The Relationship Between
Instructional Telepractice & Pedagogy;
Graduate Student Perspectives

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Evolution of Interest

History

Services

Clinical opportunity

Student responses

Participant responses

Objectives

Identify pedagogical contributions of telepractice in the classroom

Evaluate opportunities for using telepractice in the classroom

Design & integrate telepractice activities in the classroom

Pre-COVID-19 Pandemic

- ASHA
  - 2005 adopted position statement, published a technical report, and a knowledge and skills document for both audiology and speech-language pathology
- Growth in interest emerged between 2005 – 2020
  - Treatment Outcomes
    - Training
      - Use
        - Skills
          - Efficacy
            - Perceptions
              - Supervision

Onset of COVID-19 Pandemic

- Exponential Growth 2020 – Present
  - Treatment Outcomes
    - Training – Faculty, Student, Clinician, Patient (Standards & Competencies)
      - Use – Clinical & Academic, Populations, Diagnoses
        - Skills – Baseline, Clinician, Patient, Competencies
          - Efficacy – Individual, Group, Face to Face vs. Virtual
            - Perceptions – Faculty, Student, Clinician, Patient
              - Supervision – Reduces Load
                - Service – underserved

Current Literature

- Primary setting is university clinics or schools
- Most health care disciplines engage in telepractice
- Emerging routine service delivery option
- Increases access
- Effective therapeutic outcomes
- Lacks standardized training & competency measures

Study Proposal

- This study *"Addresses graduate speech-language pathology student's perception of the use of telepractice as a pedagogical tool, bridging the immediate application of theory to patient care in the classroom."*

- More specifically, *"What perceptions do graduate students have after introduction to, training with, and telepractice engagement with real patients applying theoretical constructs embedded in classroom lectures?"*

Course Assignment

- Introduced at onset of semester
  - Included pre-recorded video of participants
  - Provided introductory training
    - Zoom platform connectivity
    - Application of virtual service delivery
- Parameters
  - Self enrollment in small group / select theoretical construct
  - Submit encounter plan
  - Conduct virtual engagement with participants
  - Collect performance data
  - Submit session findings
  - Complete individual reflection assignment

Student Clinician Groups

Student Clinicians
- 59 second semester graduate students
- 2 consecutive cohorts
- 2-3 to a group
- 21 – 41 years of age (24.7)
- 5 males / 56 females
- Earned undergraduate degrees
- Enrolled in
  - 15 – week *Aphasia and Related Disorders* course
  - Full time, accelerated speech-language pathology accredited communication disorders and sciences training program

Theoretical Constructs

- Session #1 Interview
- Session # 2 Informal Assessment
- Session # 3 Formal Assessment
- Session # 4 Therapy Approaches
- Session # 5 Cognitive Considerations
- Session # 6 Word Production

- Session # 7 Reading
- Session # 8 Writing
- Session # 9 Sentence Production
- Session # 10 Quality Of Life
- Session # 11 Right Hemisphere
- Session # 12 Motor Speech

Virtual Participants / Patients

- 76-year-old male & 76-year-old spouse of 50 years
  - 6 years post CVA
  - Prior speech & dysphagia therapy
  - Occupation – Welder
  - 2 adult children
- Offered opportunity to participate
  - Increasing communication engagements
  - Facilitate student learning and skill acquisition

Virtual Patient Encounter Assignment

Develop
- 10 – 12 item informal Assessment Instrument
  - Include administration & scoring directions
- 2 – 3 Evidenced Based Treatment Activities
  - Reflects weekly course content
  - EBP
- Data collection sheet
  - Distributed to observing students

Conduct Virtual Patient Encounter

- Embedded in weekly 2 hour and 50 minute class time block
  Structure
  - Traditional Lecture (2 hours)
  - VPE (30 minutes)
  - Cohort debrief (20 minutes)
- Collect Evaluation Performance Data
- Collect Treatment Performance Data

IN-SEAT CLASSROOM

Post Virtual Patient Encounter

Presenting Student Clinicians

- Interpret Evaluation Findings
  Submit Formal Evaluation Report

- Interpret Treatment Data
  Submit Treatment Performance Data

- Complete Reflection Questionnaire Assignment

"From a teaching standpoint, how did the in-class virtual person encounter influence your learning experience?"

