



Relationships Between Medical Experiences and Health Anxiety in Young Adults

Emmanuelle Farrell and Dr. Mary Stone
Marist College



Abstract

The current study examined the relationships between Health Anxiety levels and perceptions of medical office environments as well as stress experienced during doctors visits. 50 undergraduates completed a survey assessing frequency of doctors visits, stress surrounding interactions with doctors and medical office environments, and Health Anxiety scores. Statistically significant associations between key study variables were all in the expected directions. Additionally, participants with higher pre-visit stress levels experienced significantly more stress during medical visits ($t(45) = -2.00, p = .010$).

Introduction

Health Anxiety definition and symptoms:

- Health Anxiety is a spectrum disorder that affects about 5% of the United States population (Muse, McManus, Hackmann, Williams, & Williams, 2010).
- Health Anxiety, or Illness Anxiety Disorder, is the preoccupation with having or acquiring a serious illness that is accompanied by no or mild somatic symptoms and excessive health-related behaviors (American Psychiatric Association, 2013).
- Health Anxiety is linked to increased use of healthcare services, functional impairment, and distress (Sunderland, Newby, & Andrews, 2013).

Health Anxiety in young adults:

- Young adults ages 18-30 years report higher levels of Health Anxiety than older adults (Gerolimatos, 2014).
- Differences in emotional regulation, anxiety control, and coping mechanisms may account for these age differences (Gerolimatos & Edelstein, 2012).

Effects of Health Anxiety on medical experiences:

- Up to 9% of patients in general medical clinics report severe and persistent Health Anxiety (Muse, McManus, Hackmann, Williams, & Williams, 2010).
- Medical professionals often become frustrated with the repeated reassurance seeking of patients with Health Anxiety, which may contribute to the rare diagnosis of Health Anxiety by medical practitioners (Fink, Ørnbøl, & Christensen, 2010).
- A study by van Dulmen and van den Brink-Muinen (2004) found that increased anxiety was correlated with a preference for empathic doctors, and empathic responses by doctors were observed in just 13.5% of the 698 visits examined.

Hypothesis

It was hypothesized that higher Health Anxiety would correlate with higher levels of stress related to doctors and medical offices.

Method

Participants: Data was collected from 50 Marist undergraduate students.

