



## A Learning Pathway: Multi-course Competencies in Language Sample Analysis

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### Background

#### Language Sample Analysis (LSA)

- Practical tool that speech-language pathologists (SLPs) use in clinical practice and in research (Pezold, Imgrund, & Storkel, 2020).
- Involves collecting, transcribing, and analyzing the language in many contexts (Miller et al., 2011; Pezold et al., 2020).
- Used with children and adults to assess multiple language structures (both descriptive and quantifiable)
- Supports EBP
- Easily adapted for individual communication needs (Ratner & MacWhinney, 2023), including students with diverse language and developmental needs (Miller & Iglesias, 2015).

### Course Design Rationale

1. What do undergraduate and graduate students need to know to successfully implement LSA in clinical practice?
2. What incremental skills can students learn to build competencies in LSA?

- Collect and transcribe a language sample.
- Understand differences between language sample contexts
- Perform basic analyses
- Identify language features in a LS
- Begin to apply LSA findings to therapeutic intervention plans.

### Undergraduate Competencies

### Graduate Competencies

- Review UG competencies
- Independently collect, transcribe, analyze, interpret, and report on LSA findings

### Discussion

- LSA methods involve multiple components that take time to learn and implement.
- Incremental competency-based instruction of each component across multiple courses:
  - Supports student success
  - Distributes content in a feasible way
  - Ensures students enter clinical practice with the skills to administer LSA.

### Future Directions

- Provide a greater number of LSA examples in the grad lab
- Increase opportunities to use the LSA software
- Increase awareness of LSA use with multiple languages and diverse language needs

### References

- Available upon request

### Coursework: Instructional Goals and Methods

	Human Communication Disorders (UG)	Language Development (UG)	Clinical Management of Pediatrics (UG)	Language Disorders: Birth – 5 /Lab (Grad)	Language Disorders: School-Age (Grad)
Language sample collection	Introduced to concept of LSA	Learn LSA contexts and components	Independently collect and record a sample	Review LSA Collection in self-guided mini-course	Assessed knowledge
Language sample transcription	Not introduced in this course.	Watch example videos, practice in class	Complete SALT training modules and independently transcribe a sample.	Review grammar and SALT procedures through self-guided mini-course.	Independently transcribe sample
Language sample analysis	Introduced to basic LSA analysis methods (e.g. MLU)	Learn language features. Practice in class. See example standard measure reports	Conduct basic LSA analyses. As a class develop goals based on LSA case scenario results.	Review through self-guided mini-course and with class samples	Independently complete LSA analysis. Interpret findings. Write report sections.



# Interactive Module’s Effectiveness on Empathy and Attitudes of Healthcare Students

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## LEARNING OBJECTIVES

- Assess the impact of interactive modules addressing social determinants of health’s intersection with chronic condition management on health professional students
- Evaluate the effectiveness of exposing students to situations that require cultural competency prior to engaging in their educational clinical rotations
- Observe the tangible impact interactive modules can have on the personal and professional growth of health professional students.

## ABSTRACT

As the prevalence of social determinants of health continue to have an impact on the management of chronic conditions for individuals, it is imperative to expose health professional students to these encounters. This study investigates the role that interactive modules play on medical students (DO) and physician associate (PA) students’ empathy and attitudes towards diabetes mellitus maintenance for individuals who are affected by social determinants of health. Students from both health professional programs were asked to complete a pre-survey that encompassed the Diabetes Attitude Scale, Jefferson Empathy Scale and Social Determinants of Health. Students were then asked to engage with interactive modules to follow the life of someone, Lula Mae, who lives in the Appalachian area with Type II diabetes. Once completed, students were asked to complete a post-survey that included both scales. Results from 151 medical students concluded significant findings for the Diabetes Attitudes Scale ( $p < 0.01$ ), Jefferson Empathy Scale ( $p < 0.02$ ), and ASCK-SDH ( $p = 0.02$ ). While the matched data pairs for the PA students are too few to be significant, the data showed a positive trend pre to post module. This interactive module improved health professionals’ awareness, empathy, and attitudes towards social determinants of health affecting those with chronic conditions. This implementation has proven itself to be a valuable and insightful medical educational tool that can be adapted for other scenarios to enhance the development of health professional students’ cultural competency and health equity.

## METHODS

Students from the DO and PA programs were asked to complete a survey before and after engaging with an interactive, virtual reality module. This module received funding from Medicaid/Medicare to produce videos from Ohio University. The module encompassed 12 subsections that provided a 360 view into the individual, Lula Mae’s, life. Lula Mae lives in the Appalachians as a 72-year-old woman that has lived with Type II Diabetes Mellitus for 22 years. She is the main support for her family. Through these modules, students were able to witness the impact of various social determinants of health that played into the health status and maintenance of Lula Mae’s chronic condition.

151 DO students completed the pre and post survey module. This data was then compiled and analyzed using the Diabetes Attitudes Scale ( $p < 0.01$ ), Jefferson Empathy Scale ( $p < 0.02$ ), and Assessing Student Competence and Knowledge of Social Determinants of Health (ASCK-SDH) Instrument ( $p = 0.02$ ). 7 PA students completed the pre and post survey for the module. Due to the small response rate, statistical evidence on the impact of the modules for the PA students could not be significant.

