
Annual volume		
<50,000	1	20.0
50,000–100,00	2	40.0
>100,000	2	40.0
Annual admission rate		
<10%	0	0.0
10%–20%	1	20.0
21%–30%	4	80.0
>30%	0	0.0
Program setting		
Urban	5	100.0
Suburban	0	0.0
Rural	0	0.0

scored using a proprietary algorithm. The resident's raw scores were converted to percentile scores using information from a global normative sample for each of the assessments completed. Sample items included "I am sensitive to other people's moods," "I keep calm in a crisis," and "I like to be the center of attention" for the HPI, HDS, and MVPI, respectively. Definitions for each scale are provided in Data Supplement S1 (available as supporting information in the online version of this paper, which is available at http://onlinelibrary.wiley.com/doi/10.1002/aet2.10078/full).

Residents were invited to participate via e-mail through a proprietary portal and provided with instructions on how to complete the assessment process via an online platform. When logging on, volunteers were given a unique identifier and password. Data were deidentified prior to analysis. Individuals were only permitted to complete the assessments once. Upon completion of each assessment (HPI, HDS, and

MVPI), the participants were asked to click "submit." Once this was accomplished, the responses were captured, and revisions to responses were no longer allowed. Partially completed assessments were excluded. For example, if a resident provided complete data for the HPI, but partially completed or did not complete the HDS and MVPI, we only included that resident's HPI data in the analyses. After completion of the assessments, each participating resident received an individual development report based on his or her personal results.

Data Analysis

Descriptive statistics (means and standard deviations [SDs]) were calculated for resident personality scale scores for the total sample of residents and by individual program. Frequencies and percentages were computed for program and resident characteristics.

One-sample t-tests were used to examine differences between EM residents, collectively, and the population norms for U.S. physicians on the personality measures (J3Personica, Eatontown, NJ; www.j3personica.com). These population norms are based on a nationwide sample of 3,104 U.S. physicians across specialties. Bonferroni adjustments were used to correct for the potential inflation of Type I error rates due to multiple comparisons. Therefore, after Bonferroni adjustments, two-tailed p-values of <0.007, <0.005, and <0.005 were considered to be statistically significant for comparisons between EM residents and the physician norms on the HPI, HDS, and MVPI, respectively. Standardized effect sizes (i.e., Cohen's d) were estimated for the differences between EM residents and the physician norms using the recommended cutoffs of 0.20 (small), 0.50 (medium), and 0.80 (large).[30]

One-way analysis of variance (ANOVA) tests were used to investigate differences between programs on the three personality inventories. Effect sizes (eta-squared) were estimated for all ANOVA models using the cutoffs of 0.02 (small), 0.13 (medium), and 0.26 (large), as suggested by Cohen.[30] If variances were unequal (i.e., a significant Levene's test), thereby violating a key assumption of the ANOVA model, Welch's F-statistic was instead used, as it is much less sensitive to this heteroscedasticity.[31] p-values < 0.05, two-tailed, were considered to be statistically significant. As these were exploratory analyses, the p-values reported were not corrected for multiple comparisons. Achieved power for each ANOVA model was calculated post hoc using G*Power.[32]

Table 2
Resident Characteristics

Variable	N	%
Gender		
Male	73	52.1
Female	67	47.9
PGY		
PGY1	47	33.6
PGY2	43	30.7
PGY3	30	21.4
PGY4	20	14.3
EM program		
Program A	23	16.4
Program B	21	15.0
Program C	43	30.7
Program D	27	19.3
Program E	26	18.6

PGY = program year.

RESULTS

Overall, 241 residents were eligible to participate in the study. A total of 140 residents participated. One-hundred forty (100%), 124 (88.6%), and 121 (86.4%) residents completed the HPI, HDS, and MVPI respectively. Resident characteristics are shown in Table 2.

