NSHA 2014
Poster Proposal

Author(s): Amber Sulahria & Abbie Olszewski

Email: ambersulahria@gmail.com, aolszewski@medicine.nevada.edu

Title: Examining Narrative Elicitation Methods for Young Spanish-English Bilinguals

Abstract

Introduction: The number of ELL students attending schools in the United States has increased 10% (an estimated 4.7 million students) since 2002 (US Department of Education). The National Literacy Panel on Language Minority Children has identified narratives as an area concern for English language learners (ELL). One of the largest populations of ELL children is Spanish English Bilinguals (SEB; NCES, 2011; U.S. Census, 2008). Because early narrative language skills are predictive of later academic functioning, it is imperative that educators understand the English narrative development of SEB children.

Purpose: The purpose of the study is to determine which elicitation method, spontaneous tell or retell elicits the most representative narrative language performance samples of young SEB children. Specifically, the study will answer the questions:

1. Does a spontaneous tell or retell narrative elicitation method yield the most representative narrative performance Proportion of Story Grammar Index (PSGE Index) in young SEB children?

2. Does a spontaneous tell or retell narrative elicitation method yield the most representative narrative performance on the Episodic Quality Index (EQ Index) in young SEB children?

Method: Twenty Spanish-English bilingual first graders participated in this study. Two narrative language samples were obtained using wordless “frog” picture books by Mercer Mayer. The spontaneous tell narrative was elicited first using the story Frog Goes to Dinner (FGTD: Mayer, 1974) and the narrative retell was elicited second using the story Frog Where Are You? (FWAY; Mayer, 1969).
Conclusions: Results from spontaneous tell and narrative retell will be compared for narrative language measures (Proportion of Story Grammar Index and Episodic Complexity Index).

Objectives:
1. Understand evidenced-based decision-making process (E³BP) in regards to providing speech language services to clients.
2. Understand how to locate and appraise external evidence in E³BP.
3. Understand how to integrate external evidence, internal evidence to clinical practice, and internal evidence to patient values/beliefs/preferences when answering the following foreground question:

Disclosure statements
Amber Sulahria, University of Nevada, Reno
Financial— No relevant financial relationship exists.
Nonfinancial— No relevant nonfinancial relationship exists.

Abbie Olszewski, University of Nevada, Reno
Financial— No relevant financial relationship exists.
Nonfinancial— No relevant nonfinancial relationship exists.
NSHA 2014
Poster Proposal

Author(s): Annette Zielinski & Abbie Olszewski

Email: annettez@medicine.nevada.edu, aolszewski@medicine.nevada.edu

Title: Effectiveness of computer-based aphasia treatments compared to traditional impairment-based aphasia treatments on word-finding abilities

Abstract

Introduction: Strokes can lead to the acquirement of aphasia which is defined as a language impairment affecting expressive language, receptive language, or both expressive and receptive aspects of language. One of the most common characteristics present in patients with aphasia is anomia or word finding-difficulties. Both computer-based and traditional impairment-based aphasia treatments have been implemented to increase in word-finding abilities.

Purpose: The purpose of this study was to determine whether computer-based aphasia treatments lead to a significantly greater increase in word-finding abilities compared to traditional impairment-based aphasia treatments in aphasic patients with anomia.

Method: Search terms aphasia therapy, aphasia anomia therapy, and aphasia computer therapy were used in the PubMed and EBSCO electronic database to locate external evidence. Ten research articles were appraised and evaluated for validity and reliability.

Conclusions: Results from strong external evidence, internal evidence related to clinical practice, and internal evidence related to patient were integrated to determine the best therapy approach for patients with anomia resulting from aphasia.

Objectives:
1. Understand evidenced-based decision-making process (E³BP) in regards to providing speech language services to clients.
2. Understand how to locate and appraise external evidence in E³BP.
3. Understand how to integrate external evidence, internal evidence to clinical practice, and internal evidence to patient values/beliefs/preferences when answering the following foreground question: In patients with aphasia (P), do computer-based aphasia treatments (I) lead to a significantly greater increase in word-finding abilities (O) in comparison to traditional impairment-based aphasia treatments (C)?
Disclosure statements
Annette Zielinski, University of Nevada, Reno
Financial—No relevant financial relationship exists.
Nonfinancial—No relevant nonfinancial relationship exists.

Abbie Olszewski, University of Nevada, Reno
Financial—No relevant financial relationship exists.
Nonfinancial—No relevant nonfinancial relationship exists.
Author(s): Annette Zielinski & Abbie Olszewski

Email: annettez@medicine.nevada.edu, aolszewski@medicine.nevada.edu

Title: Effectiveness of computer-based aphasia treatments compared to traditional impairment-based aphasia treatments on word-finding abilities

Abstract

Introduction: Strokes can lead to the acquisition of aphasia which is defined as a language impairment affecting expressive language, receptive language, or both expressive and receptive aspects of language. One of the most common characteristics present in patients with aphasia is anomia or word finding-difficulties. Both computer-based and traditional impairment-based aphasia treatments have been implemented to increase in word-finding abilities.

Purpose: The purpose of this study was to determine whether computer-based aphasia treatments lead to a significantly greater increase in word-finding abilities compared to traditional impairment-based aphasia treatments in aphasic patients with anomia.

Method: Search terms aphasia therapy, aphasia anomia therapy, and aphasia computer therapy were used in the PubMed and EBSCO electronic database to locate external evidence. Ten research articles were appraised and evaluated for validity and reliability.

Conclusions: Results from strong external evidence, internal evidence related to clinical practice, and internal evidence related to patient were integrated to determine the best therapy approach for patients with anomia resulting from aphasia.

