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■ Original Article		
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Measurement of emotional intelligence among interns of the department of internal medicine at Damascus University: A cross-sectional study

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ABSTRACT

Background: Emotional intelligence (EI) refers to the capacity to understand, express, perceive, and manage emotions. It encompasses self-regulation, self-awareness, social skills, motivation, and empathy as its five fundamental components. Evidence shows that there is a relationship between EI and many components of clinical practice, such as empathy during medical consultations, building a strong relationship between the physician and patient, improving clinical performance, and increasing patient satisfaction.

Objective: The authors aimed to assess the El among a sample of Syrian internal medicine interns.

Methods and participants: The authors have used a validated scale based on the self-report trait emotional intelligence questionnaire-short form categorized into four factors (well-being, self-control, emotionality, and sociability) included in 30 questions. A 7-point Likert scale was adopted. Four hundred and twenty participants from the department of internal medicine at Damascus University have voluntarily participated in our study.

Results: The mean score was 4.82 (95% confidence interval: 4.90-4.75). It was found that Interns who enjoy hobbies, with previous leadership roles, or choose their specialty based on interest exhibit higher El. Additionally, age had a significant impact. The Cronbach's alpha was > 0.85, indicating the validity and reliability of the scale.

Conclusions: It has been shown that age, hobbies, leadership experience, and interest in specialty have a significant impact on EI among interns of the department of internal medicine at Damascus University.

Keywords: emotional intelligence, ethics, intern, department of internal medicine, Syria

INTRODUCTION

Emotional intelligence (EI) has attracted more interest in medical education and research recently [1-3]. El surfaced in the 1990s as a construct based on abilities, similar to general intelligence [4]. It refers to the capacity to understand, express, perceive, and manage emotions [1, 4, 5]. El

encompasses self-regulation, self-awareness, social skills, motivation, and empathy as its five fundamental components [4]. Research has found that some factors affecting El can be learned and taught [4].

Studies show that medical students, physicians, and health workers with higher El have lower stress and burnout levels

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and are more adaptable than other physicians and health workers [6-10]. High El is also associated with great leadership skills and high academic performance [11-19]. Additionally, there is a strong association between El and self-directed learning; research shows that the higher the El level, the more readiness for self-directed learning [19, 20]. Evidence shows that there is a relationship between El and many components of clinical practice such as empathy during medical consultations [11], building a strong relationship between the physician and patient [11], improving clinical performance [21, 22], and increasing patient satisfaction [23]. These results indicate an important role of El in making a balanced and good physician [24].

Considering the significant demands for quality and productivity in healthcare, along with the rising incidence of mental health issues among medical students and physicians [25, 26], particularly after research found high levels of burnout syndrome among Syrian interns [27], it's essential to provide the necessary skills for physicians and medical students to manage stress in academic and clinical environments, enhance leadership skills, improve health outcomes [11, 28], and become a better self-directed learner [19, 20]. A good doctor must be a good self-learner. This makes El an appropriate tool to achieve these outcomes, as indicated by research [6-10, 19, 20].

Damascus University states that it intends to prepare highly competent doctors who can continue learning and equip them with a high level of knowledge and skill, in addition to developing self-directed learning and teamwork skills, to contribute to providing health services to all citizens [29]. Among published literature, there are no relevant studies assessing EI among Syrian physicians. Therefore, this study aims to measure EI and identify factors influencing it among interns of the department of internal medicine at Damascus University. The research results will help enhance EI in internal medicine interns which in turn will reduce burnout and stress levels and reflect on health services.

METHODS AND PARTICIPANTS

Study Design and Sample Size

A cross-sectional study was designed to assess EI between interns of the department of internal medicine at Damascus University. Using the Richard Geiger equation, we calculated the sample size to be 240, with a confidence interval (CI) of 95%, and a margin error of 5%. The Richard Geiger equation is given, as follows: $n = \frac{(\frac{Z}{d})^2 \times p^2}{1 + \frac{1}{N} \left[(\frac{Z}{d})^2 \times p^2 - 1 \right]}, \text{ where } n \text{ is the sample}$

size (240), N is the population size (600), z is the 95% CI (1.96),

d is the permissible error (5%), and p is the coefficient of variation (0.5).

