

Four-Year Study Demonstrates Literary Narratives Improve Empathic Awareness in Occupational Therapy Students

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Abstract

Clinician empathy, or the ability to understand the perspective of another, is an espoused value of healthcare professions and has been linked to improved health outcomes.¹⁻⁶

Our Study. The study reported herein attempted to improve student levels of empathy by emphasizing the close (guided critical) reading of literary narratives in a 2023 occupational therapy course (N = 35).

Results. Post-class student levels on the Jefferson Scale of Empathy (JSE) improved to a statistically-significant level ($p < 0.005$) compared to pre-course levels on the JSE. The results replicated earlier findings on the JSE in similar 2020 and 2022 occupational therapy courses.

Conclusion. Study results suggest an in-person class involving the close reading of medically-themed literary narratives may foster greater levels of student empathy and provide a pedagogical framework for teaching empathy to occupational therapy students.

Key Words: Empathy, literary narratives, close reading, narrative medicine, narrative reasoning, procedural reasoning.

Introduction

Several studies have demonstrated a relationship between greater clinician empathy and improved health outcomes. Canale et al and Hojat et al, in two studies involving over 20,000 physicians, found a statistically-significant difference in patients between physicians with high levels of empathy and improved diabetes-related health outcomes compared to physicians with lower levels of empathy.^{4,5} In other words, the more empathic the clinicians, the better the diabetes-related outcomes. The Jefferson Scale of Empathy (JSE) was used with both studies to compare outcomes related to empathy. Nembhard et al, in a systematic review, found over 100 quantitative studies with a relationship between higher levels of clinician

empathy and improved patient outcomes.⁶ In addition, an occupational therapy study involving 38 occupational therapists found a relationship between therapist levels of empathy and patient engagement.⁷ The greater the occupational therapists' levels of empathy, the more engaged clients were in goal setting and performance.

A CONFLICT IN VALUES

Occupational therapy, similar to other healthcare professions, emphasizes the need for practitioners to understand the unique and complex perspective of each client.⁸⁻¹¹ Surveyed occupational therapists, however, have reported productivity demands, dwindling resources, and lack of peer support have negatively influenced their ability to practice empathically.¹²⁻¹³ This has resulted in occupational therapists experiencing ethical tensions over a conflict in values.¹⁴⁻¹⁶ In addition, clinicians have reported that the ability to practice empathically has become even more challenging in an era of pandemic outbreaks, healthcare shortages, and lost faith in the science of medicine.¹⁷⁻¹⁸

The results of client perspective studies also suggest productivity expectations, norm-based assessments, and universal treatment approaches have influenced occupational therapy's ability to provide empathic and client-centered care.¹⁹⁻²¹ Walder and Moneaux surveyed patient responses to the healthcare team, including physical and occupational therapists, in a rehabilitation facility. Some patients commented they were not understood by their therapist, felt excluded from decisions about their care, and their "needs and emotions" were not being met.²¹

It has been stated, consequently, that occupational therapy may be compromising its core values.²²⁻²⁵

Theorists have called for the profession to return to its foundational beliefs in occupation and empathy, viewing each client as a complex occupational being, versus a medicalized body.²²⁻²⁵ Yerxa, in particular, cautioned occupational therapy from becoming too enamored with a science that "probes" an objective human body "to assess what can be fixed, reducing (an individual) to a machine like object of interacting parts."^{25(p491)}

Use of Narratives to Foster Understanding

Considering the need for empathy within the context and challenge of modern healthcare, one proposed method to foster greater understanding is the use of narratives. Occupational therapists have traditionally and recently used patient narratives for transformative learning, to better understand client perspectives, assess potential social change, and analyze clinical reasoning.²⁶⁻²⁹ More directly, quantitative research has linked the reading of literary narratives to better understanding of another's perspective.^{2,30-31}

NARRATIVE MEDICINE PROGRAM AT COLUMBIA UNIVERSITY

In response to the demonstrated relationship between narratives and positive health outcomes, medical schools have designed specific narrative-based courses that emphasize the reading, critical reflection, and clinical application of literary narratives. For example, at Columbia University, medical students—along with practicing physicians and other healthcare providers—journal, read, and discuss alternative perspectives in literary narratives, and use those gained perspectives to

make their practice more egalitarian, empathic, and client-centered.³

Charon has articulated that the aim of narrative medicine at Columbia, in part, is to fully embrace the subjective, layered complexity of each individual, and by so doing, better understand the human condition.³ Systematic reviews of varied narrative medicine programs, including the program at Columbia, have demonstrated several benefits to narrative medicine, including improved student levels of empathy.³²⁻³⁴