Objectives:
1. Understand evidenced-based decision-making process (E3BP) in regards to providing speech language services to clients.
2. Understand how to locate and appraise external evidence in E3BP.
3. Understand how to integrate external evidence, internal evidence to clinical practice, and internal evidence to patient values/beliefs/preferences when answering the following foreground question: In patients with aphasia (P), do computer-based aphasia treatments (I) lead to a significantly greater increase in word-finding abilities (O) in comparison to traditional impairment-based aphasia treatments (C)?
Disclosure statements
Annette Zielinski, University of Nevada, Reno
Financial— No relevant financial relationship exists.
Nonfinancial— No relevant nonfinancial relationship exists.

Abbie Olszewski, University of Nevada, Reno
Financial— No relevant financial relationship exists.
Nonfinancial— No relevant nonfinancial relationship exists.
Title: Phonological Treatment for school-aged children: A consideration for the effectiveness of Maximal and Multiple Opposition approaches

Abstract

Introduction: School-aged children with phonological disorders are sometimes not understood at school when asking questions and sharing ideas by teachers and peers. Children with these disorders are typically seen by a speech-language pathologist to work on their specific phoneme error patterns. Two therapeutic approaches to phonological disorders, Maximal Oppositions and Multiple Oppositions, have been used in speech-language therapy and have been found to improve phonological disorders in school-aged children. Yet, it is still unclear as to which approach might be more of an effective treatment.

Purpose: The purpose of this study was to determine if school-aged children with phonological disorders experience significantly greater improvements in language when provided with either a Maximal or Multiple Opposition approach during treatment.

Method: Search terms “Multiple Oppositions approach”, “Maximal Oppositions approach”, and “comparison of phonological treatment approaches” were used in the PubMed, DOAJ, ERIC, and informa Healthcare electronic databases to locate external evidence. Ten research articles were appraised and evaluated for validity and reliability.

Conclusions: Results from strong external evidence, internal evidence related to clinical practice, and internal evidence related to the patient were integrated to determine the best therapy approach for school-aged patients with phonological disorders.

Objectives:
1. Understand evidenced-based decision-making process (E3BP) in regards to providing speech language services to clients.
2. Understand how to locate and appraise external evidence in E3BP.
3. Understand how to integrate external evidence, internal evidence to clinical practice, and internal evidence to patient values/beliefs/preferences when answering the following foreground question: Do school-aged children experience significantly greater improvements in language when provided with a Maximal Opposition approach for treatment, as compared to a Minimal Opposition approach?

Disclosure statements
Brittany Paulson, University of Nevada, Reno

Financial—No relevant financial relationship exists.
Nonfinancial — No relevant nonfinancial relationship exists.

Abbie Olszewski, University of Nevada, Reno

Financial — No relevant financial relationship exists.

Nonfinancial — No relevant nonfinancial relationship exists.
NSHA 2014
Poster Proposal

Author(s): Carly Pengelly & Abbie Olszewski

Email: cpengelly@medicine.nevada.edu, aolszewski@medicine.nevada.edu

Title: Effects of surface electromyographic (sEMG) biofeedback training during the Mendelsohn maneuver vs the Mendelsohn maneuver

Abstract

Introduction: Difficulties in swallowing is known as dysphagia. Surface Electromyographic (sEMG) feedback provides information on the timing of selected muscle contraction patterns during swallowing, on the amplitude of electric activity of swallowing muscles. The Mendelsohn maneuver is a type of behavioral treatment that requires the patient to learn to swallow by voluntarily prolonging the hyolaryngeal elevation at the peak of the swallow.

Purpose: The purpose of this study was to determine if, sEMG biofeedback with a Mendelsohn Maneuver compared with only a Mendelsohn Maneuver in adults with dysphagia improves swallowing as measured by peak amplitude in submental muscles of swallowing.

Method: Search terms dysphagia, swallowing disorders, Mendelsohn maneuver, hyoid movement, surface electromyographic biofeedback, and swallowing rehabilitation were used in the Pubmed, Psycinfo, Web of Science and Academic Search Premiere electronic databases to locate external evidence. Ten research articles were appraised and evaluated for validity and reliability.

Conclusions: Results from strong external evidence, internal evidence related to clinical practice, and internal evidence related to patient were integrated to determine the best therapy approach for a patient with dysphagia.

Objectives:
1. Understand evidenced-based decision-making process (E³BP) in regards to providing speech language services to clients.
2. Understand how to locate and appraise external evidence in E³BP.
3. Understand how to integrate external evidence, internal evidence to clinical practice, and internal evidence to patient values/beliefs/preferences when answering the following foreground question: Does sEMG biofeedback with a Mendelsohn Maneuver compared with only a Mendelsohn Maneuver in adults with dysphagia improve swallowing as measured by peak amplitude in submental muscles of swallowing?
Disclosure statements
Carly Pengelly, University of Nevada, Reno
Financial— No relevant financial relationship exists.
Nonfinancial— No relevant nonfinancial relationship exists.

Abbie Olszewski, University of Nevada, Reno
Financial— No relevant financial relationship exists.
Nonfinancial— No relevant nonfinancial relationship exists.
NSHA 2014
Poster Proposal

Author(s): Chani Lewis & Abbie Olszewski

Email: chani@medicine.nevada.edu, aolszewski@medicine.nevada.edu

Title: Effects of Speech Production Treatment (SPT) and Prompts for Restructuring Oral Muscular Phonetic Targets (PROMPT) on articulation skills in adults with acquired apraxia of speech (AOS).

Abstract

Introduction: Apraxia of speech (AOS) is a motor speech disorder resulting in the inability to sequence speech sounds and ultimately articulation impairments. Sound Production Treatment (SPT) and Prompts for Restructuring Oral Muscular Phonetic Targets (PROMPT) are specific therapy approaches designed to help individuals improve articulatory accuracy and sequencing of speech sounds.