The development process of the EI included the following key steps:

- 1. Conducting a literature review on El in healthcare.
- 2. Reviewing the trait emotional intelligence questionnaire-short form (TEIQue-SF) [30, 31], which we used to assess the EI, and shown to have good reliability for global trait EI. Due to the fact that the interns are proficient in English, we utilized the original untranslated version to ensure its reliability and validity.
- 3. Conducting pilot testing.
- 4. The internal consistency and reliability of the scale was tested using Cronbach's alpha and test-re-test methods.
- 5. Conducting validity testing.

A pilot test was carried out with 30 participants to assess the reliability and validity of the TEIQue-SF questionnaire. Cronbach's alpha was 0.853, results were analyzed, and necessary revisions were made.

A 7-point Likert scale was utilized (1 = strongly disagree [SD], 2 = disagree [D], 3 = partially disagree [PD], 4 = neutral [NU], 5 = partially agree [PA], 6 = agree [A], and 7 = strongly agree [SA]), with each item scoring between 1 and 7 points [32], resulting in a total score range from 30 to 210 points.

This study was approved by the Ethical Committee at Damascus University on 14 July 2024 (MD-140724-280). Participants provided informed consent through an electronic registration form, ensuring that their information would remain private and used only for this research. The study involved all sections of the department of internal medicine in Damascus Hospital, which is a primary healthcare center in the capital, and accepts patients from across Syria. This research was carried out using validated screening tools.

Participants

420 interns from the department of internal medicine at Damascus University were invited to take part in our study and fully completed the questionnaire. These interns have graduated from faculty of medicine at Damascus University, and now they are physicians representing the various specialties of the department of internal medicine at Damascus University.

Inclusion criteria included these interns who consented to enter the study and were cooperative in self-completing the online form via Google Forms.

Table 2. Alpha-coefficients associated with the scale

Variable	Alpha
Well-being	0.73
Self-control	0.63
Emotionality	0.59
Sociability	0.69
Global total	0.85

Exclusion criteria included interns who refused to participate and who have had recent trauma, stress and psychological issues.

Methods for This Study

A two-section questionnaire was created using Google Forms. In the first section, participants were asked to provide demographic data (age, gender, and residency), and indicate their medical specialty with the year of residency and confirm whether they registered in the specialties they had desired. Additionally, they were inquired about previous volunteering and leadership experiences, also about their hobbies with an open-ended question. The second section of the questionnaire was the TEIQue-SF items, which were in the form of a self-report questionnaire consisting of 30 questions designed to assess EI. These items could be classified into four broad factors: emotionality, sociability, well-being, and self-control. The items are shown in **Table 1**.

STATISTICAL ANALYSIS

Data collected via Google Forms was exported into a Microsoft Excel file and subsequently imported into IBM statistics SPSS (version 26) for further analysis. Each participant fully completed the TEIQue-SF questionnaire, from which the global trait EI was computed individually using the scoring key. The EI score was used as the dependent variable, while the demographic data served as the independent variables. The reliability of the global and the four trait factors was assessed using Cronbach's alpha (**Table 2**).

Age was segmented into three groups using a 4-year interval. Furthermore, open-ended questions (i.e., hobbies) were converted into dichotomous (yes/no), to simplify statistical computation.