Differences Between EM Residents and Physician Norms

Results from the comparisons between EM residents and the physician norms on all three personality assessments (HPI, HDS, MVPI) are shown in Table 3. For the HPI assessment (usual tendencies), EM residents scored significantly lower on the adjustment, ambition, inquisitive, learning approach, and prudence scales, relative to the normative population, and these differences were medium to large in magnitude ($d = 0.44$ to 1.31). Compared with the normative data, EM residents scored significantly higher on the excitable, cautious, reserved, and leisurely scales, but significantly lower on the bold, diligent, and imaginative scales, of the HDS (stress tendencies). The size of these differences ranged from small to medium ($d = 0.32$ to 0.52). For the MVPI (drivers), residents scored significantly higher on the hedonism, altruistic, and aesthetics scales, yet significantly lower on the tradition and security scales, compared with the physician norms. These differences approached medium to large magnitude ($d = 0.36$ to 0.65).

Differences by Program

As shown in Table 4, ANOVA models revealed significant differences between programs on the interpersonal sensitivity scale of the HPI. No significant differences between EM programs were observed on the other six HPI scales. For the HDS, EM programs differed on only two of the 11 measures: leisurely and bold. ANOVA results indicated there were significant differences between programs on three of the 10 MVPI scales: aesthetics, commerce, and recognition.

Achieved Statistical Power

The predetermined alpha level, the final sample size, the number of study groups, and the calculated effect sizes from the ANOVA models were entered into the G*Power program. The post hoc power analysis indicated that approximately one in three ANOVA models either achieved adequate power (≥ 0.80) or closely approached this threshold (≥ 0.70 to < 0.80). Therefore, achieved power was generally low for the majority of the comparisons between EM programs.

DISCUSSION

The results of this descriptive study of baseline personality characteristics of EM residents appear to reinforce the commonly described nature of EM practice.[33–38] Specifically, compared to physician norms, EM residents tend to be vigilant, team-oriented, flexible, and pragmatic and have a hands-on, practical approach to learning. The unpredictability of EM cases, critical nature of illness, frequent interruptions, and requirements for multitasking in the practice environment would make these traits highly valued among EM residents and practitioners.[38]

Based on their HDS results, in response to stress, EM residents may become risk-averse. This is also consistent with the nature of EM practice and the current medicolegal climate in which a physician is taught to consider the worst-case scenario.[33,36,38] EM residents also scored high on the leisurely scale, indicating that, when under duress, they may become stubborn. In a field where medical decision making can mean life or death, specialist involvement may not be immediately available, and one must advocate for the patient in front of them, this result may not be surprising.[37–40] The lower scores on the bold scale indicate that EM residents' confidence and assertiveness may be less likely to manifest as arrogance or entitlement, which likely allows them to function well in their work

Table 3
Personality Scale Scores for EM Residents, Compared With Physician Norms

Scale	EM Residents		Physician Norm		t-value	p-value	Cohen's d
	Mean	SD	Mean	SD			
HPI scales							
Adjustment	37.72	29.45	59.34	28.91	8.69	<0.001	0.73
Ambition	27.22	24.14	58.85	27.73	15.50	<0.001	1.31
Inquisitiveness	56.49	26.00	68.18	25.19	5.32	<0.001	0.45
Interpersonal sensitivity	56.51	31.42	60.46	31.81	1.49	0.139	0.12
Learning approach	56.34	28.09	68.74	24.16	5.22	<0.001	0.44
Prudence	39.03	27.67	63.79	27.50	10.56	<0.001	0.89
Sociability	56.49	27.55	57.34	27.27	0.37	0.716	0.03
HDS scales							
Excitable	57.77	28.39	48.55	31.15	3.62	<0.001	0.32
Skeptical	64.38	24.52	58.27	27.47	2.77	0.006	0.25
Cautious	72.88	27.43	62.11	29.06	4.37	<0.001	0.39
Reserved	61.66	29.18	52.05	30.25	3.67	<0.001	0.33
Leisurely	67.79	24.97	58.67	29.03	4.07	<0.001	0.37
Bold	38.69	30.23	48.66	30.40	3.67	<0.001	0.33
Mischievous	53.19	31.05	51.74	30.03	0.52	0.604	0.05
Colorful	48.29	27.93	46.50	29.01	0.71	0.477	0.06
Imaginative	49.99	31.08	60.55	27.54	3.78	<0.001	0.34
Diligent	53.27	31.53	69.73	29.19	5.81	<0.001	0.52
Dutiful	63.98	26.06	63.46	28.20	0.22	0.825	0.02
MVPI scales							
Aesthetics	62.93	28.54	52.36	27.92	4.07	<0.001	0.37
Affiliation	49.64	31.64	52.51	31.02	1.00	0.320	0.09
Altruistic	75.45	19.86	68.23	24.94	4.00	<0.001	0.36
Commerce	27.39	23.66	29.02	26.40	0.76	0.450	0.05
Hedonistic	72.88	25.90	56.10	29.42	7.13	<0.001	0.65
Power	48.62	26.99	47.06	27.39	0.64	0.526	0.06
Recognition	45.28	29.42	37.86	27.49	2.77	0.006	0.25
Scientific	82.31	19.18	80.54	23.18	1.02	0.312	0.09
Security	44.29	29.81	58.43	27.50	5.22	<0.001	0.47
Tradition	31.07	25.95	46.64	28.97	6.60	<0.001	0.60