The use of narratives in medical programs also builds on emerging research on the fostering of empathy through the reading of literature.³⁰⁻³¹ Koopman and Hakemulder have articulated a model based on the demonstrated association between empathy and the reading of literature, postulating the close reading of literature increases levels of empathy through “role taking” and “defamiliarization.”³⁵ Role taking refers to how the reader gains a greater understanding of the perspective of another by reading about diverse characters.³⁵ Defamiliarization refers to the literary technique of making the common new or strange, to see the familiar differently and engage more deeply into a particular narrative’s worldview.³⁵

Purpose of This Study

Given the stated need for greater empathy in the theory and practice of occupational therapy and the established concept of narrative medicine, this study attempted to answer the following questions:

1. Can a literary narrative-based occupational therapy course improve student levels of empathy?
2. Can this study replicate earlier findings that

found an in-person occupational therapy literary narrative - based course improved student levels of empathy to a statistically-significant level?

The hypothesis was that the course would improve student levels of empathy and replicate earlier findings.

DEFINITION OF TERMS USED IN THE STUDY

- *Empathy* is defined in this study as the cognitive understanding of the perspective of another.¹
- *Literary narratives* are defined as stories with sensory-evoking language, multiple perspectives, and complex characters that challenge social conventions and stigma.²
- *Close reading* is defined as in-person, instructor-guided critical reading and reflection of the complex stories, or narratives, of another.³

COURSE CONTENT

The occupational therapy course at Husson University that was the subject of the study featured 4 aspects:

1. Reading a novel-length literary narrative of an individual with a medical diagnosis and or chronic disability (Table 1). The assignment involved critically reviewing the text from the character’s perspective, designing a treatment plan for the individual portrayed, and doing a series of experiential simulations related to narrative themes. All narratives chosen portrayed individuals in their struggle to create “accessible” and “valued spaces” for

disability.³⁶⁻³⁸ The narratives also attempted to “redefine” and “reconstruct” common characterizations of aging, poverty, and disability.³⁶⁻³⁸

2. Reading shorter medically-themed literary narratives, or stories, nearly every week (Table 2). Based on the readings, students designed home modifications and adaptive technology for story characters, answered reflective questions on client perspectives and on formulating treatment plans through procedural and narrative reasoning. Narrative reasoning was defined as a therapeutic approach in which the occupational therapist attempted to understand a client’s “unfolding story,” while procedural reasoning was defined as a treatment approach that focused on a client’s “physical ailments” and “treatment solutions.”³⁹
3. Participating in a series of close (detailed-focus) readings, discussions, and reflective homework assignments on assigned literary narratives. The in-class close readings were led initially by faculty and then by students. They included group discussion and critical reflection on character perspectives, and exploration of such topics as disability theory and the influence of socioeconomic and sociocultural factors on occupational health. Specifically, through reflective homework assignments and class discussions, students attended to story language and demonstrated gained insight, representation, and affiliation—or empathy—into a patient’s unique needs and particular perspective.
4. Participating in a class with an art teacher,

which included interpreting, or the close observation of, artistic images. The images were of COVID-19 patients; the art instructor led the students in a discussion of the emotions, perspectives, artistic details, and any potential story behind each image, demonstrating representation and affiliation with the individuals photographed.

Novel/Author
<i>Of Such Small Differences</i> : Joanne Greenberg
<i>Autobiography of a Face</i> : Lucy Greely
<i>A Man Called Ove</i> : Fredrik Backman
<i>The Great Believers</i> : Rebecca Makkai
<i>Me Before You</i> : Jojo Moyes
<i>Doubletake</i> : Kevin Michael Connolly
<i>Gimmy Moon</i> : Benjamin Ludwig
<i>True Biz</i> : Sara Novic
<i>When Breath Becomes Air</i> : Paul Kalanithi
<i>A Piece of the World</i> : Christina Baker Kline
<i>The Curious Incident of the Dog in the Nighttime</i> : Mark Haddon
<i>The Ha Ha</i> : David King
<i>Left Neglected</i> : Lisa Genova
<i>This Much I Know is True</i> : Wally Lamb
<i>Outside the Lines</i> : Amy Hatvany

Table 1: Novel-length Literary Narratives Offered as Choices for Students in the Studied Course