The data exhibited a normal distribution. Therefore, an independent t-test was employed to investigate the differences in El in relation to variables such as age, residence, hobbies, volunteering experience, and prior leadership roles. For multiple comparisons, one-way ANOVA was utilized to explore the variance in El across age, medical specialty, and academic years. However, when ANOVA was

Table 1. The items of the TEIOue-SF scale

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Expressing my emotions with words is not a problem for me.
I often find it difficult to see things from another person's viewpoint.
On the whole, I'm a highly motivated person.
I usually find it difficult to regulate my emotions.
I generally don't find life enjoyable.
I can deal effectively with people.
I tend to change my mind frequently.
Many times, I can't figure out what emotion I'm feeling.
I feel that I have a number of good qualities.
I often find it difficult to stand up for my rights.
I'm usually able to influence the way other people feel.
On the whole, I have a gloomy perspective on most things.
Those close to me often complain that I don't treat them right.
I often find it difficult to adjust my life according to the circumstances.
On the whole, I'm able to deal with stress.
I often find it difficult to show my affection to those close to me.
I'm normally able to "get into someone's shoes" and experience their emotions.
I normally find it difficult to keep myself motivated.
I'm usually able to find ways to control my emotions when I want to.
On the whole, I'm pleased with my life.
I would describe myself as a good negotiator.
I tend to get involved in things I later wish I could get out of.
I often pause and think about my feelings.
I believe I'm full of personal strengths.
I tend to "back down" even if I know I'm right.
I don't seem to have any power at all over other people's feelings.
I generally believe that things will work out fine in my life.
I find it difficult to bond well even with those close to me.
Generally, I'm able to adapt to new environments.
Others admire me for being relaxed.

significant, a post-hoc analysis was performed using Scheffé. **Table 1** demonstrates global trait El across all the groups.

RESULTS