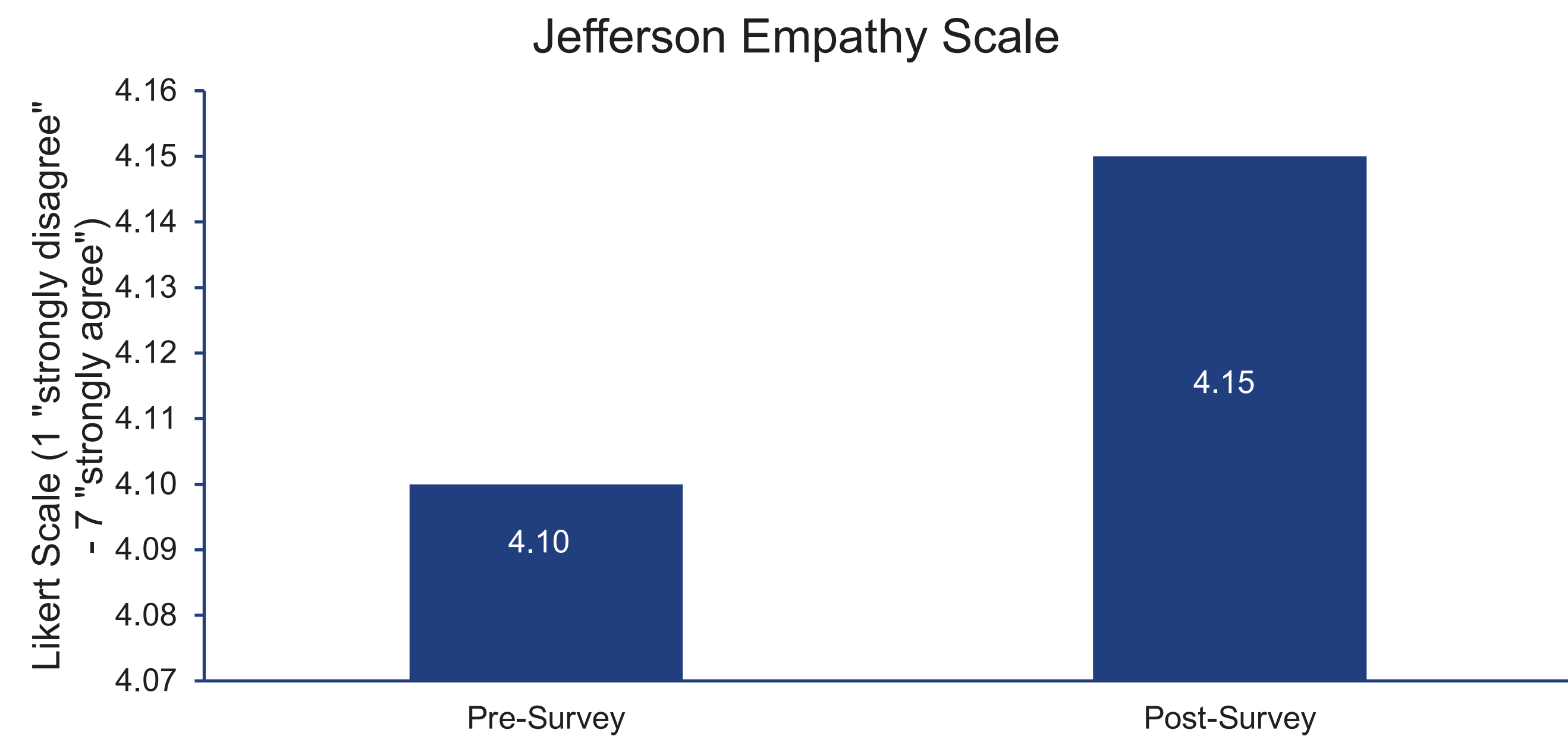
## RESULTS

Based off the paired responses from DO students, several different analyses were concluded to examine the effectiveness of the implementation of this module. Diabetes Attitudes were evaluated using a 5-point Likert-type scale with 1 being strongly disagree and 5 being strongly agree. This demonstrated significance at  $<0.01$ . Four sub scales were gauged. These included recognizing the need for special training regarding diabetic management, acknowledging the seriousness of type 2 diabetes as a disease process, recognizing the psychosocial impact of diabetes, and recognizing the importance of diabetic patient autonomy.

Sub scale	Pre M(SD)	Post M(SD)	p value
Need for special training	4.58(0.42)	4.71(0.45)	**<0.001
Seriousness of type 2 diabetes	4.29(0.44)	4.49(0.49)	**<0.001
Psychosocial impact of diabetes	4.36(0.40)	4.65(0.43)	**<0.001
Patient autonomy	4.23(0.46)	4.33(0.49)	**0.002

