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# The Well Being of Physician Assistant Students: A Preliminary Look at Quality of Life

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Equity Summer Program

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#### Introduction

Medical students are adversely affected by the rigorous curriculum and high demands of medical school causing them to experience symptoms like burnout.<sup>1</sup> Burnout is defined as a syndrome of emotional exhaustion, depersonalization, and a sense of low personal accomplishment that leads to decreased effectiveness at work.<sup>2</sup>

What about Physician Assistants (PAs)? There has been minimal research on students going through PA programs. PAs are required to learn a vast amount of knowledge in a compressed 2 year program. Hernandez and his team (2010) examined the different levels of stress, depression and medical symptoms between nursing students, medical students and physician assistant students. Hernandez and his team found that the physician assistant students reported the highest levels of depression and medical symptoms.

Further research on the wellness of PA students is necessary to produce the best possible learning environment because PA students are at risk for serious physical, emotional and mental problems.

### Background

This study will define well being as the overall state of health that encompasses biological (Physical, Fatigue, Stress), psychological (Mental, Emotional, Social) and environmental (Social Support, Financial Concern, Spirituality) components of an individual.

The Quality of Life (QOL) scale examines six aspects of an individual's life - overall quality of life, mental (intellectual) well-being, physical well-being, emotional well-being, level of social activity, and spiritual well-being. Each aspect is rated by the individual on a survey, which are measured on a 1-10 scale (1 represents as bad as it can be and 10 represents as good as it can be). The QOL scores consist of adding all 6 values together, which gives a possible range of 0-60 with higher scores representing higher quality of life.

#### Methods

The Physician Assistant Education Association (PAEA) collects data on PA student Well Being.<sup>3</sup> This study uses survey data to conduct a retrospective study examining national PA student wellness. The study uses a convenient sample of PA students who opted to take the PAEA Matriculating Student Survey (MSS) the first month of their program and the Midpoint Student Survey (MPSS) administered within the first twelve months of their program. These surveys collect information from PA students with the goal of improving education, recruitment, and retention. Data on medical school students was obtained year 1(YR1) and year 2 (YR2) through the Association of American Medical Colleges (AAMC).<sup>4</sup>

Descriptive and inferential statistics were run on the Statistical Package for the Social Science (SPSS) software. The two-tailed P values were calculated using an online statistical program called GraphPad QuickCalcs by inputting mean, standard deviation, and sample size.

Med School

47.2 (7.3)

Two-Tailed P Value

MSS (Year1)

PA School

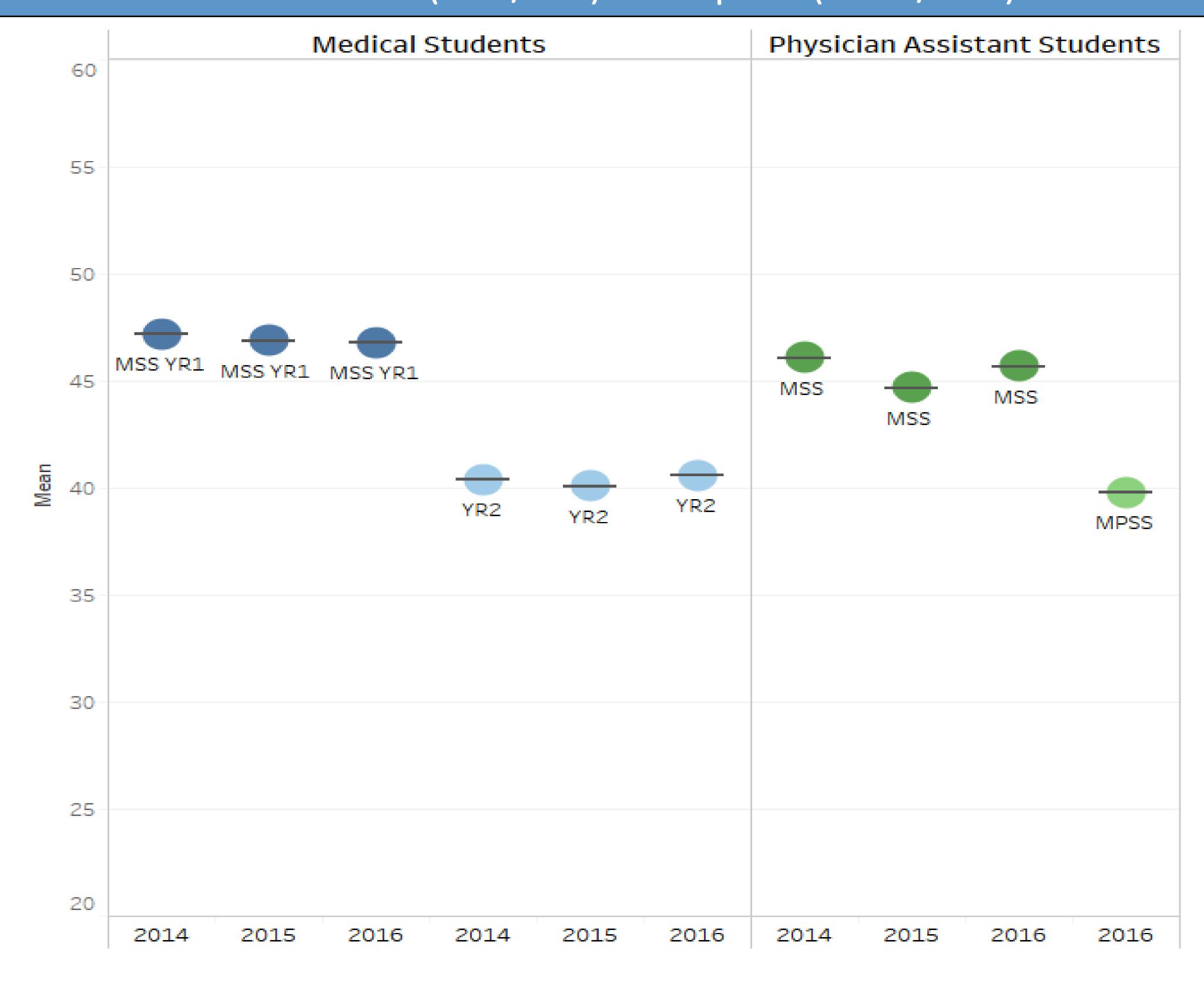
46.1 (9.0)