Out of the 600 interns in the department of internal medicine at Damascus University, 420 responded, resulting in a response rate of 70%. The mean age was 25.95 ± 1.67 years, with 52.4% of respondents being females. The largest age group was 25-29 years comprising 82.4% of participants. The majority (70%) resided in urban areas. A significant proportion (78%) reported choosing their specialty based on their personal interest. Additionally, 55.5% reported having volunteering experience, and 35.7% held leadership roles previously. Interestingly, only 6.2% of participants reported they did not have hobbies.

Further sociodemographic details can be found in **Table 3**. The overall mean value for El was 4.82 (95% Cl: 4.75-4.90).

Table 4 presents the range of answers, while **Table 5** provides descriptive analysis.

Table 3. Demographic characteristics of the participants and mean global trait El for all subgroups (STD: Standard deviation)

		Number of participants	Mean value of global	95% CI for mean value
		(%)	trait EI (± STD)	of global El
Total		420 (100%)	4.82 ± 0.75	4.75-4.90
Gender	Male	220 (52.4%)	4.86 ± 0.76	4.76-4.96
Gender	Female	200 (47.6%)	4.79 ± 0.74	468-4.89
	20-24	61 (14.5%)	5.07 ± 0.71	4.89-5.25
Age	25-29	346 (82.4%)	4.77 ± 0.75	4.69-4.85
	30-34	13 (3.1%)	5.08 ± 0.82	4.58-5.59
Specialty out of interest	Yes	329 (78.3%)	4.88 ± 0.75	4.80-4.96
Specialty out of interest	No	91 (21.7%)	4.63 ± 0.74	4.48-4.79
Valuata aria a ava arian a	Yes	233 (55.5%)	4.86 ± 0.74	4.76-4.95
Volunteering experience	No	187 (44.5%)	4.78 ± 0.76	4.67-4.90
Drien lee develor velee	Yes	150 (35.7%)	5.00 ± 0.74	4.88-5.12
Prior leadership roles	No	270 (64.3%)	4.73 ± 0.74	4.64-4.81
Francisco de la	Yes	394 (93.8%)	4.86 ± 0.75	4.78-4.93
Engaged in hobbies	No	26 (6.2%)	4.30 ± 0.61	4.05-4.55
Manadal Installation	Yes	285 (38.6%)	4.58 ± 0.79	4.46-4.71
Mental health issues	No	162 (61.4%)	4.97 ± 0.69	4.89-5.06
	1	182 (43.3%)	4.90 ± 0.73	4.79-5.01
	2	134 (31.9%)	4.47 ± 0.74	4.62-4.87
Year of residency	3	44 (10.5%)	4.61 ± 0.80	4.37-4.86
	4	36 (8.6%)	4.95 ± 0.78	4.69-5.22
	5	24 (5.7%)	4.88 ± 0.75	4.56-5.19
	Internal medicine	207 (49.3%)	4.83 ± 0.76	7.43-4.94
	Endocrinology and metabolic diseases	30 (7.1%)	4.82 ± 0.79	4.53-5.12
	Cardiovascular diseases	28 (6.7%)	4.84 ± 0.73	4.55-5.12
	Gastroenterology	27 (6.4%)	4.85 ± 0.76	4.55-5.15
	Pulmonary diseases	25 (6.0%)	4.93 ± 0.73	4.62-5.23
Specialty	Blood disease	25 (6.0%)	4.77 ± 0.64	4.51-5.04
	Neurology	21 (5.0%)	4.76 ± 0.89	4.35-5.16
	Psychiatry	18 (4.3%)	4.95 ± 0.75	4.58-5.33
	Kidney disease	18 (4.3%)	4.60 ± 0.63	4.28-4.92
	Rheumatology	14 (3.3%)	4.90 ± 0.80	4.43-5.36
	Infectious disease	7 (1.7%)	4.56 ± 0.97	3.66-5.47