Purpose: The purpose of this study was to determine if SPT yields better articulation skills (as measured by accuracy of speech sound production) than PROMPT in individuals with AOS.

Method: Search terms acquired apraxia of speech, Sound Production Treatment, PROMPT, apraxia of speech, and treatment were used in the Pub Med electronic database to locate external evidence. Ten research articles were appraised and evaluated for validity and reliability.

Conclusions: Results from strong external evidence, internal evidence related to clinical practice, and internal evidence related to patient were integrated to determine the best therapy approach for patients with acquired apraxia of speech.

Objectives:
1. Understand evidenced-based decision-making process (E³BP) in regards to providing speech language services to clients.
2. Understand how to locate and appraise external evidence in E³BP.
3. Understand how to integrate external evidence, internal evidence to clinical practice, and internal evidence to patient values/beliefs/preferences when answering the following foreground question:

Does Sound Production Treatment (SPT) yield better articulation skills (as measured by accuracy of speech sound production) for adults with acquired apraxia of speech as compared to Prompts for Restructuring Oral Muscular Phonetic Targets (PROMPT)?
**Disclosure statements**

Chani Lewis, University of Nevada, Reno

*Financial*— No relevant financial relationship exists.

*Nonfinancial*— No relevant nonfinancial relationship exists.

Abbie Olszewski, University of Nevada, Reno

*Financial*— No relevant financial relationship exists.

*Nonfinancial*— No relevant nonfinancial relationship exists.
NSHA 2014  
Poster Proposal

**Author(s):** Emily White & Abbie Olszewski

**Email:** Emilywhite@medicine.nevada.edu, aolszewski@medicine.nevada.edu

**Title:** Feeding Interventions Resulting in Best Growth Outcomes for Children with Cleft Lip and/or Palate

**Abstract**

**Introduction:** Infants with cleft lip and/or palate have difficulties with feeding. Early difficulties in receiving proper nutrition can result in failure to thrive. Several feeding techniques for feeding infants with cleft lip and/or palate exist.

**Purpose:** The purpose of this study was to determine if breastfeeding an infant with a cleft lip and/or palate will result in more rapid growth, compared to the use of non-breastfeeding techniques (i.e. rigid and flexible bottles, cups, spoons, pumps, syringe, modified feeding positions, teats, obturating plates/prostheses) for infants with clefts.

**Method:** Search terms *cleft palate, cleft lip, feeding,* and *breastfeeding* were used in the PubMed, Cochrane Collaboration, and Cleft Palate-Craniofacial Journal electronic databases to locate external evidence. Ten research articles were appraised and evaluated for validity and reliability.

**Conclusions:** Results from strong external evidence, internal evidence related to clinical practice, and internal evidence related to patient were integrated to determine the best therapy approach for feeding infants with cleft lip and/or palate.

**Objectives:**

1. Understand evidenced-based decision-making process (E³BP) in regards to providing speech language services to clients.
2. Understand how to locate and appraise external evidence in E³BP.
3. Understand how to integrate external evidence, internal evidence to clinical practice, and internal evidence to patient values/beliefs/preferences when answering the following foreground question: Does breastfeeding an infant with a cleft lip and/or palate result in more rapid growth, compared to the use of non-breastfeeding techniques (i.e. rigid and flexible bottles, cups, spoons, pumps, syringe, modified feeding positions, teats, obturating plates/prostheses) for infants with clefts?
Disclosure statements
Emily White, University of Nevada, Reno
Financial— No relevant financial relationship exists.
Nonfinancial— No relevant nonfinancial relationship exists.

Abbie Olszewski, University of Nevada, Reno
Financial— No relevant financial relationship exists.
Nonfinancial— No relevant nonfinancial relationship exists.
NSHA 2014
Poster Proposal

Author(s): Gina Denio & Abbie Olszewski

Email: ginad@medicine.nevada.edu, aolszewski@medicine.nevada.edu

Title: Effects of Speech-Sound Production Treatment (SPT) and Prompts for Restructuring Oral Muscular Phonetic Targets (PROMPT) for individuals with Apraxia of Speech

Abstract

Introduction: Adults with apraxia of speech struggle with the articulation of speech sounds. Two different treatment approaches that may help with this deficit are Speech-Sound Production Treatment (SPT) and Prompts for Restructuring Oral Muscular Phonetic Targets (PROMPT).

Purpose: The purpose of this study was to determine whether a program of Speech-Sound Production Treatment (SPT) lead to better improvement of speech intelligibility in the sounds /p/, /b/, /t/, and /d/ in comparison to Prompts for Restructuring Oral Muscular Phonetic Targets (PROMPT) therapy in adults with apraxia.

Method: Search terms acquired apraxia of speech, stroke, Speech-Sound Production and PROMPT were used in the PubMed and PsycINFO electronic databases to locate external evidence. Ten research articles were appraised and evaluated for validity and reliability.

Conclusions: Results from strong external evidence, internal evidence related to clinical practice, and internal evidence related to patient were integrated to determine the best therapy approach for patient with apraxia of speech.

Objectives:
1. Understand evidenced-based decision-making process (E³BP) in regards to providing speech language services to clients.
2. Understand how to locate and appraise external evidence in E³BP.
3. Understand how to integrate external evidence, internal evidence to clinical practice, and internal evidence to patient values/beliefs/preferences when answering the following foreground question: In adults with apraxia, does a program of Speech-Sound Production Treatment lead to better improvement of speech intelligibility in the sounds /p/, /b/, /t/, and /d/ in comparison to PROMPT Therapy?

Disclosure statements
Gina Denio, University of Nevada, Reno
Financial— No relevant financial relationship exists.
Nonfinancial— No relevant nonfinancial relationship exists.