- Facilitate / Impede learning material
- Most / Least helpful with the experience
- Adequacy of training
- Experience increase comfort
- Professional development and future employability
- Improve the experience / Additional comments

Post Virtual Patient Encounter

Remaining Cohort
- Access to the Encounter Plan & Data form
- Observe
- Collect performance data
- Document in SOAP format
  - Include
    - Reflect on application of course content
    - Identify strength/weakness of student clinician(s)
    - Address aspect not included in session
- Submit w/in 24 hours

Study Design

- A Cross Sectional Study Design
  - Used to assess the phenomenology of graduate student perceptions on the inclusion of telepractice during classroom instruction

- Qualitative Data
  - Collected via a final semester reflective questionnaire
    - Student feedback on the experience and its applicability to professional development

Results

- 59 de-identified reflective questionnaires
  - Thematically analyzed by 3 independent reviewers:
    - Classroom instructor, and two graduate students
      - .923 Intraclass correlation coefficient
- 6 primary perceptual codes were identified

Six Primary Perceptual Codes

1. Facilitates learning course content (100%)
2. Does not impede course content (< 11 %)
3. Adequate training (56%)
4. Assists with comfort in future use (86%)
5. Professional development (82%)
6. Contributes to employability (89%)

Student Perceptions Telepractice in the Classroom
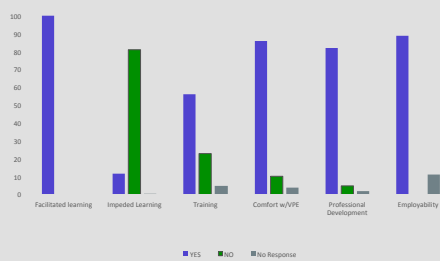
Three Themes

1. Positive impact on learning course content
2. Enhances professional skills
3. Improves employability

Response Examples

"I found it very helpful to be able to participate in virtual treatment and observe my colleagues leading therapy sessions because it facilitated further conversations regarding what we were learning in class and how it directly applies to the assessment and treatment principles we had discussed."

"The most helpful part of the experience was watching and experiencing the failures. The failures were present for the entire class to see and forced the students presenting and leading the class to reflect on what more could have been planned or what changes could have been implemented to allow the communication partner more success."

"I believe this experience has provided us all with a means to set us apart from other students. In addition, virtual therapy facilitates learning of several soft skills that cannot be acquired through traditional modes of therapy."

Conclusions

Graduate SLP Students perceive virtual encounters embedded in weekly classroom lectures to:

- Facilitate Learning
- Enhance Professional Skills
- Improve Employability

Conclusions

Student perspectives on the use of virtual patient encounters, as a graduate level pedagogical tool, has merit in academic training for bridging theoretical constructs with therapeutic implementation, student satisfaction and professional application.

Limitations

- Post experience assignment
- Limited number and type of questions
- Single semester experience
- Single patient diagnosis

Current Research

- Analysis of data from 2 sections – same cohort
  - Section 01 – VPE person with non-fluent aphasia
  - Section 02 – VPE person with fluent aphasia
    - Attitudes / Perceptions
    - Implementation
    - Synchronous vs. Asynchronous session
    - Assessment vs. Treatment

VIRTUAL CLASSROOM
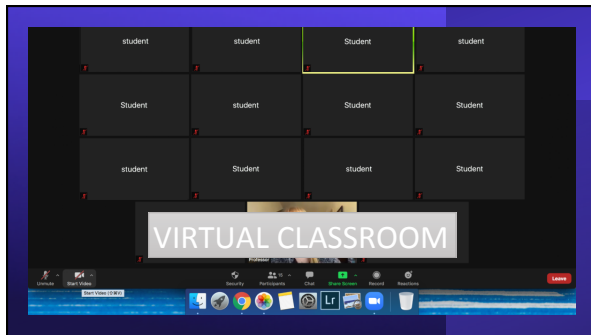
Future Research

- Entry Level Clinicians
  - Training protocols
  - Student competencies
  - Best practices
  - Assessment / Treatment protocols
  - Populations (demographics)
  - Diagnoses
  - Baseline skills (clinician / participant)
  - Prescription
- Faculty & Preceptor Alignment
- Student Performance

Post Analyses

Initial investigation of this pedagogical tool offers a plethora of opportunities for engaging students in:
- Flip learning
- Experiential learning
- Observational learning
- Student-instructor partnerships
- Inter/intra professional collaboration
- Acquisition of clinical hours
- Provision of service to underserved populations

Questions

Thank You!

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