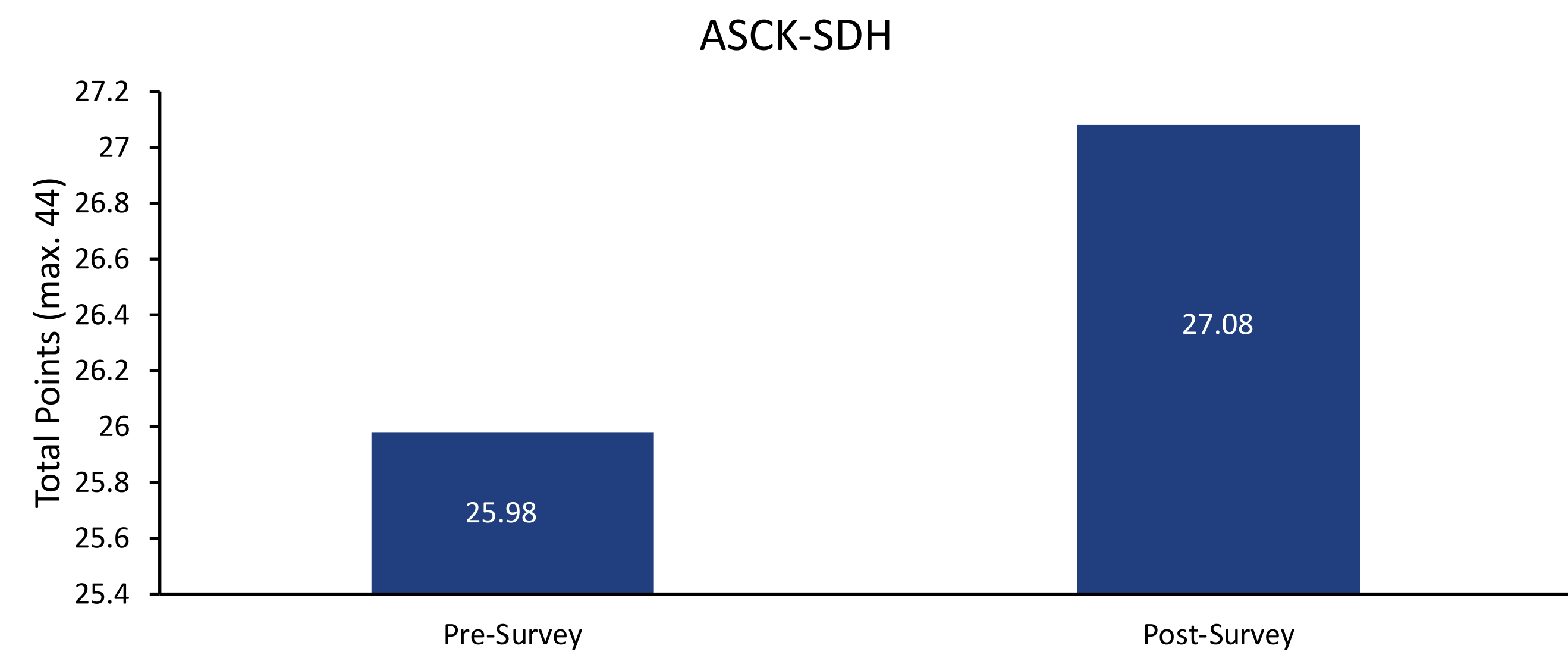
Table 1: Diabetes Attitude Results

Jefferson Empathy Scale used a 20-item 7-point Likert-type scale with 1 being strongly disagree and 7 being strongly agree. This demonstrated a significant difference from pre to post test ( $p=0.02$ ).



Graph 1: Jefferson Empathy Results

ASCK-SDH is a new scale that has recently been validated for use as it measures the confidence and knowledge about social determinants of health. It is a 4-point Likert-type scale consisting of 11 items with 1 being strongly disagree and 4 being strongly agree. This demonstrated a significant difference from pre to post ( $p=<0.001$ ).



Graph 2: ASCK-SDH Results

## DISCUSSION

Based off the statistical analysis provided, it can be concluded that the interactive module increased DO students’ empathy as well as knowledge of social determinants on various aspects of diabetes care. The statistical results helps provide validity for introducing interactive modules into healthcare students’ curriculums. It also provided a new, innovative learning modality for students learning to augment students’ personal and professional development during their didactic courses. A limitation of this study was the response rate for the PA students. Future studies would be interested in expanding the introduction of the modules to other health profession programs and performing a statistical analysis. These studies would also strive to find ways to increase paired response rates.

## REFERENCES

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Keywords: interactive modules, health professional students, diabetes mellitus management

## ACKNOWLEDGEMENTS

1. Dr. Wardian and Dr. Beverly for their analysis and aid in the development and interpretation of the study’s results.
2. Dr. Thomas for providing continual guidance and support throughout the project. We are sincerely thankful for your help and contribution to the Rocky Vista community.





# Developing Reflective Learning Through Simulation-Based Experiences

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### Background

In healthcare, simulation promotes a "real world" experience for occupational therapy (OT) and other health profession students to learn prior to clinical experiences (Hung et al., 2021). By providing students with an effective learning environment facilitating authentic and context-specific clinical situations, students develop clinical reasoning, cognitive processes, and socio-emotional communication skills such as empathy.

Evidence indicates that several factors support learning and facilitate clinical reasoning including (1) Use of task trainers, mannequins, or standardized patients; (2) simulation of authentic environments such as a ward or clinical environment; and (3) use of videos, equipment, or interactive virtual reality programs to recreate the context and setting of practice situations (Hung et al., 2021). An Australian scoping review conducted by Grant and associates (2021), demonstrated that high fidelity was maintained in the simulation experience when OT students wore their uniforms and carried out activities in an authentic environment. Therefore, the context of the simulation impacted the effectiveness of the simulation. Further, the use of video and debriefing increased the fidelity of the learning experience with simulation.

### Purpose and Research Question

The purpose of our project is to explore occupational therapy student perceptions about participating in a video recorded simulation within a simulated hospital room setting.

The research question: "What is the impact of participation in a video recorded simulation lab practical on occupational therapy student learning?"

### Methods

A quantitative study utilized a retrospective analysis measuring OTD student perspective on their experience of participation in the summer 2022 clinical lab practical within the simulation center.

This lab practical served as a learning experience for second year OTD students to demonstrate their competency with assessment of vision, sensation, range of motion, and upper extremity dressing with a client who was simulating a person who had experienced a stroke. Each student was required to provide tailored education to the client, such as a home exercise program for self-range of motion, visual scanning, safety with decreased sensation, or hemiplegic dressing techniques.

Each student's lab practical was recorded using Sim Capture software. Professors sent the individual video link to each student to provide an opportunity for them to review their videotaped performance.

This study was approved by the Rockhurst University IRB (RU # 2022-24). Students were asked to complete a short electronic anonymous survey to reflect on their learning about participation in the lab practical within a simulated hospital room and share their thoughts about watching their own performance via the recording of their lab practical using Sim Capture software.

#### OTD Simulation Experience Reflection Survey

1. How did the simulation aid your neuro rehab learning?
2. Did you watch the video of your practical?
3. What did you learn about your performance from the video?
4. Which parts of the practical helped you in your learning?