2014QOL μ (SD)	n=5,121	n=13,728	<.0001
2015QOL μ (SD)	44.7 (9.6) n=4,855	46.9 (7.5) n=12,410	<.0001
2016QOL μ (SD)	45.7 (9.2) n=4,469	46.8 (7.4) n=11,970	<.0001
MPSS (Year2)	PA School	Med School	Two-Tailed P Value
2014QOL μ (SD)	<del></del>	40.4 (10.3) n=8,859	
2014QOL μ (SD) 2015QOL μ (SD)			

Med School	YR1	YR2	Two-Tailed P Value
2014QOL μ (SD)	47.2 (7.3) n=13,728	40.4 (10.3) n=8,859	<.0001
2015QOL μ (SD)	46.9 (7.5) n=12,410	40.1 (10.2) n=10,402	<.0001
2016QOL μ (SD)	45.7 (9.2) n=4,469	40.6 (10.1) n=11,311	<.0001
PA School	MSS	MPSS	Two-Tailed P Value
2016QOL μ (SD)	45.7 (9.2) n=4,469	39.8 (10.1) n=778	<.0001

# Medical & Physician Assistant Students Quality of Life (QOL)

## Matriculation (MSS/YR1) & Midpoint (MPSS/YR 2)



<sup>\*</sup>Physician Assistant Students Midpoint (MPSS) data is only available for 2016.

### Conclusion

According to the AAMC and PAEA survey data, the average quality of life of a PA student matriculating into their program is slightly lower than that of a first year medical student. There could be a multitude of reasons why the quality of life of PA students is lower than that of medical students at matriculation, which is why more research needs to be conducted.

Although the data is not paired, it is probable that quality of life goes down slightly during both PA & medical school. This is likely due to multiple factors including stress, lack of sleep, and the rigor of medical training.

#### References & Acknowledgements

1.Hernandez MB, Blavo C, Hardigan PC, Perez AM, Hage K. Differences in perceived stress, depression, and medical symptoms among medical, nursing, and physician assistant students: a latent class analysis. *Annals of Behavioral Science and Medical Education*. 2010;16(1):35-39.

2.Wolf MR, Rosenstock JB. Inadequate Sleep and Exercise Associated with Burnout and Depression Among Medical Students. *Academic Psychiatry*.

3. Physician Assistant Education Association. By the Numbers: Student Report 1. 2017:48.

2017;41(2):174-179.

4.Association of American Medical Colleges. Matriculating Student Questionnaire: 2014 All Schools Summary Report. 2014.

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