

1. Berg, K., Blatt, B., Lopreiato, J., Jung, J., Schaeffer, A., Heil, D., ... Hojat, M. (2015). Standardized Patient Assessment of Medical Student Empathy: Ethnicity and Gender Effects in a Multi-Institutional Study. *Academic Medicine*, 90(1), 105–111.
<http://doi.org/10.1097/ACM.0000000000000529>
2. Berg, K., Majdan, J. F., Berg, D., Veloski, J., & Hojat, M. (2011a). A comparison of medical students' self-reported empathy with simulated patients' assessments of the students' empathy. *Medical Teacher*, 33(5), 388–391.
<http://doi.org/10.3109/0142159X.2010.530319>
3. Berg, K., Majdan, J. F., Berg, D., Veloski, J., & Hojat, M. (2011b). Medical Students' Self-Reported Empathy and Simulated Patients' Assessments of Student Empathy: An Analysis by Gender and Ethnicity. *Academic Medicine*, 86(8), 984–988.
<http://doi.org/10.1097/ACM.0b013e3182224f1f>
4. Bucher, J. T., Vu, D. M., & Hojat, M. (2013). Psychostimulant drug abuse and personality factors in medical students. *Medical Teacher*, 35(1), 53–57.
<http://doi.org/10.3109/0142159X.2012.731099>
5. Del Canale, S., Louis, D. Z., Maio, V., Wang, X., Rossi, G., Hojat, M., & Gonnella, J. S. (2012). The relationship between physician empathy and disease complications: an empirical study of primary care physicians and their diabetic patients in Parma, Italy. *Academic Medicine*, 87(9), 1243–1249.
<http://doi.org/10.1097/ACM.0b013e3182628fbf>
6. Di Lillo, M., Cicchetti, A., Scalzo, A. L., Taroni, F., & Hojat, M. (2009). The Jefferson Scale of Physician Empathy: Preliminary Psychometrics and Group Comparisons in Italian Physicians. *Academic Medicine*, 84(9), 1198–1202.
<http://doi.org/10.1097/ACM.0b013e3181b17b3f>
7. Fields, S. K., Hojat, M., Gonnella, J. S., Mangione, S., Kane, G., & Magee, M. (2004). Comparisons of Nurses and Physicians on an Operational Measure of Empathy. *Evaluation & the Health Professions*, 27(1), 80–94.
<http://doi.org/10.1177/0163278703261206>
8. Fields, S. K., Mahan, P., Tillman, P., Harris, J., Maxwell, K., & Hojat, M. (2011). Measuring empathy in healthcare profession students using the Jefferson Scale of Physician Empathy: Health provider – student version. *Journal of Interprofessional Care*, 25(4), 287–293. <http://doi.org/10.3109/13561820.2011.566648>
9. Fjortoft, N., Van Winkle, L. J., & Hojat, M. (2011). Measuring Empathy in Pharmacy Students. *American Journal of Pharmaceutical Education*, 75(6). Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3175671/>
10. Forstater, A. T., Chauhan, N., Allen, A., Hojat, M., & Lopez, B. L. (2011). An Emergency Department Shadowing Experience for Emergency Medicine Residents - Can It Prevent the Erosion of Empathy? (Abstract). *Academic Emergency Medicine*, 18, S2.
<http://doi.org/10.1111/j.1553-2712.2011.01188.x>
11. Glaser, K. M., Markham, F. W., Adler, H. M., McManus, P. R., & Hojat, M. (2007). Relationships between scores on the Jefferson Scale of physician empathy, patient perceptions of physician empathy, and humanistic approaches to patient care: a validity study. *Medical Science Monitor: International Medical Journal of Experimental and Clinical Research*, 13(7), CR291–294.
12. Hojat, M. (2009). Ten approaches for enhancing empathy in health and human services cultures. *Journal of Health and Human Services Administration*, 31(4), 412–450.
13. Hojat, M. (2014). Assessments of empathy in medical school admissions: what additional