### Results

#### How did the simulation experience aid in your learning about neurorehabilitation?

*"Being in a more medical setting with the room setup/getting a feel for it."*

*"The 'patients' were more lifelike, so it gave me a better understanding of what to expect if I work with someone who had my diagnosis."*

*"I was able to have a realistic experience as to what it would look and feel like if I were actually in a rehab hospital."*

*"I felt like it aided in my learning by imitating a realistic evaluation with a patient, allowed for transferability to other classes and practicals, and it was nice only being me and the patient in the room and no professor."*

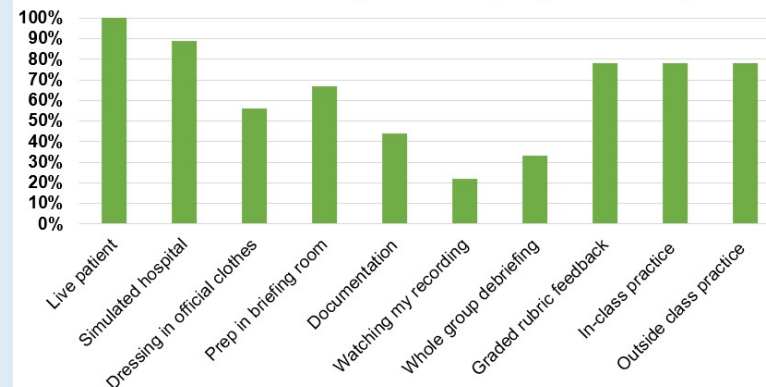
#### What did you learn about your performance within this simulation space from your recording?

*"Body positioning, communication, confidence"*

*"I watched the majority of it and bits and pieces. I did not enjoy hearing myself and seeing my mistakes. However, it was beneficial for me to hear my tone, volume, and if I make sense to a patient who may not know anything. I also felt it was important see my physical performance, as little as my body mechanics, positioning, and how my interview skills learned in Psychosocial were applied."*

*"I learned that I needed to calm down and just do what I have learned to do. I think it felt so realistic that I got nervous and didn't perform to my ability."*

#### Which elements of the practical helped your learning?



### Discussion

- Simulation embodies a learner-centered, not patient-centered environment, which encourages students to practice skills, receive feedback, and even "do over" in a safe and guided space (McDougall, 2015).
- Simulation should be "built in" instead of "bolted on" to a program, course and/or the curriculum (Zapletal et al., 2022).
- Simulation provides students the opportunity to assess individual and/or group strengths and areas of growth (Zapletal et al., 2022).
- Students who view their video recordings perceive the experience to be a valuable component to their learning (Gordon & Buckley, 2009) as well as discover areas of competence and growth opportunities (Giles et al., 2014).
- Debriefing is not feedback. Debriefing is interactive using guided reflection while feedback is unidirectional focused on student performance (Cheng et al., 2017; Voyer & Hatala, 2015).
- Learning experiences utilizing simulation serve as a modality to enhance the training cycle (Zapletal et al., 2022).



### References



# Assessing the Professional Quality of Life of Clinical Instructors

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## Abstract

**Purpose:** The purpose of this study was to determine the professional quality of life of physical therapist clinical instructors, identify factors associated with compassion satisfaction (CS), burnout (BO), and secondary traumatic stress (STS).

**Methods:** This study used a cross-sectional design and survey methodology to determine factors associated with professional quality of life. Respondents completed a survey that included the Professional Quality of Life (ProQOL) scale and demographics.

**Results:** Of the 259 physical therapist CIs who completed the survey, the majority experienced average to high levels of CS and low levels of BO and STS. Chi-square tests of independence indicated that CIs older than 56, experience as a CI more than 25 years, or licensed more than 25 years as a physical therapist were associated with high ratings of CS. CIs ages 26-35 or with less than 5 years of CI experience were associated with low ratings of CS. CIs licensed more than 25 years as a physical therapist were associated with low ratings of BO.

**Conclusion:** Older CIs with experience appear to have the ability to buffer the effects of compassion fatigue (CF) compared to CIs earlier in their career. CIs, employers and academic programs must consider mentorship, educational and training opportunities for prevention of CF.

## Background

- The purpose of this study was to determine the professional quality of life of physical therapist clinical instructors, and identify factors associated with compassion satisfaction (CS), burnout (BO), and secondary traumatic stress (STS).
- Physical therapists (PTs) typically enter the profession to care for others and derive pleasure and, accomplishment from helping those in their care. (1,2) PT clinical instructors (CIs) often derive similar pleasure and accomplishment from clinical teaching. (3,4) Both scenarios are examples of compassion satisfaction, defined as the positive consequences of helping others. (5)
- Conversely, compassion fatigue (CF), the adverse consequences of helping others (5), can develop over time due to experiences and emotions that negatively affect professional life. (1)
- BO was first identified as a moderate problem in the physical therapy profession in the early 2000s, with 40-50% of surveyed PTs stating they felt some level of burnout. (1) Rehabilitative work requires continual empathetic availability, making BO especially concerning in physical therapy (6) as it ultimately affects the quality of patient care.
- Moral injury, a type of trauma experienced after a perceived moral code violation, also leads to the experience of BO. (4) Moral injury is a widespread problem across health professions and was recently identified in clinical educators.
- The role of the PT CI is multifaceted as they balance patient needs, student learning requirements, educational institution expectations, and healthcare organization demands. Identifying and engaging CIs willing to accept students has become more complicated in recent years, perhaps due to moral injury and BO caused by an inability to simultaneously meet the needs and values of the individual educator and other stakeholders. (4) Clinical educator wellbeing is a growing concern as increased BO, and moral injury rates continue across health professions. (2,4)