Author/Stories
O'Reilly M. Sharing the health experience (narrative). In: Mattingly C, Fleming M. (Eds.), <i>Clinical Reasoning: Forms of Inquiry in a Therapeutic Practice</i> . (pp. 288-231). F.A. Davis; 1994.
Johnson, M.J. (2003). Unspeakable conversations (memoir). <i>New York Times Magazine</i> , February 16, 50-55. {HYPERLINK "https://www.nytimes.com/2003/02/16/magazine/unspeakable-conversations.html" \h}
Angell, R. (2014). This old man: Life in the nineties (memoir). <i>The New Yorker</i> , 17, 60-65. {HYPERLINK "https://www.newyorker.com/magazine/2014/02/17/old-man-3" \h}
Backman, F. (2012). <i>A Man Called Ove</i> (novel excerpt). Washington Square Press.
Solomon, A. (2013). <i>Far From the Tree</i> (nonfiction excerpt). Scribner.
Kelly, C. (2011). Serving the Wounded (short story). <i>Slice</i> , 9, 95-102.
Aronson, L. (2013). Days of Awe (short story). In <i>A history of the present illness</i> . (pp. 179-204). Bloomsbury.
Genova, L. (2011). <i>Left Neglected</i> (novel excerpt). Simon & Schuster.
Penney, D., & Stastny, P. (2008). <i>Lives Left Behind</i> (nonfiction excerpt). Bellevue Literary Press.
Grealy, L. (1994). <i>Autobiography of a Face</i> (memoir excerpt). HarperCollins.
Miller, S. (2003). <i>The Story of My Father</i> (memoir excerpt). Random House.

Table 2: Short Literary Narratives Used for Close Reading/Homework in the Studied Course

Methodology

The single cohort of occupational therapy students in the Master's in Occupational Therapy (MOT) program were in their fourth year of college, or the spring semester of their second year in the professional phase of the MOT. All students were eligible. The mean age of participants was 23.4 years, with 2 males and 29 females. Two students had bachelor's degrees and one a master's degree. The remaining students were undergraduates. Twenty-eight of the 31 students participated in the Jefferson Scale of Empathy (JSE) survey. Voluntary student consent was received from all participants, with names de-identified. The study received approval from the university's Institutional Review Board (19OT03). Course content was taught in person by the primary investigator.

As with the prior studies that involved separate

cohorts, students were given pre- and post-class surveys of the JSE to measure empathic awareness. For a cross-sectional control group, the same students were given the initial survey directly after a rehabilitation-based course that did not involve literary narratives. The JSE is an adapted version of the Jefferson Scale of Empathy Physician/Health Professional Version. It is widely used in the health field as a self-reported measurement of empathy.¹ Exploratory and confirmatory factor analysis by Hojat et al suggests the JSE assesses multiple factors of empathy.¹

Students were also given the Marlowe-Crowne Social Desirability Scale (MCSD) per protocol as a post test. The MCSD has demonstrated satisfactory to strong reliability to detect social desirability, or the inclination to self-report higher levels of empathy because it a socially-desirable trait for healthcare professionals.⁴⁰

Results

A one-tailed hypothesis directional t-test compared pre- and post-class JSE survey data. For the 2023 JSE survey questions, the study demonstrated a statistically-significant difference between the pre- and post-survey scores ($p < 0.005$), suggesting the students became more empathically aware after the course was completed (Table 3).

The MCSD was analyzed for any significant correlation between social desirability and the JSE.

There was no correlation with the responses on the JSE and the Marlowe-Crowne scores for social desirability.

Category	2020	2021	2022	2023
N	31	39	36	28
Lectures In Person	7	0	14	14
Lectures Online	7	14	0	0
JSE Mean	Pre: 99.10 Post: 116.85	Pre: 113.46 Post: 111.18	Pre: 116.33 Post: 122.50	Pre: 105.43 Post: 108.32
Sig. (1-tailed)	.005	.25	.005	.005
Confidence Level	95%	75%	95%	95%
Marlowe-Crowne Correlation	N/A	Not significant	Not significant	Not significant
Control Group	N/A	Rehabilitation Course Posttest	Rehabilitation Course Posttest	Rehabilitation Course Posttest

Table 3: Comparing Results of the Study Over the Four-Year Period

Discussion

The aims of this study were to determine if master's-level occupational therapy students would demonstrate improved empathy after a course involving literary narratives. For 4 consecutive years, students were surveyed with the JSE (2020-2023). Every year, the curriculum was instructed in person, empathy levels improved to a statistically-significant level (Table 3). In 2021, however, the course was taught virtually due to COVID-19; there was no statistically-significant change in student levels of empathy. This suggests the impact of the in-person aspects of the class (including lectures, close reading discussions, and instruction from the art teacher), may have influenced levels of empathy. It is uncertain, however, which aspects of the in-person teaching influenced the JSE levels. Further exploration is also warranted to determine if online content can be taught in a different way to increase impact.