N = 124 to 140 for the total sample of EM residents; N = 3,104 for the physician norms. After Bonferroni adjustments, p-values of <0.007, <0.005, and <0.005 were considered to be statistically significant for comparisons on the HPI, HDS, and MVPI, respectively. Scores on each measure could range from 0% to 100%.
HDS = Hogan Development Survey; HPI = Hogan Personality Inventory; MVPI = Motives, Values, and Preferences Inventory.

environment where a true team approach is essential.[33,34,36]

Findings suggest that EM residents are likely to be motivated by the values assessed in the altruistic, hedonistic, and aesthetics scales of the MVPI. Based on the data, other motivators, such as those measured by the tradition and security scales, may play a much smaller role in driving EM resident behavior. Collectively, these findings indicate that EM residents tend to place a higher value on service to others, service quality, and fun, whereas other factors, such as role hierarchy and structure or predictability are less important. This is again consistent with the practice of EM, where the consequences of shift work, basis of salary, unpredictable nature of patient volume and pathology, reliance on teamwork, limited time for decision making, and external regulations create an environment that will attract persons with particular values and potentially dissuade others.[33,36,38]

A great majority of the scores for the personality measures in this study were toward the middle of the scale. Specifically, on 20 of 28 scales, the scores were in the middle third of the scale. This suggests that EM residents are generally not too extreme on many characteristics. The large SDs on the personality scales suggest there is likely variability in personality traits