## Materials and Methods

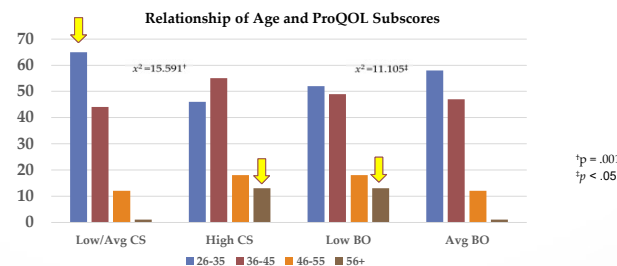
- This study used a cross-sectional design using survey methodology, conducted from August 26 to September 22, 2022, and approved by the IRBs at A.T. Still University and Augustana University.
- The participants were recruited through convenience sampling using Exxat Prism
- The ProQOL comprises 30 items scored on a 5-point Likert-type scale (0 = never to 5 = very frequently) and is scored over three subscales: CS, BO, and STS. The ProQOL has demonstrated good construct validity and discriminant validity ( $r < .70$ ) and good internal consistency ( $\alpha = .75-.88$ ).
- Univariate descriptive statistics, including the mean, standard deviation, and interquartile range of participants' sociodemographic characteristics, were calculated. The raw data from the ProQOL were summed and compared against ProQOL cut scores. Univariate descriptive statistics were calculated for each subscale.
- Chi-square tests of independence were performed, to explore associations between participants' characteristics and individual ProQOL subscale scores. Post-hoc testing using adjusted standardized residuals were used to determine which characteristics contributed to significant associations.

## Results

Summary of ProQOL Scores

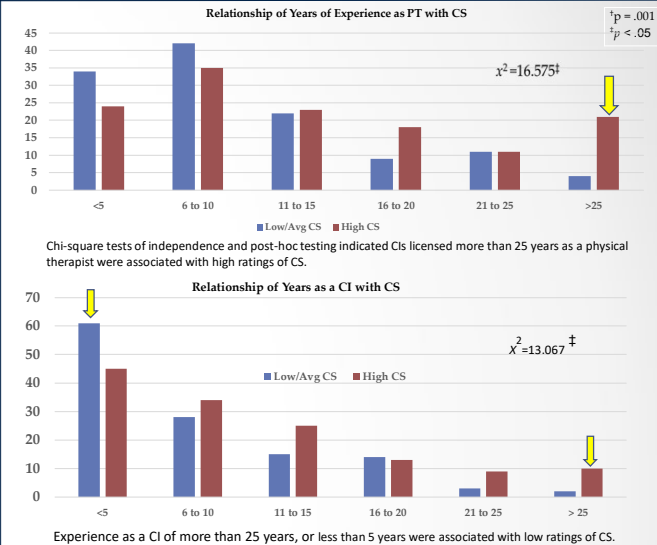
ProQOL Subscale	n	M (SD)	Low (10-22)	Average (23-41)	High (42-50)
			n(%)		
CS	257	41.40(5.63)	2(0.8)	122(50.2)	119(49.0)
BO	252	22.32(5.25)	133(52.8)	119(47.2)	0(0)
STS	253	19.30(4.72)	192(75.9)	61(24.1)	0(0)

Of the 259 physical therapist CIs who completed the ProQOL survey, the majority experienced average to high levels of CS and low levels of BO and STS



Chi-square tests of independence and post-hoc testing indicated that CIs older than 56 were associated with high ratings of CS and low ratings of BO. CIs ages 26-35 were associated with low ratings of CS.

## Results



## Conclusion

- Older CIs with experience appear to have the ability to buffer the effects of compassion fatigue (CF), compared to CIs earlier in their career.
- CIs, employers and academic programs must consider mentorship, educational and training opportunities for the prevention of CF, particularly for new graduates and new clinical instructors

## Future Direction

- Future work should explore how clinical sites and academic programs could expand mentorship opportunities, particularly for early career CIs, and develop education and training opportunities specific to preventing compassion fatigue.
- Thoughtful approaches by academic programs, clinical site organizations, and SCCEs to enhance CS and prevent CF may help support and increase CIs' ProQOL.
- In addition, these approaches may lead to CIs modeling effective strategies for balancing the multifaceted challenges of clinical practice for student PTs.

## References



Scan for references and demographic data

# The relationship between compassion fatigue and perceived organizational support.

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## Abstract

**Purpose:** The purpose of this study was to examine the relationship between perceived organizational support and compassion fatigue (CF) in physical therapist clinical instructors.

**Methods:** This study used a cross-sectional design and survey methodology to explore the relationship between CF and perceived organizational support. Respondents completed a survey that included the Professional Quality of Life (ProQOL) scale and the 8-item Survey of Perceived Organizational Support (SPOS).

**Results:** Of the 259 physical therapist CIs who completed the survey, the majority (63.2%) reported medium levels of perceived organizational support. Only 9.3% of participants reported a high perception of organizational support based on the SPOS. Chi-square tests of independence indicated a relationship between SPOS and each of the two subscales of CF, BO and STS. Post hoc testing revealed an inverse relationship between SPOS and CF where individuals with high levels of SPOS had a higher likelihood of scoring low in BO, while individuals with low levels of SPOS were more likely to report higher levels of BO and STS.

**Conclusion:** Perceived organizational support may positively affect overall professional quality of life of CIs through decreased experience of BO/CF while a negative perception of organizational support may negatively affect overall professional quality of life through an increased report of CF (BO & STS). This study strengthens the findings of previous research that hypothesized that the experience of CF is greatly affected by an individual's environment. CIs, employers and academic programs must consider mentorship, educational and training opportunities for the prevention of CF.