It should also be noted that for all 4 years, the JSE pretest was always given directly after a semester of courses in physical rehabilitation, mental health, pediatrics, and the foundational principals of occupational therapy. All those courses relied on medical case studies, or a medical listing of the facts of a particular client without the defined features of a

literary narrative. This suggests literary narratives may be more effective in teaching empathy compared to traditional medical case-based occupational therapy content.

LIMITATIONS

The JSE only measures empathic awareness. It does not measure empathic performance. The study of empathic performance would require measured student performance in a simulation or clinical rotation. The study also did not include a pure control group and therefore it was not isolated from other variables during that same time, such as other courses that may have emphasized empathy. Consequently, no causal relationship can be stated. The number of participants for all 4 years combined ($n = 134$) was also limited, with further larger studies warranted. Finally, all 4 years the course were taught by the same professor who has had training in teaching narrative medicine. It is uncertain if the course content would produce similar results with a different faculty instructor.

Conclusion

Even with the given limitations and need for further study, the 4-year findings on empathy are significant. They suggest the course content as designed has merit when attempting to teach students to be more empathic. Given the current challenges in healthcare, the study findings may prove beneficial as a starting point for both further research and attempts to refine a particular pedagogy to better meet the needs of students, clients, and the profession of occupational therapy.

CONCEPTS APPLICABLE TO MANY LEARNING OBJECTIVES

It is also noteworthy that the narrative concepts used in this study can be easily applied to any medical course's learning objectives. For example, the course studied was primarily focused on home health and assistive technology. It was not a humanities-based course. The only significant change in course assignments was the replacing of medical case studies with literary narratives. It was simply the same course—in terms of content, and assignments—with the added depth of the humanity-based narratives. For a further example, other courses in the same institution, on mental health, pediatrics, ethics, clinical conditions, and wellness, have intermittently replaced medical cases with narratives without significantly changing course design or learning objectives.

FOSTERING A GREATER DEPTH OF UNDERSTANDING

The narratives, as stated, provide greater depth of understanding for students compared to medical case studies. This can help students see both the humanity and medical needs of each client, versus a strict binary type approach.^{1,3} The use of narratives may consequently train students to think both emotionally and objectively when treating clients. This approach can be advocated because, as stated, research suggests empathic clinicians are more effective clinically. The emotional content inherent in narratives may also help students better engage in lectured material, have a greater grasp of the context within taught content, and improve retention.⁴¹

Greater use of human-based narratives in occupational therapy instruction may also lead the profession toward a greater congruence in values. Simply, training

students to become more empathic may help occupational therapy address its current crisis in identity. In essence, thinking more empathically may help practicing therapists treat each client in theory and in practice, as a more complex, unique individual with physical *and* emotional needs—the diverse occupational being at the core of every client-driven occupational therapy treatment plan.⁴²

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About the Authors



Cavanaugh Kelly, PhD, MS, OTR/L, has centered his writing, teaching, research, and occupational therapy (OT) practice on the pursuit of health through individual narratives. Virginia Wolf stated such illness-based narratives are as unique to each individual as the print of a bird's feet in snow. Flannery O'Connor also believed in viewing illness as a land where no one can follow – a place more instructional than a trip to Europe and a blessing in one of God's mercies.

Kelly's health-themed fictional short stories on the moments of grace in illness have been published in *Braided Way*, *Harmony Magazine*, *Pulse*, *Birmingham Arts Journal*, *Red Wheel Barrel*, *Toucan*, *Slice*, and other publications.

Kelly's work as an occupational therapist treating patients for over thirty years has focused on healing through each person's unfolding story of health.

As an associate professor in occupational therapy at Husson University, Kelly has presented, taught, and published his research on the positive influence of literary narratives on the empathy levels of healthcare students internationally and nationally, winning the Global Empathy Award at the 2022 international Global Empathy Conference in London, UK, where he was a keynote speaker. At Husson, Kelly was also awarded the Theresa W. Steele award for excellence in teaching research in 2022 and the 2025 Global Scholarship Award.

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