Abbie Olszewski, University of Nevada, Reno
Financial— No relevant financial relationship exists.
Nonfinancial— No relevant nonfinancial relationship exists.
Author(s): Jennifer Peters & Abbie Olszewski

Email: jenniferpeters@medicine.nevada.edu, aolszewski@medicine.nevada.edu

Title: Does phonological awareness intervention or Fast Forward Software lead to higher reading fluency in children with dyslexia?

Abstract

Introduction: Children with dyslexia generally have deficits in phonological awareness. Phonological awareness intervention and a computerized language intervention have been used to improve phonological awareness skills, which will in turn, improve reading ability in children.

Purpose: The purpose of this study was to determine if phonological awareness intervention leads to a higher increase in reading fluency (measured in words read per minute) than Fast ForWord Language software in school-aged children with dyslexia.

Method: Search terms dyslexia, reading intervention, and school-aged children were used in the PubMed and PsycINFO electronic databases to locate external evidence. Ten research articles were appraised and evaluated for validity and reliability.

Conclusions: Results from strong external evidence, internal evidence related to clinical practice, and internal evidence related to patient were integrated to determine the best therapy approach for patients with dyslexia.

Objectives:
1. Understand evidenced-based decision-making process (E³BP) in regards to providing speech language services to clients.
2. Understand how to locate and appraise external evidence in E³BP.
3. Understand how to integrate external evidence, internal evidence to clinical practice, and internal evidence to patient values/beliefs/preferences when answering the following foreground question: In school-aged children with dyslexia, does phonological awareness intervention lead to a higher increase in reading fluency (measured in words read per minute) than Fast ForWord Language software?

Disclosure statements
Jennifer Peters, University of Nevada, Reno
Financial— No relevant financial relationship exists.
Nonfinancial— No relevant nonfinancial relationship exists.
Abbie Olszewski, University of Nevada, Reno

Financial— No relevant financial relationship exists.

Nonfinancial— No relevant nonfinancial relationship exists.
**NSHA 2014**  
**Poster Proposal**

**Author(s):** Jenny Lopez & Abbie Olszewski

**Email:** jclopez@medicine.nevada.edu & aolszewski@medicine.nevada.edu

**Title:** A Comparison of Milieu Therapy and Early Intensive Behavioral Intervention (EIBI) on Improvement of Adaptive Behavior Skills in Children with Autism Spectrum Disorder (ASD)

**Abstract**

**Introduction:** Autism spectrum disorder (ASD) is developmental disorder affecting many preschool children. Children with ASD have poor adaptive skill measured by the Vineland Adaptive Behavior Skills (VABS) scale. Milieu Therapy is a naturalistic therapy method used to improve adaptive behavioral skills. Early Intensive Behavioral Intervention (EIBI) is a therapy method that incorporates applied behavioral analysis (ABA) to improve adaptive behavior skills.

**Purpose:** The purpose of this study was to determine if Milieu Therapy improves the composite score of adaptive behavior skills more than EIBI therapy in preschool children with ASD.

**Method:** Search terms *milieu therapy, applied behavioral analysis, naturalistic therapy,* and *discrete trial,* were used in the PubMed, ERICSON, PsycINFO, and American Academy of Pediatrics electronic databases to locate external evidence. Ten research articles were appraised and evaluated for validity and reliability.

**Conclusions:** Results from strong external evidence, internal evidence related to clinical practice, and internal evidence related to patient were integrated to determine the best therapy approach for patient with ASD.

**Objectives:**

1. Understand evidenced-based decision-making process (E³BP) in regards to providing speech language services to clients.
2. Understand how to locate and appraise external evidence in E³BP.
3. Understand how to integrate external evidence, internal evidence to clinical practice, and internal evidence to patient values/beliefs/preferences when answering the following foreground question:

   In preschool children with autism spectrum disorder (ASD), does Milieu Therapy improve the composite score of adaptive skills more than Early Intensive Behavioral Intervention (EIBI)?
Disclosure statements
Jenny Lopez, University of Nevada, Reno
Financial — No relevant financial relationship exists.
Nonfinancial — No relevant nonfinancial relationship exists.

Abbie Olszewski, University of Nevada, Reno
Financial — No relevant financial relationship exists.
Nonfinancial — No relevant nonfinancial relationship exists.
Title: Effectiveness of Using Maximal and Multiple Oppositions in Children With Phonological Disorders

Abstract

Introduction: Phonological processes impact a child’s speech. Phonological processes make a child’s speech less intelligible to unfamiliar listeners. Children produce phonological error patterns when they have a phonological disorder. Once you increase a child’s phonological inventory it will increase their intelligibility. Phonological interventions result in increasing a child’s intelligibility.

Purpose: The purpose of this study was to determine the types of phonological interventions (maximal oppositions or multiple oppositions), which will result in fastest improvement in phonological processes, in preschool-aged children who have a phonological disorder.

Method: Search terms maximal oppositions, multiple oppositions, phonology, and speech sound disorders were used in the PubMed, Google Scholar, ERIC, and Academic Search Premier electronic databases to locate external evidence. Ten research articles were appraised and evaluated for validity and reliability.

Conclusions: Results from strong external evidence, internal evidence related to clinical practice, and internal evidence related to patient were integrated to determine the best therapy approach for patient with a phonological disorder.

Objectives:
1. Understand evidenced-based decision-making process (E³BP) in regards to providing speech language services to clients.
2. Understand how to locate and appraise external evidence in E³BP.
3. Understand how to integrate external evidence, internal evidence to clinical practice, and internal evidence to patient values/beliefs/preferences when answering the following foreground question: Which intervention, (I) maximal oppositions therapy approach or (C) multiple oppositions therapy approach, provided to (P) preschool-aged children with speech-sound phonological disorders results in the fastest improvement on (O) measures of phonological processes (ie: assimilation, gliding, cluster simplification, final consonant deletion, weak syllable deletion, deaffrication, stopping, vocalization, depalatalization, and fronting)?
Disclosure statements
Justine Filipovich, University of Nevada, Reno
Financial—No relevant financial relationship exists.
Nonfinancial—No relevant nonfinancial relationship exists.