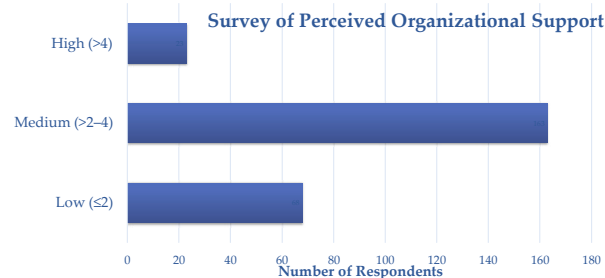
## Background

- The purpose of this study was to examine the relationship between perceived organizational support and BO, and STS, the two facets of compassion fatigue (CF) (1).
- CF, the adverse consequences of helping others can develop over time due to experiences and emotions that negatively affect professional life. (1)
- Historically, CF and BO were viewed as problems an individual faced. However, recent research is shifting the focus onto modifiable environmental factors within the workplace. (2)
- Cavanagh et al. (3) found that the primary trigger of BO is stressors related to workload and organizational characteristics.
- Similarly, Burri et al. (2) reported that most risk factors related to BO were related to the culture or structure of the organization, with only 19% of BO explained by psychological and emotional risk factors.
- In work environments that prioritize productivity or financial outcomes over provider well-being, professional quality of life may decline, as healthcare providers lack support, suffer physical and emotional effects, and patient care suffers. In addition, the most significant predictor of unethical behavior is an organizational culture that prioritizes productivity. (4)
- Clinical instructors are at risk for burnout as physical therapists and shoulder the additional pressure of delivering high-quality educational opportunities to physical therapy students. (5)
- Stress is associated with burnout, and the stress of supervising health profession students is associated with clinician burnout. (6,7)
- Organizational and workplace culture also influences how clinicians perceive the benefits and barriers of clinical education and, ultimately, whether they decide to supervise a student. (6,8)
- Healthcare institutions that explicitly value clinical education recognize and support the contribution of clinical instructors. (6)

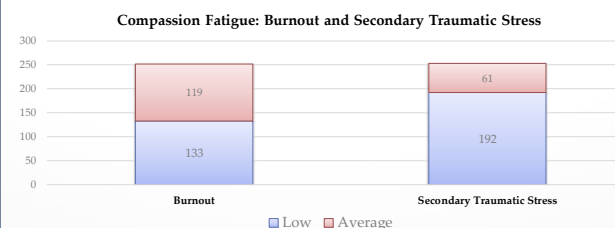
## Materials and Methods

- This study used a cross-sectional design using survey methodology, conducted from August 26 to September 22, 2022, and approved by the IRBs at A.T. Still University and Augustana University.
- The participants were recruited through convenience sampling using Exxat Prism.
- The online survey included three sociodemographic questions about participant age, years of experience in clinical practice, and years of experience in clinical instruction, followed by the 8-item Survey of Perceived Organizational Support (SPOS) and the ProQOL scale.
- The SPOS assesses perceived organizational support with eight questions using a 7-point Likert-type scale (0 = strongly disagree to 6 = strongly agree).
- The ProQOL comprises 30 items scored on a 5-point Likert-type scale (0 = never to 5 = very frequently) and is scored over three subscales: CS, BO, and STS.
- Univariate descriptive statistics, including the mean, standard deviation, and interquartile range of participants' sociodemographic characteristics, were calculated. The raw data from the ProQOL were summed and compared against ProQOL cut scores. Univariate descriptive statistics were calculated for each subscale.
- Chi-square tests of independence were performed, to explore associations between participants' characteristics and individual ProQOL subscale scores. Post-hoc testing using adjusted standardized residuals were used to determine which characteristics contributed to significant associations.

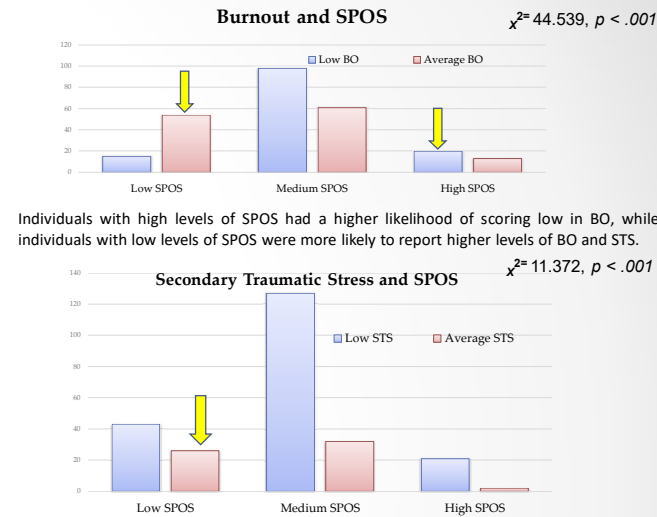
## Results



Of the 259 physical therapist CIs who completed the survey, the majority (63.2%) reported medium levels of perceived organizational support. Only 9.3% of participants reported a high perception of organizational support based on the SPOS. 119 Reported average burnout and 61 reported average STS.



## Results, cont.



## Conclusion

- Perceived organizational support may positively affect overall professional quality of life of CIs through decreased CF while a negative perception of organizational support may negatively affect overall professional quality of life through an increased report of CF.
- This study strengthens the findings of previous research that hypothesized that the experience of CF is greatly affected by an individual's environment.

## Future Direction

- Further investigate the environment of the CIs who report high perceived organizational support
- Investigate how student outcomes align with CIs who perceive various levels of organizational support
- Ultimately identify structure or culture barriers or opportunities to support clinical instructors from an organizational standpoint

## References



Scan for a complete list of references



# Clinical reasoning teaching strategies in health professions education: a review

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# Background: Transformative Learning in HPE

- Health Professions Education (HPE) students often learn in settings which require them to provide patient care prior to program completion, which means transformative learning exposure often occurs (Van Schalkwyk et al., 2019).
- Transformative learning can be thought of as the *application of basic science knowledge to solve a clinical problem*. This means the student's ability to transfer basic science is essential to clinical reasoning (CR) development.
  - Transformative learning can provide health professions educators a theoretical framework to view, and deliver, student learning.