Table 4. Range of answers

Range	SA	Α	PA	NU	PD	D	SD
Expressing my emotions with words is not a problem for me.	89 (21.2)	59 (14.0)	70 (16.7)	71 (16.9)	62 (14.8)	40 (9.5)	29 (6.9)
I often find it difficult to see things from another person's viewpoint.	120 (28.6)	112 (26.7)	49 (11.7)	64 (15.2)	35 (8.3)	22 (52.0)	18 (4.3)
On the whole, I'm a highly motivated person.	51 (12.0)	47 (11.2)	61 (14.5)	70 (16.7)	62 (14.8)	72 (17.1)	57 (13.6)
I usually find it difficult to regulate my emotions.	70 (16.7)	76 (18.1)	58 (13.8)	66 (15.7)	65 (15.5)	43 (10.2)	42 (10.0)
I generally don't find life enjoyable.	98 (23.3)	87 (20.7)	50 (11.9)	65 (15.5)	45 (10.7)	36 (8.6)	39 (9.3)
I can deal effectively with people.	110 (26.2)	122 (29.0)	81 (19.3)	61 (14.5)	29 (6.9)	10 (2.4)	7 (1.7)
I tend to change my mind frequently.	48 (11.4)	81 (19.3)	61 (14.5)	81 (19.3)	59 (14.0)	47 (11.2)	43 (10.2)
Many times, I can't figure out what emotion I'm feeling	84 (20.0)	88 (21.0)	65 (15.5)	60 (14.3)	53 (12.6)	34 (8.1)	36 (8.6)
I feel that I have a number of good qualities.	120 (28.6)	132 (31.4)	85 (20.2)	56 (13.3)	18 (4.3)	7 (1.7)	2 (0.5)
I often find it difficult to stand up for my rights.	67 (16.0)	79 (18.8)	48 (11.4)	72 (17.1)	67 (16.0)	52 (12.4)	35 (8.3)
I'm usually able to influence the way other people feel.	65 (15.5)	99 (23.6)	106 (25.2)	85 (20.2)	34 (8.1)	19 (4.5)	12 (2.9)
On the whole, I have a gloomy perspective on most things.	94 (22.4)	109 (26.0)	53 (12.6)	49 (11.7)	44 (10.5)	42 (10.0)	29 (6.9)
Those close to me often complain that I don't treat them right.	165 (39.3)	109 (26.0)	50 (11.9)	40 (9.5)	20 (4.8)	27 (6.4)	9 (2.1)
I often find it difficult to adjust my life according to the circumstances.	107 (25.5)	113 (26.9)	62 (14.8)	63 (15.0)	28 (6.7)	35 (8.3)	12 (2.9)
On the whole, I'm able to deal with stress.	34 (8.1)	72 (17.1)	86 (20.5)	84 (20.0)	71 (16.9)	43 (10.2)	30 (7.1)
I often find it difficult to show my affection to those close to me.	99 (23.6)	82 (19.5)	54 (12.9)	46 (11.0)	56 (13.3)	52 (12.4)	31 (7.4)
I'm able to "get into someone's shoes" and experience their emotions.	92 (21.9)	112 (26.7)	75 (17.9)	57 (13.6)	36 (8.6)	34 (8.1)	14 (3.3)
I normally find it difficult to keep myself motivated.	47 (11.2)	72 (17.1)	66 (15.7)	88 (21.0)	63 (15.0)	50 (11.9)	34 (8.1)
I'm usually able to find ways to control my emotions when I want to.	70 (16.7)	109 (26.0)	85 (20.2)	71 (16.9)	39 (9.3)	34 (8.1)	12 (2.9)
On the whole, I'm pleased with my life.	89 (21.2)	107 (25.5)	85 (20.2)	65 (15.5)	32 (7.6)	32 (7.6)	10 (2.4)
I would describe myself as a good negotiator.	55 (13.1)	82 (19.5)	88 (21.0)	91 (21.7)	48 (11.4)	39 (9.3)	17 (4.0)
I tend to get involved in things I later wish I could get out of.	52 (12.4)	73 (17.4)	54 (12.9)	71 (16.9)	69 (16.4)	56 (13.3)	45 (10.7)
I often pause and think about my feelings	78 (18.6)	100 (23.8)	76 (18.1)	67 (16.0)	42 (10.0)	36 (8.6)	21 (5.0)
I believe I'm full of personal strengths.	70 (16.7)	116 (27.6)	107 (25.5)	70 (16.7)	36 (8.5)	13 (3.1)	8 (1.9)
I tend to "back down" even if I know I'm right.	100 (23.8)	97 (23.1)	45 (10.7)	71 (16.9)	55 (13.1)	29 (6.9)	23 (5.5)

