

## Do Female Residents Actually Demonstrate Better Levels of Empathy, Emotional Intelligence and Burnout than their Male Counterparts?

Jeanne L. Jacoby MD  
*Lehigh Valley Health Network, Jeanne\_L.Jacoby@lvhn.org*

Bryan G. Kane MD  
*Lehigh Valley Health Network, bryan.kane@lvhn.org*

Marna R. Greenberg DO, MPH, FACEP  
*Lehigh Valley Health Network, marna.greenberg@lvhn.org*

Robert D. Barraco MD, MPH  
*Lehigh Valley Health Network, robert\_d.barraco@lvhn.org*

Elaine A. Donoghue MD  
*Lehigh Valley Health Network, elaine\_a.donoghue@lvhn.org*

*See next page for additional authors*

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### Published In/Presented At

Jacoby, J. Kane, B. Greenberg, M. Barraco, R. Donoghue, E. Weaver, K. Macfarlan, J. Rosenau, A. Quinn, J. Smith, A. (2019, October 23-27). *Do Female Residents Actually Demonstrate Better Levels of Empathy, Emotional Intelligence and Burnout than their Male Counterparts?*. Poster Presented at: American College of Emergency Physicians (ACEP) Research Forum, Denver, CO.

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**Authors**

Jeanne L. Jacoby MD; Bryan G. Kane MD; Marna R. Greenberg DO, MPH, FACEP; Robert D. Barraco MD, MPH; Elaine A. Donoghue MD; Kevin Weaver D.O., FACOEP; Jennifer E. Macfarlan MPH; Alexander M. Rosenau DO; Joann F. Quinn PhD; and Amy B. Smith PhD

# Do Female Residents Actually Demonstrate Better Levels of Empathy, Emotional Intelligence and Burnout than their Male Counterparts?

Jeanne L. Jacoby, MD,<sup>1</sup> Bryan G. Kane, MD,<sup>1</sup> Marna Rayl Greenberg, DO, MPH,<sup>1</sup> Robert D. Barraco, MD, MPH,<sup>1</sup> Elaine A. Donoghue, MD,<sup>1</sup> Kevin R. Weaver, DO,<sup>1</sup> Jennifer E. Macfarlan, MPH,<sup>1</sup> Alex M. Rosenau, DO,<sup>1</sup> Joann F. Quinn, PhD,<sup>2</sup> Amy B. Smith, PhD<sup>1</sup>

<sup>1</sup>Lehigh Valley Health Network/University of South Florida Morsani College of Medicine, Lehigh Valley Campus, Allentown, PA

<sup>2</sup>University of South Florida Morsani College of Medicine, Tampa, FL

## STUDY OBJECTIVES

The problem of clinician wellness has received considerable attention in recent years. Some reports indicate that these issues are related to the selection process and rigors of medical school and therefore predate residency training. There are scant data regarding the effect of sex on measures of resident well-being and emotional intelligence. The purpose of this prospective, cross-sectional study was to determine whether measures of Empathy, Emotional Intelligence, and Burnout differ significantly by sex prior to the start of residency training. We hypothesized that these measures would differ by sex, with females demonstrating higher levels of empathy and emotional intelligence, and lower levels of burnout.

## METHODS

Three previously validated survey instruments: the Jefferson Scale of Physician Empathy, Maslach Burnout Inventory, and the Emotional and Social Competency Inventory (ESCI), were written into a survey platform as a single 125-question survey. During June 2015, 2016, and

2017, incoming residents at our 1100 bed hospital network were emailed an explanation of the study with a link to the survey, which they completed at the hospital orientation. All incoming residents were analyzed by sex. Anonymity was assured.

## RESULTS

There were 121 females and 108 males surveyed; there was no difference in average age (27 years;  $p=0.18$ ), marital status, and having children. A slight majority was single (51% of females; 63% of males) and most did not have children (93% of females; 87% of males). The first year residents surveyed included: Emergency Medicine (42), Internal Medicine (53), Pediatrics (17), Surgery (22), Family Medicine (19), OB/GYN (18), Dental (21), Transitional (30), and Other (7). As we hypothesized, females had significantly higher levels of Empathy (Jefferson Score: 121 vs. 115,  $p<0.001$ ; ESCI Empathy Competency Score: 4.2 vs. 4.0,  $p<0.0001$ ). In the Maslach subcategory of Personal Accomplishment (higher score is better), females scored higher than males (41 vs. 39,  $p<0.02$ ). Females

also scored significantly higher in the ESCI competencies of Achievement Orientation, Emotional Self-Awareness, and Teamwork (all  $p<0.02$ ). However, contrary to what we hypothesized, females and males had similar measures of Burnout as measured by the Maslach Emotional Exhaustion (20% of females and 17% of males scoring in the High Burnout category;  $p=0.80$ ) and Depersonalization (22% of females and 28% of males scoring in the High Burnout category;  $p=0.63$ ) categories.

## CONCLUSION

First year female residents scored higher than their male counterparts on measures of Empathy and Emotional Intelligence and expressed a higher level of Personal Accomplishment than did their male counterparts. However, as measured by the Maslach categories of Emotional Exhaustion and Depersonalization, two classic indicators of burnout, there was no difference in the male and female cohorts.

## ACKNOWLEDGMENT

This study was funded, in part, by the Anne and Carl Anderson Trust.