- evidence is needed? *International Journal of Medical Education*, 5, 7–10.
<http://doi.org/10.5116/ijme.52b7.5294>
14. Hojat, M., Axelrod, D., Spandorfer, J., & Mangione, S. (2013). Enhancing and sustaining empathy in medical students. *Medical Teacher*, 1–6.
<http://doi.org/10.3109/0142159X.2013.802300>
15. Hojat, M., Bianco, J. A., Mann, D., Massello, D., & Calabrese, L. H. (2014). Overlap between empathy, teamwork and integrative approach to patient care. *Medical Teacher*, 1–4. <http://doi.org/10.3109/0142159X.2014.971722>
16. Hojat, M., & Cohen, M. J. (2012). Physicians' perception of pain as related to empathy, sympathy and the mirror-neuron system. In M. Incayawar & K. Todd (Eds). *Culture, Brain, and Analgesia: Understanding and Managing Pain in Diverse Populations* (1st ed., pp. 63–74). Oxford University Press, USA.
17. Hojat, M., DeSantis, J., Shannon, S., Speicher, M., Bragan, L., and Calabrese, L.H. (2020). Empathy as Related to Gender, Age, Race/Ethnicity, Academic Background, and Career Interest: A Nationwide Study of Osteopathic Medical Students in the United States. *Medical Education*, 54, 571-581. <https://doi.org/10.1111/medu.14138>.
18. Hojat, M., DeSantis, J., Shannon, S. C., Mortensen, L. H., Speicher, M. R., Bragan, L., LaNoue, M., & Calabrese, L. H. (2018). The Jefferson Scale of Empathy: A Nationwide Study of Measurement Properties, Underlying Components, Latent Variable Structure, and National Norms in Medical Students. *Advances in Health Sciences Education: Theory and Practice*, 23(5), 899-920.
<https://doi.org/10.1007/s10459-018-9839-9>.
19. Hojat, M., DeSantis, J., & Gonnella, J. S. (2017). Patient Perceptions of Clinician's Empathy: Measurement and Psychometrics. *Journal of Patient Experience* 4, 78–83. doi:10.1177/2374373517699273.
20. Hojat, M., Erdmann, J. B., & Gonnella, J. S. (2013). Personality assessments and outcomes in medical education and the practice of medicine: AMEE Guide No. 79. *Medical Teacher*, 35(7), e1267–1301. <http://doi.org/10.3109/0142159X.2013.785654>
21. Hojat, M., Erdmann, J. B., & Gonnella, J.S. (2014). *Personality assessments and outcomes in medical education and the practice of medicine (AMEE Guide 79)*. Dundee, UK: Association for Medical Education in Europe (AMEE).
22. Hojat, M., Fields, S. K., & Gonnella, J. S. (2003). Empathy: an NP/MD comparison. *The Nurse Practitioner*, 28(4), 45–47.
23. Hojat, M., & Gonnella, J. S. (2017). What Matters More About the Interpersonal Reactivity Index and the Jefferson Scale of Empathy? Their Underlying Constructs or Their Relationships with Pertinent Measures of Clinical Competence and Patient Outcomes? [Editorial]. *Academic Medicine*, 92, 743-745. doi:10.1097/ACM.0000000000001424.
24. Hojat, M., & Gonnella, J. S. (2015). Eleven Years of Data on the Jefferson Scale of Empathy-Medical Student Version (JSE-S): Proxy Norm Data and Tentative Cutoff Scores. *Medical Principles and Practice*, 24, 344–350.
<http://doi.org/10.1159/000381954>
25. Hojat, M., Gonnella, J. S., Mangione, S., Nasca, T. J., & Magee, M. (2003). Physician empathy in medical education and practice: experience with the Jefferson scale of physician empathy. *Seminars in Integrative Medicine*, 1(1), 25–41.
26. Hojat, M., Gonnella, J. S., Mangione, S., Nasca, T. J., Veloski, J. J., Erdmann, J. B., ... Magee, M. (2002). Empathy in medical students as related to academic performance,