Abbie Olszewski, University of Nevada, Reno
Financial—No relevant financial relationship exists.
Nonfinancial—No relevant nonfinancial relationship exists.
Title: Effects of Music Therapy Versus Spoken Word Therapy on Literacy Skills for Children

Abstract

Introduction: The detection and manipulation of sounds in language is called phonological awareness. There are children who have disorders in phonological awareness, which causes problems in their literacy skills. Language and music share a processing mechanism in learning sounds called pitch processing. Children with Phonological Awareness disorders normally receive therapy in spoken words. Music therapy can help aid a child's phonological awareness and reading abilities.

Purpose: The purpose of this study is to determine whether the use of music therapy for school-aged children with phonological disorders can improve reading skills (as measured by phonological awareness) when compared to spoken word therapy.

Method: Search terms music therapy, phonological awareness, reading, literacy, and children were used in the electronic PubMed Health, Web of Science, and Education Resources Information Center databases to locate external evidence. Ten research articles were appraised and evaluated for validity and reliability.

Conclusions: Results from strong external evidence, internal evidence related to clinical practice, and internal evidence related to patients was integrated to determine the best therapy approach for patients with problems in phonological awareness.

Objectives:
1. Understand evidenced-based decision-making process (E3BP) in regards to providing speech language services to clients.
2. Understand how to locate and appraise external evidence in E3BP.
3. Understand how to integrate external evidence, internal evidence to clinical practice, and internal evidence to patient values/beliefs/preferences when answering the following foreground question: Can the use of music therapy for school-aged children with phonological disorders lead to significantly greater phonemic awareness when compared to spoken word therapy?
Disclosure statements
Katherine Rodriguez, University of Nevada, Reno
Financial— No relevant financial relationship exists.
Nonfinancial— No relevant nonfinancial relationship exists.

Abbie Olszewski, University of Nevada, Reno
Financial— No relevant financial relationship exists.
Nonfinancial— No relevant nonfinancial relationship exists.
Author(s): Katie Dyer & Abbie Olszewski

Email: katherinedyer@medicine.nevada.edu, aolszewski@medicine.nevada.edu

Title: Comparing Discrete Trial Training and Milieu Teaching in Children with Autism

Abstract

Introduction: Children with autism often display expressive language deficits. Expressive language can be measured through the use of spontaneous speech. There are behavioral and naturalistic approaches used to increase expressive language in children with autism. One approach to increase expressive language stems from Applied Behavior Analysis (ABA) and is called discrete trial training. The other approach is more naturalistic, called milieu teaching.

Purpose: The purpose of this study was to determine if milieu teaching (I) is more effective at increasing expressive language (O) as measured by increased spontaneous speech when compared to Applied Behavioral Analysis discrete trial training (C) in children with autism (P).

Method: Search terms “milieu teaching, autism, milieu, language, discrete trial, discrete trial training, and social communication” were used in the ERIC, PsychINFO, and Academic Search Premier electronic databases to locate external evidence. References from within these articles were also utilized. Eight research articles were appraised and evaluated for validity and reliability.

Conclusions: Results from strong external evidence, internal evidence related to clinical practice, and internal evidence related to the patient were integrated to determine the best therapy approach for a patient with autism.

Objectives:
1. Understand evidenced-based decision-making process (E\(^3\)BP) in regards to providing speech language services to clients.
2. Understand how to locate and appraise external evidence in E\(^3\)BP.
3. Understand how to integrate external evidence, internal evidence to clinical practice, and internal evidence to patient values/beliefs/preferences when answering the following foreground question: The purpose of this study was to determine if milieu teaching is more effective at increasing expressive language as measured by increased spontaneous speech when compared to Applied Behavioral Analysis discrete trial training in children with autism.
Disclosure statements
Katie Dyer, University of Nevada, Reno
Financial— No relevant financial relationship exists.
Nonfinancial— No relevant nonfinancial relationship exists.

Abbie Olszewski, University of Nevada, Reno
Financial— No relevant financial relationship exists.
Nonfinancial— No relevant nonfinancial relationship exists.
NSHA 2014
Poster Proposal

Author(s): Kayla Faiman & Abbie Olszewski

Email: kfaiman@medicine.nevada.edu, aolszewski@medicine.nevada.edu

Title: A Comparison of Maximal Opposition and Minimal Pairs for Children with Phonological Disorders

Abstract

Introduction: Many children present with phonological disorders which are characterized by speech sound errors that are rule based. Certain speech sound errors don’t permit for certain phonemes to be produced resulting in phonetic inventory constraints. A phonetic inventory consists of the speech sounds in a child’s system and can increase through the use of phonological therapy techniques such as minimal pairs and maximal opposition.

Purpose: The purpose of this study was to determine if maximal opposition leads to significantly greater system wide change by measures of phonetic inventories than minimal pairs in children with phonological disorders?

Method: Search terms phonology, treatment, maximal opposition, minimal pairs, speech therapy, and maximal opposition were used in the Directory of Open Access Journals, and PubMed electronic databases to locate external evidence. Ten research articles were appraised and evaluated for validity and reliability.

Conclusions: Results from strong external evidence, internal evidence related to clinical practice, and internal evidence related to patient were integrated to determine the best therapy approach for patients with phonological disorders.