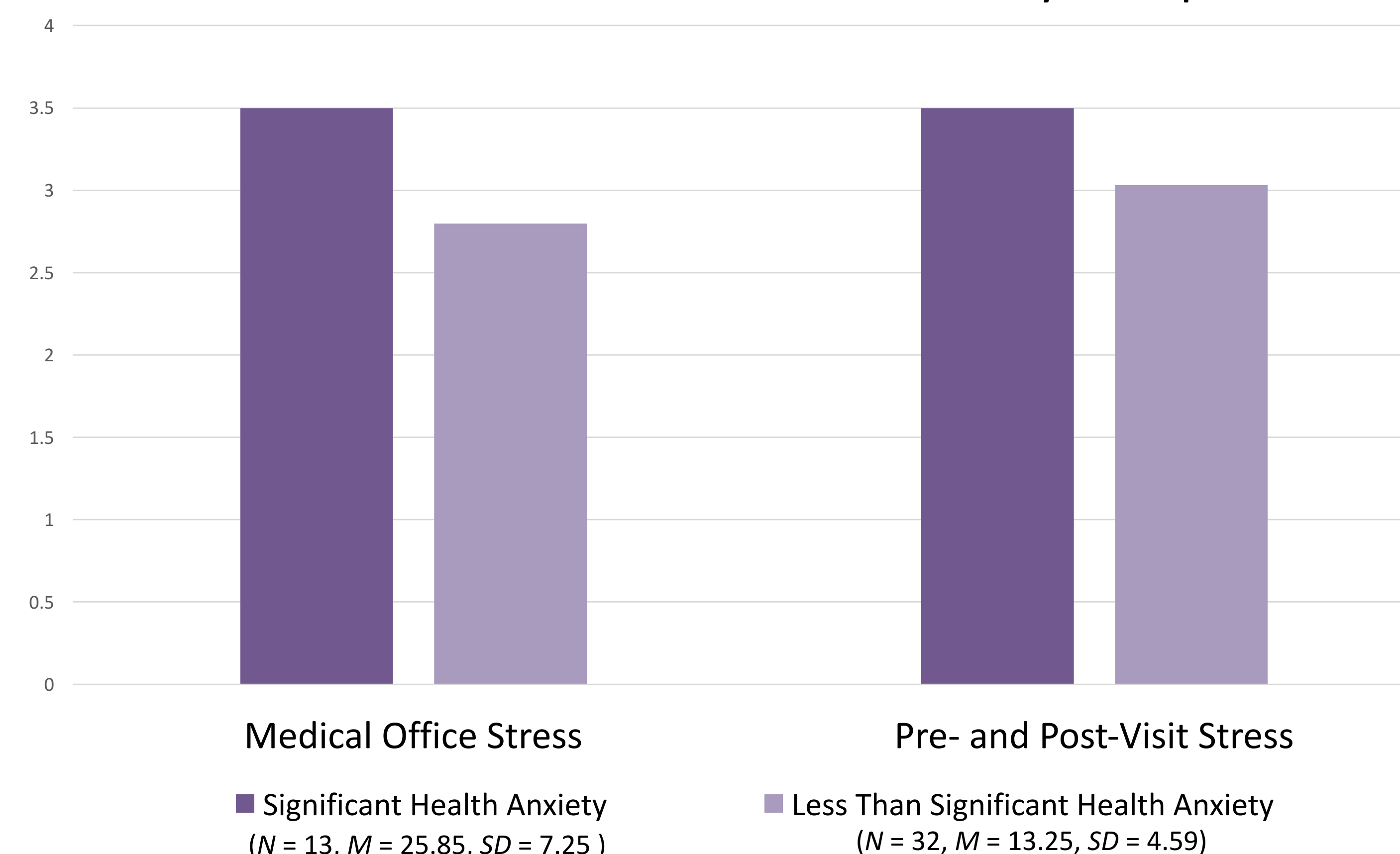
- 46 females, 3 males, 1 agender
- 3 freshmen, 13 sophomores, 13 juniors, and 21 seniors
- Participants were recruited through the Facebook group pages for each class year at Marist

Materials: Participants completed an anonymous online survey that inquired about demographic information and included five subsections:

- Feelings about doctors: This section assessed frequency of doctors visits, doctors perceived overall levels of understanding, and how stressed or relaxed doctors typically make participants feel (e.g. Overall, how understanding were the doctors you have visited?).
- Feelings about medical office environments: This section evaluated how stressed or relaxed medical office environments typically make participants feel (e.g. Overall, how stressful or relaxing were the physical environments of the doctors' offices you have been to?).
- Feelings before and after visiting the doctor: This section focused on how stressed or relaxed participants typically feel before and after visiting the doctor (e.g. Before visiting any type of doctor, how stressed or relaxed do you typically feel?).
- Health Anxiety: The six-month, 18-item Health Anxiety Inventory assessed Health Anxiety (Salkovskis, Rimes, Warwick, & Clark, 2002). Scores must be between 20 and 54 to meet the criteria for significant Health Anxiety (Tyrer et al., 2011).
- Perceptions of Marist College's Health Services: This section included questions about frequency of visits to Marist Health Services, reasons for visits (physical and/or mental), and positive and negative experiences at Marist Health Services.

Independent Samples T-Tests

Mean Stress Levels of Health Anxiety Groups



Results

- The majority of correlations were significant and in the expected directions.