- clinical competence and gender. *Medical Education*, 36(6), 522–527.
<http://doi.org/10.1046/j.1365-2923.2002.01234.x>
27. Hojat, M., Gonnella, J. S., Nasca, T. J., Mangione, S., Veloski, J. J., & Magee, M. (2002). The Jefferson Scale of Physician Empathy: further psychometric data and differences by gender and specialty at item level. *Academic Medicine*, 77(10 Suppl), S58–S60.
28. Hojat, M., Gonnella, J. S., Nasca, T. J., Mangione, S., Vergare, M. J., & Magee, M. (2002). Physician Empathy: Definition, Components, Measurement, and Relationship to Gender and Specialty. *American Journal of Psychiatry*, 159(9), 1563–1569.
29. Hojat, M., Gonnella, J. S., & Veloski, J. (2010). Rebuttals to Critics of Studies of the Decline of Empathy. *Academic Medicine*, 85(12), 1812.
<http://doi.org/10.1097/ACM.0b013e3181fa3576>
30. Hojat, M., & LaNoue, M. (2014). Exploration and confirmation of the latent variable structure of the Jefferson scale of empathy. *International Journal of Medical Education*, 5, 73–81. <http://doi.org/10.5116/ijme.533f.0c41>
31. Hojat, M., Louis, D. Z., Maio, V., & Gonnella, J. S. (2013). Editorial: Empathy and Health Care Quality. *American Journal of Medical Quality*, 28(1), 6–7.
<http://doi.org/10.1177/1062860612464731>
32. Hojat, M., Louis, D. Z., Markham, F. W., Wender, R., Rabinowitz, C., & Gonnella, J. S. (2011). Physicians' Empathy and Clinical Outcomes for Diabetic Patients: *Academic Medicine*, 86(3), 359–364. <http://doi.org/10.1097/ACM.0b013e3182086fe1>
33. Hojat, M., Maio, V., Markham, F. W., Louis, D. Z. & Gonnella, J. S. (2019). Physician Empathy and Diabetes Outcomes. *Journal of General Internal Medicine*, July 19, 2019. <https://doi.org/10.1007/s11606-019-05187-0>
34. Hojat, M., Mangione, S., Gonnella, J. S., Nasca, T. J., Veloski, J., & Kane, G. (2001). Empathy in Medical Education and Patient Care (Letter to the Editor). *Academic Medicine*, 76(7), 669.
35. Hojat, M., Mangione, S., Kane, G. C., & Gonnella, J. S. (2005). Relationships between scores of the Jefferson Scale of Physician Empathy (JSPE) and the Interpersonal Reactivity Index (IRI). *Medical Teacher*, 27(7), 625–628.
<http://doi.org/10.1080/01421590500069744>
36. Hojat, M., Mangione, S., Nasca, T. J., Cohen, M. J. M., Gonnella, J. S., Erdmann, J. B., ... Magee, M. (2001). The Jefferson Scale of Physician Empathy: Development and Preliminary Psychometric Data. *Educational and Psychological Measurement*, 61(2), 349–365. <http://doi.org/10.1177/00131640121971158>
37. Hojat, M., Mangione, S., Nasca, T. J., Gonnella, J. S., & Magee, M. (2005). Empathy Scores in Medical School and Ratings of Empathic Behavior in Residency Training 3 Years Later. *The Journal of Social Psychology*, 145(6), 663–672.
<http://doi.org/10.3200/SOCP.145.6.663-672>
38. Hojat, M., Mangione, S., Nasca, T. J., Rattner, S., Erdmann, J. B., Gonnella, J. S., & Magee, M. (2004). An empirical study of decline in empathy in medical school. *Medical Education*, 38(9), 934–941. <http://doi.org/10.1111/j.1365-2929.2004.01911.x>
39. Hojat, M., Michalec, B., Veloski, J. J., & Tykocinski, M. L. (2015). Can Empathy, Other Personality Attributes, and Level of Positive Social Influence in Medical School Identify Potential Leaders in Medicine? *Academic Medicine*, 90, 505-510.
<http://doi.org/10.1097/ACM.0000000000000652>
40. Hojat, M., Shannon, S.C., DeSantis, J., Speicher, M., Bragan, L.. Calabrese, L.H. (2020).

Does Empathy Decline in the Clinical Phase of Medical Education? A Nationwide, Multi-Institutional, Cross-Sectional Study of Students at DO-Granting Medical Schools. *Academic Medicine*, 95, 911-918.

