



# Students' Perceptions of the Impact a Creative Arts Journal Has on Their Medical Education

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**BACKGROUND AND OBJECTIVES:** Student-produced creative arts journals now exist in several medical schools. The Florida State University College of Medicine (FSUCOM) has created HEAL: Humanism Evolving through Arts and Literature. This study sought to determine what influence, if any, HEAL publications may have on medical students.

**METHODS:** A survey utilizing Likert scale questions was sent to Florida State University medical students. Student responses were tabulated and analyzed using SAS 9.2 and MS Excel. A total of 241 (49.5%) students responded to the survey.

**RESULTS:** About 81% of the respondents enjoyed reading HEAL. Many respondents agreed that HEAL promoted patient-centered care (55.9%) and could prevent burnout (61.8%). Sixty-four percent thought that HEAL helped them to understand their colleagues and classmates.

**CONCLUSIONS:** This survey found that the medical students perceive HEAL as having positive value.

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Paper versions of the survey were distributed to first- and second-year students, while third- and fourth-year students completed email surveys. This paper focuses on the student results.

## *Instrument Development*

The authors, along with medical student editors of the HEAL journal, created a 14-item survey, including four negatively worded statements and seven positively worded statements. Including negatively worded items is one approach to decreasing positive bias in measuring attitudes and interests.<sup>3</sup> The 11 statements were used to determine the perceived value of this publication to medical students. Due to time and resource constraints, the survey was not pilot tested. Responses were rated on a 5-point Likert scale with verbal anchors of strongly agree, agree, neutral, disagree, and strongly disagree. Participants were also asked three demographic questions: year in school, gender, and age.

## *Procedure*

Following the approval of the Florida State University Institutional Review Board (IRB), the research assistant (TJW) contacted faculty,

Students and faculty collaborated in the creation of HEAL: Humanism Evolving through Arts and Literature. The HEAL journal presents the creative work of students, faculty, and staff—including essays, poetry, photography, and visual art—to communicate respect, compassion, and appreciation for others.

Relatively little has been written on what impact participation in a creative arts publication has on medical students. Many educational programs recognize the connection between arts, literature, and medicine.<sup>1</sup> A recent literature review of the use of humanities in medical education suggests that while there are many scholarly articles written on

the subject, the majority either describe a curricular humanities intervention or praise the potential effects the inclusion of humanities could have. Only nine of the 245 articles reviewed documented the impact of humanities in medical education. None of the articles evaluated or quantified the impact of participating in a creative arts journal.<sup>2</sup> Our study is the first that attempts to quantify the impact of a creative arts journal on medical students.

## **Methods**

### *Subjects*

We sent email surveys to the students (487), faculty (168), and staff (193) of the Florida State University College of Medicine (FSUCOM).

From the Department of Family Medicine and Rural Health (Drs Rodríguez and Saunders) and Department of Medical Humanities and Social Sciences (Drs Welch and Edwards), Florida State University, Tallahassee, FL.

students, and staff via email. The email included the consent form and a link to the survey. A weekly reminder was sent to all those who had not completed the survey. After 3 weeks, the email survey was closed. Survey results were tabulated automatically using Vovici® software. All personal identifying information was blinded to the investigators. Student responses were numerically coded and analyzed using SAS 9.2.

## Results

In total, 241 students (49.5%) completed the survey. Demographic data of the respondents, along with the general student body data, are listed in Table 1. Eighty percent of respondents agreed or strongly agreed that they enjoyed the HEAL publications. Seventy percent felt that HEAL illustrated the importance of personal reflection and narrative. Of note, 61.8% of respondents felt that HEAL could help to prevent burnout, and 55.9% agreed that HEAL publications help students become more patient centered. Sixty-four percent of respondents felt that reading HEAL helped them to understand their classmates and colleagues. The majority of the student respondents disagreed or strongly disagreed with all four negatively worded statements, indicating that students did not see HEAL as irrelevant (65.1%), boring (78.4%), useful only to participants

(68.4%), or as a waste of resources (83.4%). The complete results are in Table 2.

## Discussion

The results suggest that students find value in HEAL publications. A majority of respondents believe HEAL is beneficial to their medical education. The four areas about which students had the most agreement were: enjoyment in reading HEAL, importance of personal reflection and narrative, promotion of patient-centered care, and understanding of colleagues.

A majority of students also agreed with the statement “HEAL has illustrated the importance of personal reflection and narrative.” Narrative medicine, or narrative knowledge, is recognized as a critical part of effective medical practice.<sup>4</sup> Self-reflection and narrative medicine can be a crucial step toward learning to communicate empathetically with patients.<sup>5</sup> Witnessing faculty, peers, and patients provide narratives to HEAL may motivate students to begin practicing reflection and to submit to HEAL themselves.