Table 4 (Continued). Range of answers

Range	SA	Α	PA	NU	PD	D	SD
I don't seem to have any power at all over other people's feelings	150 (35.7)	115 (27.4)	68 (16.2)	41 (9.8)	26 (6.2)	8 (1.9)	12 (2.9)
I generally believe that things will work out fine in my life.	108 (25.7)	99 (23.6)	84 (20.0)	66 (15.7)	26 (6.2)	25 (6.0)	12 (2.9)
I find it difficult to bond well even with those close to me.	147 (35.0)	121 (28.8)	44 (10.5)	50 (11.9)	26 (6.2)	20 (4.8)	12 (2.9)
Generally, I'm able to adapt to new environments.		115 (27.4)	82 (19.5)	95 (14.0)	36 (8.6)	32 (7.6)	10 (2.4)
Others admire me for being relaxed.	111 (26.4)	100 (23.8)	59 (14.0)	64 (15.2)	29 (6.9)	30 (7.1)	27 (6.4)

Table 5. Descriptive analysis of global trait El scores (STD: Standard deviation)

Items	Mean (STD)	Median	Mode	Range
Expressing my emotions with words is not a problem for me.	4.54 (1.87)	5.00	7	6
I often find it difficult to see things from another person's viewpoint.	5.19 (1.73)	6.00	7	6
On the whole, I'm a highly motivated person.	3.84 (1.92)	4.00	2	6
I usually find it difficult to regulate my emotions.	4.34 (1.92)	4.00	6	6
I generally don't find life enjoyable.	4.68 (1.97)	5.00	7	6
I can deal effectively with people.	5.39 (1.44)	6.00	6	6
I tend to change my mind frequently.	4.20 (1.85)	4.00	4	6
Many times, I can't figure out what emotion I'm feeling	4.63 (1.90)	5.00	6	6
I feel that I have a number of good qualities.	5.60 (1.27)	6.00	6	6
I often find it difficult to stand up for my rights.	4.31 (1.90)	4.00	6	6
I'm usually able to influence the way other people feel.	4.93 (1.49)	5.00	5	6
On the whole, I have a gloomy perspective on most things.	4.80 (1.91)	5.00	6	6
Those close to me often complain that I don't treat them right.	5.58 (1.64)	6.00	7	6
I often find it difficult to adjust my life according to the circumstances.	5.13 (1.70)	6.00	6	6
On the whole, I'm able to deal with stress.	4.20 (1.67)	4.00	5	6
I often find it difficult to show my affection to those close to me.	4.62 (1.98)	5.00	7	6
I'm able to "get into someone's shoes" and experience their emotions.	5.02 (1.70)	5.00	6	6
I normally find it difficult to keep myself motivated.	4.20 (1.78)	4.00	4	6
I'm usually able to find ways to control my emotions when I want to.	4.88 (1.62)	5.00	6	6
On the whole, I'm pleased with my life.	5.05 (1.62)	5.00	6	6
I would describe myself as a good negotiator.	4.57 (1.64)	5.00	4	6
I tend to get involved in things I later wish I could get out of.	4.10 (1.89)	4.00	6	6
I often pause and think about my feelings	4.79 (1.75)	5.00	6	6
I believe I'm full of personal strengths.	5.10 (1.42)	5.00	6	6
I tend to "back down" even if I know I'm right.	4.85 (1.83)	5.00	7	6
I don't seem to have any power at all over other people's feelings	5.60 (1.52)	6.00	7	6
I generally believe that things will work out fine in my life.	5.18 (1.62)	5.00	7	6
I find it difficult to bond well even with those close to me.	5.49 (1.64)	6.00	7	6
Generally, I'm able to adapt to new environments.	5.05 (1.62)	5.00	6	6
Others admire me for being relaxed.	5.00 (1.84)	6.00	7	6

Emotional Intelligence and Demographic Characteristics

A one-way ANOVA revealed a significant variation in the mean global trait EI across the three age groups (F [2, 417] = 4.93, p = 0.00). Further, post-hoc analysis using Scheffé test (p = 0.01) highlighted that participants in the 20-24 age group exhibited higher global trait EI scores than those in the 25-29 age group.

Participants who chose their specialty out of their personal interest demonstrated higher global trait El scores (t [418] = -2.77, p = 0.00). Moreover, those with prior leading roles also scored higher (t [418] = -3.64, p = 0.00). Interestingly, the

participants engaged in hobbies have higher scores (t [418] = -4.00, p = 0.00).

Global trait El scores were found to be not significantly influenced by factors such as gender (t [418] = 0.96, p = 0.33), residency status (t [418] = 0.17, p = 0.86), or previous volunteering experiences (t [418] = -0.96, p = 0.33) (**Table 3**).

Specialty and Emotional Intelligence

Neither the specialty ((F [0.22, 0.58] = 0.38, p = 0.95), nor the year of specialization (F [1.13, 0.56] = 2.00, p = 0.09) had a significant impact on global trait El scores.

DISCUSSION

In this study, we analyzed global trait EI scores among internal medicine residents at Damascus University in Syria. We examined the various factors significantly influencing this score, alongside those with minimal to no impact. Our findings revealed a mean global trait EI score of 4.82 among the participants. This score was significantly influenced by age in an interesting way, while it showed minimal variation based on the year of residency and the type of medical specialty. On the contrary, personal interest and pursuing the desired specialty were of a significant impact on the score. Additionally, hobbies and prior leadership experience positively influenced the score, as participants with these characteristics exhibited higher EI compared to those without them.