Objectives:
1. Understand evidenced-based decision-making process (E³BP) in regards to providing speech language services to clients.
2. Understand how to locate and appraise external evidence in E³BP.
3. Understand how to integrate external evidence, internal evidence to clinical practice, and internal evidence to patient values/beliefs/preferences when answering the following foreground question: In children with phonological disorders, does maximal opposition lead to significantly greater system wide change by measures of phonetic inventories than minimal pairs?
Disclosure statements
Kayla Faiman, University of Nevada, Reno
Financial— No relevant financial relationship exists.
Nonfinancial— No relevant nonfinancial relationship exists.

Abbie Olszewski, University of Nevada, Reno
Financial— No relevant financial relationship exists.
Nonfinancial— No relevant nonfinancial relationship exists.
NSHA 2014
Poster Proposal

Author(s): Kimberly Branich & Abbie Olszewski

Email: kbranich@medicine.nevada.edu, aolszewski@medicine.nevada.edu

Title: A Review of the Effectiveness of Therapeutic Intervention Incorporating Animals

Abstract

Introduction: Children with autism show little eye contact and little communicative intents. Animals are thought to have a positive impact on humans and bring comfort to them. Children with autism may respond positively to equine therapy and other therapies involving animals. It is possible that children with autism may interact with animals differently than with traditional therapy with humans.

Purpose: The purpose of this study was to determine if the measures of oral expression, social skills, and positive behaviors of children with autism increase when animals are present and incorporated in therapy compared to when therapy is provided without animals present.

Method: The following key words were used: animal assisted therapy, animal assisted intervention, children, and autism in the electronic data bases PubMed, Web of Science, and Academic Search Premier to locate external evidence. Ten research articles were appraised with a 13-point appraisal form and evaluated for validity and importance.

Conclusions: Results from strong external evidence, internal evidence related to clinical practice, and internal evidence related to patient were integrated to determine the best therapy approach for children with autism.

Objectives:
1. Understand evidenced-based decision-making process (E³BP) in regards to providing speech language services to clients.
2. Understand how to locate and appraise external evidence in E³BP.
3. Understand how to integrate external evidence, internal evidence to clinical practice, and internal evidence to patient values/beliefs/preferences when answering the following foreground question:
   Do the measures of oral expression, social skills, and positive behaviors of children with autism increase when animals are present and incorporated in therapy compared to when therapy is provided without animals present?
Disclosure statements
Kimberly Branich, University of Nevada, Reno
Financial— No relevant financial relationship exists.
Nonfinancial— No relevant nonfinancial relationship exists.

Abbie Olszewski, University of Nevada, Reno
Financial— No relevant financial relationship exists.
Nonfinancial— No relevant nonfinancial relationship exists.
Title: The effects of three phonological therapy treatments on phonemic awareness for children with phonological disorders

Abstract

Introduction: Phonemic awareness is the ability for a person to organize and distinguish phonemic sounds from one another. However, it is difficult to know exactly which intervention to use when beginning therapy for a preschool age child with a phonological disorder. Multiple Oppositions, Maximal Oppositions and Minimal Pair therapy approach are all interventions used to increase phonemic awareness for phonological disorders in preschool age children.

Purpose: The purpose of this study was to determine whether Multiple Oppositions therapy, Maximal Oppositions or Minimal Pair therapy approach lead to greater gains in phonemic awareness of preschool age children with phonological disorders.

Method: Search terms phonological oppositions, multiple oppositions, minimal pairs, and phonological disorders and multiple oppositions were used in the Pubmed, Directory of Open Access Journals and ASHA Compendium electronic databases to locate external evidence. Ten research articles were appraised and evaluated for validity and reliability.

Conclusions: Results from strong external evidence, internal evidence related to clinical practice, and internal evidence related to patient were integrated to determine the best therapy approach for patient with a phonological disorder.

Objectives:
1. Understand evidenced-based decision-making process (E3BP) in regards to providing speech language services to clients.
2. Understand how to locate and appraise external evidence in E3BP.
3. Understand how to integrate external evidence, internal evidence to clinical practice, and internal evidence to patient values/beliefs/preferences when answering the following foreground question: In preschool age children with phonological disorders, does Multiple Opposition therapy approach lead to significantly greater gains in phonemic awareness than Minimal Pair therapy or Maximal Opposition therapy?
Disclosure statements
Kylie Oroszi, University of Nevada, Reno
Financial— No relevant financial relationship exists.
Nonfinancial— No relevant nonfinancial relationship exists.

Abbie Olszewski, University of Nevada, Reno
Financial— No relevant financial relationship exists.
Nonfinancial— No relevant nonfinancial relationship exists.
Title: The effect of Speech Language Therapy on Right Hemisphere Damage

Abstract

Introduction: Right Hemisphere Strokes affect many aspects of communication including divided attention. Divided attention is measured by the ability to attend to two separate stimuli. Divided attention can affect an individual’s ability to effectively communicate. Speech and Language Therapy can improve deficits in divided attention.

Purpose: The purpose of this study was to determine if implementing direct attention treatment significantly improves divided attention in individuals who have suffered right hemisphere strokes as compared to those individuals who are taught compensatory strategies?

Method: Search terms Right Hemisphere Stroke, Cognitive Impairment, and Traumatic brain injuries were used in the PubMed and ERIC electronic databases to locate external evidence. Ten research articles were appraised and evaluated for validity and reliability. Due to the minimal external evidence of Patients with Right Hemisphere Damage this body of research was combined with those of Traumatic brain injuries.

Conclusions: Results from strong external evidence, internal evidence related to clinical practice, and internal evidence related to patient were integrated to determine the best therapy approach for patient with Right Hemisphere Damage.

Objectives:
1. Understand evidenced-based decision-making process (E3BP) in regards to providing speech language services to clients.
2. Understand how to locate and appraise external evidence in E3BP.
3. Understand how to integrate external evidence, internal evidence to clinical practice, and internal evidence to patient values/beliefs/preferences when answering the following foreground question:

Disclosure statements
Lisamarie Wynne, University of Nevada, Reno
Financial— No relevant financial relationship exists.
Nonfinancial— No relevant nonfinancial relationship exists.