	1	2	3	4	5	6
1. Average frequency of visits to any doctor		.179	.122	-.095	-.083	-.314*
2. Average perceived level of understanding of doctors	.179		-.333	-.048	-.289	.287
3. Average stress level produced by doctors	.122	-.333		.576**	.648**	.259
4. Average stress level produced by medical office environments	-.095	-.048	.576**		.555**	.504**
5. Average of pre- and post-visit stress levels	-.083	-.289	.648**	.555**		.258
6. Total Health Anxiety Score	.314*	.287	.259	.504**	.258	

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).

- Independent samples T-test revealed a significant difference in the average amount of stress caused by medical office environments between participants with significant and less than significant Health Anxiety scores ($t(42) = 2.72, p = .010$).
- Independent samples T-test revealed a significant difference in the average amount of stress experienced before and after visiting any doctor between participants with significant and less than significant Health Anxiety scores ($t(45) = 2.04, p = .047$).

Discussion

- Health Anxiety is correlated with frequency of and stress surrounding medical experiences.
- Stress levels in medical experiences are correlated with stress levels before and after doctors visits.
- Participants with high levels of pre-visit stress experience significantly more stress in interactions with doctors.

Implications: Doctors' interactions with patients and medical office environments should be improved to accommodate young adults with Health Anxiety.

- Doctors should be trained to recognize Health Anxiety symptoms
- Health Anxiety patients should be referred to counseling
- Medical offices could incorporate soothing colors and stress toys to improve the experience of patients with Health Anxiety.

Limitations:

- Genders not equally represented
- Some items may have been difficult to self-report

References

- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: Author.
- Fink, P., Ørnbøl, E., & Christensen, K. S. (2010). The outcome of health anxiety in primary care: A two-year follow-up study on health care costs and self-rated health. *PLoS One*, 5(3). doi:10.1371/journal.pone.0009873
- Gerolimatos, L. A., & Edelstein, B. A. (2012). Predictors of health anxiety among older and young adults. *International Psychogeriatrics*, 24(12), 1998-2008. doi:10.1017/S1041610212001329
- Gerolimatos, L. A. (2014). *Age-related differences in the experience of health anxiety and use of coping strategies* (Doctoral dissertation). Retrieved from Healthcare Administration Database: Psychology Database. (Order No. 3637585)
- Muse, K., McManus, F., Hackmann, A., Williams, M., & Williams, M. (2010). Intrusive imagery in severe health anxiety: Prevalence, nature and links with memories and maintenance cycles. *Behaviour Research and Therapy*, 48(8), 792-798. doi:10.1016/j.brat.2010.05.008
- Salkovskis, P.M., Rimes, K.A., Warwick, H.M.C. & Clark, D.M. (2002). The health anxiety inventory: development and validation of scales for the measurement of health anxiety and hypochondriasis. *Psychological Medicine*, 32(5), 843-853.
- Sunderland, M., Newby, J. M., & Andrews, G. (2013). Health anxiety in Australia: prevalence, comorbidity, disability and service use. *The British Journal of Psychiatry*, 202(1), 56-61. doi:10.1192/bjp.bp.111.103960
- Tyrer, P., Cooper, S., Crawford, M., Dupont, S., Green, J., Murphy, D., Salkovskis, P., Smith, G., Wang, D., Bhogal, S., Keeling, M., Loeberberg, G., Seivewright, R., Walker, G., Cooper, F., Evered, R., Kings, S., Kramo, K., McNulty, A., Tyrer, H. (2011). Prevalence of health anxiety problems in medical clinics. *Journal of Psychosomatic Research*, 71(6), 392-394. doi: 10.1016/j.jpsyres.2011.07.004
- Taylor, S., & Asmundson, G. J. G. (2004). *Treating health anxiety: A cognitive-behavioral approach*. New York, NY: The Guilford Press.
- van Dulmen, S., & van den Brink-Muinen, A. (2004). Patients' preferences and experiences in handling emotions. *Patient Education and Counseling*, 55(1), 149-152. doi:10.1016/S0738-3991(04)00300-3