Factors Affecting Emotional Intelligence

In our study, we found that the participants' mean global trait El score was 4.82, which falls between the scores of other countries, making it acceptable [33-35]. Interestingly, the age group 20-24 exhibited higher El scores compared to the age group 25-29, while the age group 30-34 showed no significant differences when compared to other age groups. In conclusion, the age group 20-24 recorded the highest El score in comparison to the other groups. Previous studies found that age positively affected El scores which contradicts our findings [36]. This discrepancy suggests that other factors may overshadow age influence on El scores and that age may only affect El scores to a certain extent.

Notably, there was no correlation between the year of residency and El score, although other studies found that El score tends to increase as participants advance in their medical training [22]. Some possible explanations for our findings could be the buildup of pressure and burn out over the years of residency due to the civil war in Syria [28, 37] and having stable personality traits. However, we cannot draw such definitive conclusions.

Similar to that, choice of specialty was of no impact as well, correlating with previous studies [38]. This finding either indicates that El is linked more to individual skills or that most medical specialties require a similar El level. More research can be conducted to discuss this issue further.

Additionally, previous leadership experience had a positive impact on El score aligning with previous studies that showed a significant positive relationship between El and leadership roles [16]. Future studies can explore how enhancing El can affect leadership skills, and conversely,

how assuming more leadership responsibilities can enhance

We also analyzed how subjects of interest such as having a hobby and studying desired specialty can affect El score. Both of them turned out to have a positive impact on the score. A previous study showed that students with higher El scores are more likely to pursue their interests more passionately and approach subjects of interest better than those with low El score [39]. Future research can investigate whether high El is the cause of having specific interests or having specific interests contribute to higher El.

Regarding gender, our study found no significant impact on El scores. These results are consistent with previous research [40], although some other studies found a correlation between gender and El [41]. Our results suggest that both males and females can equally and effectively improve their El scores since it encompasses skills that can be developed by anyone, regardless of gender.

In addition to that, place of residence did not impact El score, which was consistent with prior studies [42]. This shows that personal characteristics may influence El more compared to external factors. Further studies are needed to determine which factor plays a larger role in El.

Moreover, previous volunteering experience had no significant influence on El score in our study, aligning with prior research [43]. This finding of ours may reflect the diversity of volunteering work and individual motivations, where some volunteering may focus more on skill development rather than El enhancement.

Strengths of Our Study

Our study is the first of its kind to evaluate the El of the internal medicine residents at Damascus University, Syria. The novelty of our study lies in examining the impact of having a hobby and studying the desired specialty on El scores, a topic not previously studied in literature. Furthermore, unlike findings in other studies, there was no statistically significant correlation between El scores and age, previous volunteering experience, or year of residency.

Limitations

The findings from a small sample size at a single university center limit the ability to generalize our results. Additionally, the cross-sectional design hinders the determination of the temporal sequence of events, making it challenging to establish cause-and-effect relationships or determine whether exposure or outcome occurred first. Moreover, relying on self-reported data is susceptible to social

desirability bias, where respondents may tend to alter their answers to align with perceived social expectations rather than their genuine opinions or behaviors.

Since our study was conducted exclusively at the faculty of medicine at University of Damascus, which is the only center affiliated with our research, we depended on the Syrian scores due to their relevance to the study's environment, conditions, and professional practices within the country. Considering different indicators might have led to different results, potentially strengthening our research. Future studies should aim for larger sample sizes to generalize our findings.

CONCLUSIONS

Our study investigated the correlation between EI and factors such as sociodemographic characteristics, specialty and year of specialization among interns of the department of internal medicine at Damascus University. We found that engagement in hobbies, having previous leadership roles, and choosing specialty based on interest significantly influence EI. Interestingly, both younger and older interns scored higher in EI compared to their middle-aged counterparts. However, sociodemographic factors did not appear to impact EI among the participants.

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Data sharing statement: Data supporting the findings and conclusions are available upon request from the corresponding author.

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