A little more than half of the respondents agreed that HEAL can help students become more patient-centered. Creative arts journals may play a role in the promotion of patient centeredness by simply presenting stories of patient-provider

interactions.<sup>5</sup> HEAL publishes a variety of student narratives describing interaction with patients, experience with illness, and the overcoming of personal obstacles.

Most students also agreed with the statement “HEAL helps me to better understand my classmates and colleagues.” Learning intimate details about classmates may promote understanding and sustain teamwork. This is a valuable outcome as medicine is increasingly dependent on teams to provide optimal patient care.<sup>6,7</sup> Through HEAL, faculty members also share failures, successes, and what patient relationships mean to them. Learning about the doctoring experiences of faculty members helps students identify with and internalize concepts of humanism, altruism, and patient-centered care.<sup>8</sup>

Our study had some limitations. The students who were more positively inclined toward creativity may have responded in larger numbers than others. While 49% of the overall student body did respond, the majority of student respondents were in their preclinical years. We were able to make the survey available on paper and distribute it during classes only to the preclinical students. This also may have skewed the results, as the first- and second-year students are both the majority of the editorial board as well as the most active

**Table 1: Respondents and (Student Body) Demographic Data**

Year in School	Gender		Age in Years		
	Male	Female	18–26	26–40	40+
M1, n=96 (122)	51% (58%)	49% (42%)	90% (92%)	10% (8%)	0% (0%)
M2, n=105 (117)	42% (44%)	58% (56%)	86% (87%)	14% (13%)	0% (0%)
M3, n=20 (122)	30% (49%)	70% (51%)	80% (84%)	20% (16%)	0% (0%)
M4, n=19 (116)	32% (43%)	68% (57%)	42% (72%)	58% (28%)	0% (0%)
Bridge, (n=4) (10)	0% (10%)	100% (90%)	50% (80%)	50% (20%)	0% (0%)
Total, (n=241) (487)	43% (48%)	57% (52%)	75.6% (84%)	24% (16%)	0% (0%)

Table 2: Impact of HEAL Publications

Question	Strongly Agree or Agree	Neutral	Strongly Disagree or Disagree
I look forward to reading the HEAL newsletters	68.1%	26.1%	5.8%
Reading HEAL has helped me to better understand my classmates or colleagues	64.0%	30.3%	5.7%
After reading HEAL, I am inspired to become a contributor	52.9%	36.3%	10.8%
HEAL has illustrated to me the importance of personal reflection and narrative	70.5%	23.7%	5.8%
HEAL is not relevant to my medical education	12.1%	22.8%	65.1%
I enjoy reading HEAL	80.5%	18.2%	1.3%
I find HEAL boring	4.6%	17.0%	78.4%
I think that HEAL can play an important role in preventing burnout for medical students	61.8%	30.0%	8.2%
I think HEAL is only useful to those who contribute	16.7%	14.9%	68.4%
I believe HEAL to be a waste of College of Medicine resources	5.8%	10.8%	83.4%
HEAL and similar publications help me to be more patient centered	55.9%	34.4%	9.7%

of the submitters. The upper-class students are assigned to one of six regional campuses located in cities throughout Florida, and those students were only available by email. For that reason, our survey had a lower than optimal response rate from the third- and fourth-year students. We did not ask the students if they were familiar with HEAL, so some of the answers may reflect unfamiliarity rather than actual disagreement with the value of the publication.

This study shows that creative arts journals like HEAL could be of benefit to medical students. Our students felt that HEAL publications specifically illustrate the importance of narrative medicine and personal reflection, as well as help students better understand their classmates and colleagues. They also find enjoyment in and look forward to reading the HEAL journals as a welcome

respite from the challenges of medical school.

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## References

- Charon R. Commentary: calculating the contributions of humanities to medical practice—motives, methods, and metrics. *Acad Med* 2010;85(6):935-7. PMID:20505387
- Ousager J, Johannessen H. Humanities in undergraduate medical education: a literature review. *Acad Med* 2010;85(6):988-98. PMID:20505399
- Nunnally JC, Bernstein IH. *Psychometric theory*. McGraw-Hill, 1994.
- Charon R. Narrative medicine: form, function, and ethics. *Ann Intern Med* 2001;134(1):83-7. PMID:11187429
- DasGupta S, Charon R. Personal illness narratives: using reflective writing to teach empathy. *Acad Medicine* 2004;79(4):351-6. PMID:15044169
- Weaver SJ, Lyons R, DiazGranados D, et al. The anatomy of health care team training and the state of practice: a critical review. *Acad Med* 2010;85(11):1746-60. PMID:20841989
- Thomas EJ. Improving teamwork in health-care: current approaches and the path forward. *BMJ Quality and Safety* 2011;20(8):647-50. PMID:21712372
- Quaintance JL, Arnold L, Thompson GS. What students learn about professionalism from faculty stories: an "appreciative inquiry" approach. *Acad Med* 2010;85(1):118-23. PMID: 20042837