Table 4
Personality Scale Scores by Program

Scale	A Mean	A SD	B Mean	B SD	C Mean	C SD	D Mean	D SD	E Mean	E SD	F-value	η^2
HPI scales												
Adjustment	46.09	31.23	34.62	29.92	31.14	27.08	48.93	29.57	32.08	28.15	2.36	0.07
Ambition	24.43	21.23	27.76	24.24	28.33	26.94	31.63	23.10	22.85	23.40	0.53	0.02
Inquisitiveness	55.70	26.04	45.19	21.66	62.44	27.00	57.15	26.38	55.81	25.86	1.60	0.05
Interpersonal sensitivity	73.17	28.78	62.48	30.54	47.28	31.17	59.67	31.45	48.92	29.18	3.40*	0.09
Learning approach	55.22	28.82	57.24	25.03	57.07	28.51	56.30	30.36	55.42	28.73	0.03	<0.01
Prudence	45.57	26.89	44.48	24.87	33.72	29.11	37.52	27.74	39.19	28.06	0.94	0.03
Sociability	60.57	26.16	55.05	27.83	58.02	29.12	50.89	28.21	57.35	26.25	0.45	0.01
HDS scales												
Excitable	50.84	28.38	57.79	26.04	64.88	29.24	47.30	26.11	61.41	28.81	1.85	0.06
Skeptical	57.89	23.77	63.05	23.02	72.56	22.76	55.17	25.99	65.50	24.98	2.42	0.08
Cautious	72.00	23.46	69.16	35.80	76.41	25.52	67.70	28.19	75.68	26.21	0.52	0.02
Reserved	49.00	31.62	59.53	27.54	66.37	28.32	57.09	32.29	70.45	23.71	1.88	0.06
Leisurely	68.00	25.77	54.95	30.27	76.17	21.82	63.74	20.64	67.32	25.26	2.71*	0.08
Bold	25.26	27.15	31.42	24.90	51.51	30.91	35.83	28.97	35.68	30.68	3.41*	0.10
Mischievous	46.74	31.58	51.32	26.14	58.46	32.66	54.48	31.17	49.23	32.28	0.61	0.02
Colorful	49.26	33.67	44.05	28.25	54.68	28.58	42.65	21.20	45.09	27.30	0.96	0.03
Imaginative	39.95	28.57	44.05	31.78	57.00	32.32	53.83	31.16	46.73	28.96	1.35	0.04
Diligent	49.95	28.13	58.26	33.07	53.39	32.67	39.39	31.29	66.14	27.07	2.29	0.07
Dutiful	61.47	26.52	60.79	25.46	63.20	29.15	61.57	22.39	72.86	23.88	0.81	0.03
MVPI scales												
Aesthetics	59.84	28.72	53.59	24.71	73.49	25.30	63.52	30.00	52.05	30.81	2.84*	0.09
Affiliation	57.95	30.31	51.59	31.13	47.59	32.46	49.17	32.19	45.10	32.55	0.49	0.02
Altruistic	80.53	19.27	80.94	14.85	72.05	21.66	72.13	23.43	76.71	15.07	1.12	0.04
Commerce†	13.47	14.50	31.59	27.48	31.22	24.82	24.70	19.30	32.05	25.76	4.06‡	0.25
Hedonistic	65.47	28.15	76.76	17.76	76.20	25.10	69.52	29.81	73.62	26.88	0.75	0.03
Power	35.26	26.59	53.06	21.46	53.39	26.76	45.74	31.13	50.95	24.92	1.75	0.06
Recognition	30.63	27.72	38.65	25.34	55.49	29.17	39.09	26.40	50.76	31.44	3.30*	0.10
Scientific	79.11	20.78	89.94	8.00	78.95	21.81	81.78	21.15	86.19	15.05	1.35	0.05
Security	31.37	21.53	53.41	25.93	45.90	31.19	41.74	31.70	48.24	32.68	1.48	0.05
Tradition	22.89	18.96	40.82	26.94	35.37	28.62	26.74	25.09	26.90	24.17	1.69	0.06

N = 124 to 140 for total sample; *n* = 23 for program A; *n* = 21 for program B; *n* = 43 for program C; *n* = 27 for program D; *n* = 26 for program E. Scores on each measure could range from 0% to 100%.
ANOVA = analysis of variance; HDS = Hogan Development Survey; HPI = Hogan Personality Inventory; MVPI = Motives, Values, and Preferences Inventory.
*p < 0.05.
†Welch's ANOVA was used to estimate the F-statistic due to a violation of the assumption of homogeneity of variance.
‡p < 0.01.

among EM residents, which is consistent with prior literature.[20] This variety may play an important role in team dynamics and highlights that being a "perfect fit" for the EM specialty is not necessary for success.

Our results show similar scores in the majority of scales across programs in all three personality assessments (6/7 for the HPI, 9/11 for the HDS, and 7/10 for the MVPI), suggesting that there is a distinctive set of personality characteristics for EM residents. This is consistent with prior literature demonstrating

personality characteristics can differentiate between medical students, residents, and practicing physicians of various specialties.[20–23] However, there were small to moderate differences between programs regarding interpersonal sensitivity, leisurely, bold, recognition, and aesthetics scales, whereas differences in commerce scale scores approached large magnitude, potentially indicating there may be characteristics that are unique to a particular EM program's culture. Should this be the case, our results suggest that some programs may

ultimately be more suitable for (or seem more attractive to) to particular residents. This highlights the value of residency applicants and programs finding the right "fit," something that student advisors and mentors often focus on when providing counseling during the application and interview process. To corroborate this idea, a future study should examine whether the personality characteristics of incumbent residents are correlated with faculty personality characteristics at the same program and whether these characteristics are present before residency or instead develop during training, as a result of program culture. Effect sizes were generally small to moderate, at best, so it is unclear how important these differences would be in actuality and how they could potentially impact the individual program training environment, as well as other important outcomes, such as resident selection, satisfaction, and attrition rates. Additional research will be needed to investigate these issues.