## Problem of Practice

- Previous literature has revealed a ***very low ability of learners to spontaneously transfer basic science knowledge to CR*** (Day & Goldstone, 2012).
  - Because transfer of science is challenging, but also very necessary for patient care, it is vital that educators turn to the literature when looking for successful teaching strategies to assist in student clinical reasoning development.



## **EBP: Teaching Strategies to improve CR**

- Commonsense Analogies
- Multiple Contexts
- Whole or Serial Case Format
- Key Questions
- Students acting like health care professionals
- Test-taking strategies

# Teaching Strategy: Commonsense Analogies

A meta-analysis conducted by Castillo et al. (2018) revealed the use of ***commonsense analogies***, and the study of ***multiple clinical problems in multiple contexts*** improved the transfer of basic science information to a clinical context.

Example: *Using a baking analogy to explain how a cold pack “works” or how heat transfers from warm skin to cold ice pack.*



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# Teaching Strategy: Analogies and Multiple Contexts

A Kulasegaram et al. (2017) study importantly demonstrated that ***at least two contexts are key***, and deep analogies are needed, to improve student transfer of knowledge.

*Example: How do I know if I recommend an ice bath or ice massage?*

*\*Use the same principle of heat transfer*

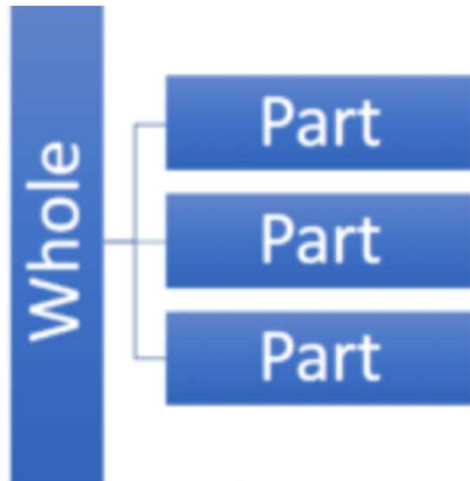


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# Teaching Strategy: Whole or Serial Case Format



While clinical cases are often used to enhance clinical reasoning, there is some debate about whether to use whole or serial cases.

However, a study conducted in 2020 revealed there was no main effect for case format ( $p = .50$ ) meaning ***diagnostic accuracy between the serial or whole case format did not significantly differ*** (Kiesewetter et al., 2020).

## Teaching Strategy: Key Questions

However, the results of a study conducted with students of an obstetrics and gynecology rotation revealed that ***clinical cases interspersed with key questions led to greater learning success*** as compared to only reading cases (Recker et al., 2022).



## Teaching Strategy: Acting as a health care professional

When assessing individual program methods, one systematic review found that students perceived educational opportunities that ***allowed them to act as a physical therapist better facilitated their learning than peer or expert feedback*** (LaRosa & Dinsmore, 2020).



## Teaching Strategy: Test Performance

Lastly, to improve student clinical reasoning performance on exams, one mixed-methods study revealed ***four successful clinical reasoning strategies***:

1. **Read the vignette with restating and summarizing**
2. **Summarize key features after reading alternatives**
3. **Use scheme-inductive reasoning**
4. **Use non-analytic reasoning (Heist et al., 2014, p. 712)**

A therapist has orders to evaluate and treat a patient status-post motor vehicle accident in which he was hit by a truck while riding his bike. Chart review reveals X-rays showed a left femur fracture addressed with an internal fixation; platelet count 300,000; hematocrit 40%; hemoglobin 13.5 g/dL. Which of the following is the most appropriate action for the therapist to take?

- a. Conduct a normal, full evaluation
- b. Hold Physical Therapy and consult with the nurse
- c. Delay physical therapy for the day and check back tomorrow
- d. Perform a modified evaluation

# Key Points



1. Transformative learning is difficult for most
2. Use common-sense analogies
3. Provide multiple problems in multiple clinical contexts
4. Serial and whole case formats are beneficial
5. Key questions facilitate student learning
6. Allow students to “act” as a professional
7. To test well: summarize the clinical vignette, summarize the answers, use scheme-inductive reasoning, use nonanalytic reasoning

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# Questions?

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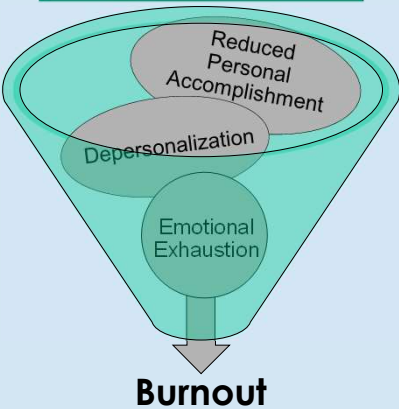


# Preventing Burnout of Physical Therapists: A Phenomenological Study to Guide Faculty

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## Burnout: What is it?



## What Causes it?

Job-Person Fit	Contributing Factors to Burnout
<b>Workload</b>	Higher number of hours worked Time constraints / Productivity requirements Administrative burden Work-family pressures
<b>Control</b>	Too much organizational change <b>Younger age</b> <b>Lower levels of experience</b>
<b>Reward</b>	Imbalance between effort and reward Lack of self-compassion Decreased professional achievement
<b>Community</b>	Lack of professional relationships Lack of management support <b>Lack of mentoring / understanding one's role</b> Work culture / management of conflict
<b>Fairness</b>	Perception that leader treats people unfairly Perception that organization treats people unjustly
<b>Values</b>	Lack of value-alignment with leadership Lack of value-alignment with organization <b>DPT student loan debt</b>