Abbie Olszewski, University of Nevada, Reno

Financial— No relevant financial relationship exists.

Nonfinancial— No relevant nonfinancial relationship exists.
Abstract

Introduction: As the population of non-English speaking families increases in the United States, so does the population of bilingual children identified with language disorders/delays. In the field of education, bilingual education and monolingual education have been used to improve overall educational performance. These same approaches have also been used in the field of speech language pathology to increase receptive and expressive language skills in bilingual children with identified language disorders.

Purpose: The purpose of this study was to determine if bilingual language therapy yields greater change versus monolingual language therapy in the child’s second language as measures of expressive language (expressive vocabulary, MLU, pronoun use) in school-age bilingual children with language disorders.

Method: Search terms bilingual, language impairment, therapy, multilingual, systematic review, meta-analysis, and dual-language learner were used in the Pubmed.org, Google Scholar, asha.org, and ScienceDirect electronic databases to locate external evidence. Ten research articles were appraised and evaluated for validity and reliability.

Conclusions: Results from strong external evidence, internal evidence related to clinical practice, and internal evidence related to patient were integrated to determine the best therapy approach for bilingual patients with an identified language disorder.

Objectives:

1. Understand evidenced-based decision-making process (E³BP) in regards to providing speech language services to clients.
2. Understand how to locate and appraise external evidence in E³BP.
3. Understand how to integrate external evidence, internal evidence to clinical practice, and internal evidence to patient values/beliefs/preferences when answering the following foreground question:

In school-age bilingual children with language disorders, does bilingual language therapy yield greater change versus monolingual language therapy
in the child’s second language on measures of expressive language (expressive vocabulary, MLU, pronoun use)?

Disclosure statements
Lynda McIntosh, University of Nevada, Reno
Financial— No relevant financial relationship exists.
Nonfinancial— No relevant nonfinancial relationship exists.

Abbie Olszewski, University of Nevada, Reno
Financial— No relevant financial relationship exists.
Nonfinancial— No relevant nonfinancial relationship exists.
Title: A Comparison of PROMPT and Minimal Pair intervention in Down syndrome

Abstract

1. **Introduction:** To be accurately understood, speech sounds must be appropriately and developmentally acquired. Individuals with Down syndrome experience a delay when acquiring speech sounds. Speech sound delays can also lead to poor intelligibility. Some treatments attempt to increase intelligibility by working on articulation. One therapy approach is called minimal pair therapy. Another treatment is prompts for restructuring oral muscular phonetic targets (PROMPT) therapy, which attempts to increase intelligibility by physically manipulating the body to articulate the correct sound.

**Purpose:** The purpose of this study is to examine the effects of articulation intervention on intelligibility in individuals with Down syndrome.

**Method:** Search terms Down syndrome, intelligibility, Minimal Pair Therapy, articulation, PROMPT, speech sound, and speech were used in PubMed and EBSCO electronic databases to locate external evidence. Ten research articles were appraised and evaluated for validity and reliability.

**Conclusions:** Results from strong external evidence, internal evidence related to clinical practice, and internal evidence related to patient were integrated to determine the best therapy approach for patient with Down syndrome.
Objectives:
1. Understand evidenced-based decision-making process (E\textsuperscript{3}BP) in regards to providing speech language services to clients.
2. Understand how to locate and appraise external evidence in E\textsuperscript{3}BP.
3. Understand how to integrate external evidence, internal evidence to clinical practice, and internal evidence to patient values/beliefs/preferences when answering the following foreground question:

Does Prompts for restructuring oral muscular phonetic targets (PROMPT) intervention result in significantly increased intelligibility, as measured by increased articulation skills, for children with Down syndrome as compared with minimal pair intervention?

Disclosure statements
Lynzie Thorpe, University of Nevada, Reno
Financial— No relevant financial relationship exists.
Nonfinancial— No relevant nonfinancial relationship exists.

Abbie Olszewski, University of Nevada, Reno
Financial— No relevant financial relationship exists.
Nonfinancial— No relevant nonfinancial relationship exists.
Title: The Effectiveness of Intervention Approaches on Increasing Joint Attention in Toddlers with Autism Spectrum Disorders (ASD)

Abstract

Introduction: Children with Autism spectrum disorder have difficulty with joint attention. One approach used to improve joint attention is a family-centered approach, which requires the involvement of the client’s family in the service delivery model. Another approach used to improve joint attention is a clinician-directed, enhanced milieu approach in which the clinician controls all aspects of therapy in order to hone in on specific targets for intervention.

Purpose: The purpose of this study was to determine if a clinician-directed, enhanced milieu approach to intervention will be more effective in increasing instances of joint attention in toddlers with Autism spectrum disorders than a family-centered approach to intervention.

Method: Search terms parent training, interventions, ASD, and enhanced milieu were used in the PubMed and ASHA electronic databases to locate external evidence. Ten research articles were appraised and evaluated for validity and reliability.

Conclusions: Results from strong external evidence, internal evidence related to clinical practice, and internal evidence related to patient were integrated to determine the best therapy approach for a patient with Autism spectrum disorder.

Objectives:
1. Understand evidenced-based decision-making process (E3BP) in regards to providing speech language services to clients.
2. Understand how to locate and appraise external evidence in E3BP.
3. Understand how to integrate external evidence, internal evidence to clinical practice, and internal evidence to patient values/beliefs/preferences when answering the following foreground question: Will a clinician-directed, enhanced milieu approach to intervention be more effective in increasing joint attention in toddlers with Autism spectrum disorder than a family-centered approach?
Madison Stonestreet, University of Nevada, Reno
Financial—No relevant financial relationship exists.
Nonfinancial—No relevant nonfinancial relationship exists.