Overall, the results of this pilot study demonstrate that there are many personality characteristics of EM residents that differ from physician norms and that there exists a considerable degree of consistency among residents in five distinct EM programs, suggesting that there are characteristics that may make a candidate better suited for the practice of EM. There were also modest differences between EM programs, suggesting that certain traits may make an individual a better fit with a particular program. It is important to note that there is substantial variation in individual scores, suggesting that there is not a perfect prototype, and advisors should not discourage applicants from applying to EM simply because they do not have the "typical" characteristics. Personality assessment may benefit both the trainee and the program by enabling students to identify fields and individual programs that might be attractive and/or suitable, while simultaneously allowing training programs to hone their interview selection process. Furthermore, the inclusion of personality assessment in the selection process may increase resident satisfaction (by increasing the likelihood of a "good match" between trainee and program) and may decrease the number of residents who leave a training program prior to completion, such as has been found in other specialties.[41,42]

Personality assessment can also have implications for improving the quality and focus of EM resident mentorship. For example, residents could complete these assessments as a part of a selection process, receive customized mentorship reports to reflect on the results, and review the implications with their faculty mentor. Such data could prompt a rich discussion of strengths, but also challenges that may be preventing the trainee from reaching his/her full potential.[2] Furthermore, a better understanding of trainee personality characteristics and values/motivators could assist in the development of individualized learning and remediation plans, when appropriate. Finally, application of these tools may enable better mentor/mentee matching, as compatibility between mentor and protégé on values and interests, among other deeper-level qualities, was shown in a prior meta-analysis to predict trainees' perceptions of a positive mentoring relationship.[43] By potentially helping to facilitate this compatibility, utilizing personality assessments may help make the shared experience more robust, deep, and meaningful for both mentor and mentee.

This pilot study contributes to the literature by identifying the unique personality characteristics of EM residents compared to physician norms and evaluating the extent to which these common traits vary between several EM programs in the United States. Nevertheless, there are still many questions left unanswered. In particular, additional research will be necessary to determine the association between the personality profile of the EM resident workforce and the profile of health care managers (i.e., faculty/program leadership) and/or consumers (i.e., patients). Moreover, the validity of personality assessments to predict important outcomes, such as rank list position, success in residency, job satisfaction, and attrition in EM will need to be further explored in subsequent studies. Future research should also focus on assessing the utility of personality evaluation for enhancing the training environment, including mentorship, remediation plans, and career counseling, for practice after residency.

LIMITATIONS

All data were voluntarily provided by residents via self-report, thereby raising the possibility of response bias or self-selection effects. Additionally, this was a convenience sample from five programs located in the western and the northeastern United States, so the results may not be generalizable. Bonferroni adjustments were not performed for the multiple comparisons between EM programs, as those analyses were exploratory in nature; it is thus possible that some statistically significant results may have been due to chance or inflated Type I error rates. Of importance, this study was

underpowered in several cases to be able to detect differences between EM programs, especially in light of relatively small effect sizes. We also cannot exclude the possibility that variables not examined in the analyses (e.g., PGY, age, race/ethnicity, cognitive ability) could have at least partially explained the group differences observed in this study. To address the aforementioned shortcomings, a future research study will need to pool multiple years of data within each program to ensure sufficient power to explore group differences, after controlling for potential confounders.

CONCLUSIONS

Overall, our findings suggest that the personality characteristics of emergency medicine residents differ markedly from those of physicians, collectively. Additionally, the personality characteristics of emergency medicine residents at different programs are comparable in many areas, but moderate variation exists. These results may help to inform future research incorporating personality assessment into the resident selection process and the training environment.

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Supporting Information

The following supporting information is available in the online version of this paper available at http://onlinelibrary.wiley.com/doi/10.1002/aet2.10078/full

Data Supplement S1. Scale Definition Summary.