## Data Collection Procedures and Tools

### Recruitment

### Screening Questionnaire

### Bracketing

- Mind map
- Reflective journaling

### Interview procedures

- Virtual process
- Semi-structured interview protocol

### Member checking

### Audit trail

- Member checking, peer review, and correspondences with committee

## Data Analysis

- **Thematic analysis** following the methods of van Manen
- All analysis was completed by hand
- Epoche and reduction of data
  - Significant Statements
  - Meaning Units
  - Themes
  - Essence of phenomenon
- Peer Reviewer

## Results



## Sample of Framework

Strategy	Specific Examples for Application	Job-Person Fit
<b>Maintain Perspective</b>	Remember your purpose Find joy and share joy Develop a strong professional identity*	Control Reward Values
<b>Foster Relationships</b>	Connect and collaborate with coworkers Connect with patients Be a team player*	Community Workload
<b>Take Control</b>	Achieve variety - patients, schedule, treatments Engage in educational opportunities Demonstrate initiative*	Control Workload
<b>Practice Self-Care</b>	Maintain work-life balance: family, vacation, boundaries, hobbies, reduced hours Practice self-compassion* Practice mindfulness *	Workload Control Reward Community Values
<b>Take Advantage of Organizational Supports</b>	Professional development opportunities Positive culture* Value alignment*	Workload Control Reward Community Fairness Values

\*found in the literature; others were from this study

## References and Acknowledgements

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## BACKGROUND

- Strong leadership in healthcare is needed to combat a constantly changing industry, manage a variety of stakeholders, create a positive work environment, make difficult decisions, and improve patient care (Kupietzky, 2023).
- While competencies to become a clinician are standardized and spelled out in the form of educational standards and board examinations, competencies to become a clinical leader in the healthcare field are more ambiguous.
- Measuring student/graduate outcomes on leadership is especially timely since Creighton University is pursuing the Carnegie Foundation's Elective Classification in Leadership for Public Purpose, a distinction awarded to post-secondary institutions producing evidence in commitment and practice towards leadership for public purpose.

## AIMS & LEARNING OBJECTIVES

The aims of this project were to examine existing assessment processes and instruments to: (a) develop an infrastructure that will allow for longitudinal data collection and (b) develop a survey item that can measure occupational therapy students' leadership outcomes across time. Following completion of this methodologist poster presentation, participants:

1. will evaluate the methodological steps used to develop an infrastructure for collecting student outcomes across time.
2. examine considerations and strategies applied when streamlining assessment procedures and aligning survey instruments.
3. reflect on their existing assessment procedures and instruments to identify opportunities for innovation and scholarship, especially in measuring student outcomes in leadership.

## METHODS

- The Program Assessment Committee (n=9; 7 faculty members and 2 student representatives) in the Department of Occupational Therapy at Creighton University pursued the following three phases to achieve the proposed aims:

**[Phase 1] Review of Existing Assessment Procedures and Instruments:** The committee reviewed all available survey instruments and their items to identify opportunities *repeated measurements* across time. The assessment cycle, including the time of dissemination and target audience, was carefully reviewed. The committee was able to identify the Graduate Exit Survey, 1-Year Post Graduation Survey, and 5-Year Post Alumni Survey as three instruments/points in time to collect longitudinal data from a cohort of students. These survey data are typically analyzed and reported separately.

**[Phase 2] Alignment of Survey Items Across Three Instruments/Points in Time:** The identified surveys were reviewed item-by-item to (a) examine any existing constructs that are measured repeatedly across the instruments and (b) consistency in how the construct is measured (i.e., wording, sentence structure, multiple choice options, etc.). The committee worked through inconsistencies and addition/deletion of survey items for optimal alignment across the three instruments, ensuring that the data can be consistently collected across three points of time.

**[Phase 3] Developing a Longitudinal Survey Item:** With the infrastructure established, the Program Assessment Committee reviewed the three surveys again to identify any existing items that indicate and measure leadership capacities. The committee encountered challenges as (a) leadership / leadership for public purpose is a complex, multifaceted construct and (b) how leadership capacities manifest as students, new graduates, and experienced practitioners vary due to the natural career trajectory (i.e., students currently enrolled in the program may volunteer for the AOTA, but cannot hold elected positions). Due to these concerns, the committee discussed extensively about the feasibility of one survey item appropriately collecting leadership / leadership for public purpose data across changing roles and times.

## RESULTS

- The committee members met twice a month during the Fall 2021 semester, achieving the proposed aims by January 2022.
- The infrastructure was developed to allow faculty to collect program-level longitudinal data across three points in time (at graduation, 1-year post graduation, and 5-years post graduation).
- Longitudinal survey items, involving both quantitative and reflective, qualitative components, that measure leadership outcomes of occupational therapy students will be added to the Graduate Exit Survey, 1-Year Post Graduation Survey, and Alumni Survey.

Graduate Exit Survey

1-Year Post Graduation survey

5-Year Post Alumni Survey

Graduate Exit Survey	5-Year Post Alumni Survey
Based upon the completion of your capstone, have you completed any of the following?	Since you graduated from the entry-level OTD Program, indicate if you have engaged in any of the following publication activities.
<ul style="list-style-type: none"> <li>• Presented at AOTA Conference</li> <li>• Presented at a non-OT conference</li> <li>• Published in a peer reviewed journal</li> </ul>	<ul style="list-style-type: none"> <li>• Peer reviewed journal articles</li> <li>• Non peer reviewed journal articles</li> <li>• Author or co-author book chapters</li> </ul>

## DISCUSSION

- Often, health professional programs engage in robust assessment activities to meet accreditation standards. The assessment procedures, instruments, and the collected data can also be used for innovative work and scholarship; such initiatives can be pursued from carefully evaluating the existing assessment procedures and activities. Instead of developing and adding new survey instruments, programs are encouraged to examine their current assessment procedures and collection of instruments for opportunities to evaluate other important aspects of program assessment - such as leadership outcomes of students as they transition into the role of clinicians.

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