<https://doi.org/10.1097/ACM.00000000000003175>

41. Hojat, M., Shannon, S. C., DeSantis, J., Speicher, M. R., Bragan, L., & Calabrese, L. H. (2019). Empathy in Medicine National Norms for the Jefferson Scale of Empathy: A Nationwide Project in Osteopathic Medical Education and Empathy (POMEE). *The Journal of the American Osteopathic Association*, 119(8), 520–32.
<https://doi.org/10.7556/jaoa.2019.091>
42. Hojat, M., Spandorfer, J., Louis, D. Z., & Gonnella, J. S. (2011). Empathic and Sympathetic Orientations Toward Patient Care: Conceptualization, Measurement, and Psychometrics: *Academic Medicine*, 86(8), 989–995.
<http://doi.org/10.1097/ACM.0b013e31822203d8>
43. Hojat, M., Vergare, M., Isenberg, G., Cohen, M., & Spandorfer, J. (2015). Underlying construct of empathy, optimism, and burnout in medical students. *International Journal of Medical Education*, 6, 12–16. <http://doi.org/10.5116/ijme.54c3.60cd>
44. Hojat, M., Vergare, M. J., Maxwell, K., Brainard, G., Herrine, S. K., Isenberg, G. A., ... Gonnella, J. S. (2009). The Devil is in the Third Year: A Longitudinal Study of Erosion of Empathy in Medical School: *Academic Medicine*, 84(9), 1182–1191.
<http://doi.org/10.1097/ACM.0b013e3181b17e55>
45. Hojat, M., & Zuckerman, M. (2008). Personality and specialty interest in medical students. *Medical Teacher*, 30(4), 400–406. <http://doi.org/10.1080/01421590802043835>
46. Hojat, M., Zuckerman, M., Magee, M., Mangione, S., Nasca, T., Vergare, M., & Gonnella, J. S. (2005). Empathy in medical students as related to specialty interest, personality, and perceptions of mother and father. *Personality and Individual Differences*, 39(7), 1205–1215. <http://doi.org/10.1016/j.paid.2005.04.007>
47. Isenberg, G., Brown, A., DeSantis, J., Veloski, J., Hojat, M. (2020). The Relationship between Grit and Selected Personality Measures in Medical Students. *International Journal of Medical Education*, 1, 25–30. <https://doi.org/10.5116/ijme.5e01.f32d>.
48. Kataoka, H., Iwase, T., Ogawa, H., Mahmood, S., Sato, M., DeSantis, J., Hojat, M., Gonnella, J. S. (2019). Can communication skills training improve empathy? A six-year longitudinal study of medical students in Japan. *Medical Teacher*, 41(2), 195-200.
49. Kataoka, H. U., Koide, N., Ochi, K., Hojat, M., & Gonnella, J. S. (2009). Measurement of Empathy Among Japanese Medical Students: Psychometrics and Score Differences by Gender and Level of Medical Education: *Academic Medicine*, 84(9), 1192–1197.
<http://doi.org/10.1097/ACM.0b013e3181b180d4>
50. LoSasso, A., Lamberton, C., Sammon, M., Berg, K., Caruso, J., Cass, J., and Hojat, M. (2017). Enhancing Student Empathetic Engagement, History-Taking, and Communication Skills During Electronic Medical Record Use in Patient Care. *Academic Medicine*, 92(7), 1022-1027. doi: 10.1097/ACM.0000000000001476.
51. Magee, M., & Hojat, M. (2010). Rocking chair and empathy: a pilot study. *Family Medicine*, 42(7), 466–467.
52. Mangione, S., Kane, G. C., Caruso, J. W., Gonnella, J. S., Nasca, T. J., & Hojat, M. (2002). Assessment of empathy in different years of internal medicine training. *Medical Teacher*, 24(4), 370–373. <http://doi.org/10.1080/01421590220145725>
53. Michalec, B., Veloski, J. J., Hojat, M., & Tykocinski, M. L. (2015). Identifying potential

- engaging leaders within medical education: The role of positive influence on peers. *Medical Teacher*, 37, 677-683. <http://doi.org/10.3109/0142159X.2014.947933>
54. Suh, D.H., Jong, S.H., Dong, H. L., Gonnella, J.S., Hojat, M. (2012). The Jefferson Scale of Physician Empathy: A Preliminary Psychometric Study and Group Comparisons in Korean Physicians. *Medical Teacher* 34 (6), e464–e68.
55. Van Winkle, L. J., Fjortoft, N., & Hojat, M. (2012). Impact of a Workshop about Aging on the Empathy Scores of Pharmacy and Medical Students. *American Journal of Pharmaceutical Education*, 76(1 Article 9), 1–5. <http://doi.org/10.5688/ajpe7619>
56. Ward, J., Cody, J., Schaal, M., & Hojat, M. (2012). The empathy enigma: an empirical study of decline in empathy among undergraduate nursing students. *Journal of Professional Nursing*, 28(1), 34–40. <http://doi.org/10.1016/j.profnurs.2011.10.007>
57. Ward, J., Schaal, M., Sullivan, J., Bowen, M. E., Erdmann, J. B., & Hojat, M. (2009a). Reliability and validity of the Jefferson Scale of Empathy in undergraduate nursing students. *Journal of Nursing Measurement*, 17(1), 73–88.