Abbie Olszewski, University of Nevada, Reno
Financial—No relevant financial relationship exists.
Nonfinancial—No relevant nonfinancial relationship exists.
NSHA 2014 Poster Proposal

Author(s): Melanie Carlson & Abbie Olszewski
Email: mcarlson@medicine.nevada.edu, aolszewski@medicine.nevada.edu

Title: A comparison of therapy approaches: multiple oppositions and maximal oppositions in phonological intervention

Abstract

Introduction: Children with moderate to severe phonological impairments typically present with multiple phonemic collapses. Multiple oppositions is a treatment approach in phonological intervention which contrasts several target sounds to a comparison sound. Maximal oppositions is an intervention approach which targets several errored sounds within the same phoneme collapse and contrasts them to the child’s production. Research shows that children with multiple phonemic collapses benefit from both multiple and maximal oppositions.

Purpose: The purpose of this study was to determine which approach to intervention, multiple oppositions or maximal oppositions, results in faster acquisition of errored sounds in preschool aged children with moderate to severe phonological impairments.

Method: Search terms multiple oppositions, maximal oppositions, phonology, and intervention were used in the PsycInfo, ERIC, and PubMed electronic databases to locate external evidence. Ten research articles were appraised and evaluated for validity and reliability.

Conclusions: Results from strong external evidence, internal evidence related to clinical practice, and internal evidence related to patient were integrated to determine the best therapy approach for patient with moderate to severe phonological impairments.

Objectives:
1. Understanding evidence-based decision-making process (EBP) in regards to providing speech language services to clients.
2. Understand how to locate and appraise external evidence in EBP.
3. Understand how to integrate external evidence, internal evidence to clinical practice, and internal evidence to patient values/beliefs/preferences when answering the following foreground question:
Which approach to intervention, multiple oppositions or maximal oppositions, results in faster acquisition of errored sounds in preschool aged children with moderate to severe phonological impairments?

Disclosure statement:
Melanie Carlson, University of Nevada, Reno
Financial—No relevant financial relationship exists.
Nonfinancial—No relevant nonfinancial relationship exists

Abbie Olszewski, University of Nevada, Reno
Financial—No relevant financial relationship exists.
Nonfinancial— No relevant nonfinancial relationship exists.
Title: Effects of Verb Network Strengthening Treatment (VNeST) and Melodic Intonation Therapy (MIT) on conversational speech in individuals with Aphasia

Abstract

Introduction: The ability to participate in conversational speech originates in the left hemisphere at Broca’s area. Strokes that damage this area cause Aphasia, which prevents access to this language pathway. Verb Network Strengthening Treatment (VNeST) and Melodic Intonation Therapy (MIT) are both treatments which aim to increase conversational speech production for those with non-fluent Aphasia.

Purpose: The purpose of this study was to determine if Melodic Intonation Therapy (MIT) results in significantly improved conversational speech, as measured by words per minute, for people with Aphasia as compared with Verb Network Strengthening Treatment (VNeST).

Method: Search terms Aphasia, Melodic Intonation Therapy, Conversational Speech, and Verb Network Strengthening Treatment were used in the PubMed electronic database to locate external evidence. Ten research articles were appraised and evaluated for validity and reliability.

Conclusions: Results from strong external evidence, internal evidence related to clinical practice, and internal evidence related to patient were integrated to determine the best therapy approach for individuals with Aphasia.

Objectives:
1. Understand evidenced-based decision-making process (E³BP) in regards to providing speech language services to clients.
2. Understand how to locate and appraise external evidence in E³BP.
3. Understand how to integrate external evidence, internal evidence to clinical practice, and internal evidence to patient values/beliefs/preferences when answering the following foreground question: Does Melodic Intonation Therapy (MIT) result in significantly improved conversational speech as measured by words per minute for people with Aphasia as compared with Verb Network Strengthening Treatment (VNeST)?
Disclosure statements
Samantha Hundemer, University of Nevada, Reno
Financial— No relevant financial relationship exists.
Nonfinancial— No relevant nonfinancial relationship exists.

Abbie Olszewski, University of Nevada, Reno
Financial— No relevant financial relationship exists.
Nonfinancial— No relevant nonfinancial relationship exists.
Author(s): Selah Sullivan & Abbie Olszewski

Email: selahs@medicine.nevada.edu, aolszewski@medicine.nevada.edu

Title: A review of therapy techniques to feminize the voice of male-to-female transgender individuals.

Abstract

Introduction: One of the greatest obstacles that male-to-female (MTF) transgender individuals face in being perceived as female is their voice. The voice is one of the few changes that transgender MTF cannot change with surgery or hormones. The best option to achieve the perception of a more feminine voice is through receiving voice therapy.

Purpose: The purpose of this study was to determine whether raising fundamental frequency in combination with other speech strategies results in the perception of a more feminine voice in male-to-female transgender individuals than when fundamental frequency is the only strategy utilized.

Method: Search terms transgender voice therapy, transgender speech, and transgender feminine were used in the University of Nevada, Reno Library and the science direct electronic databases to locate external evidence. Seven research articles were appraised and evaluated for validity and reliability.

Conclusions: Results from strong external evidence, internal evidence related to clinical practice, and internal evidence related to patient were integrated to determine the best therapy approach for transgender male-to-female patients.

Objectives:
1. Understand evidenced-based decision-making process (E³BP) in regards to providing speech language services to clients.
2. Understand how to locate and appraise external evidence in E³BP.
3. Understand how to integrate external evidence, internal evidence to clinical practice, and internal evidence to patient values/beliefs/preferences when answering the following foreground question:

   In transgender male-to-female individuals, does raising fundamental frequency in combination with other voice therapy strategies result in more feminine voice characteristics, as measured by perceptual judgment, than raising fundamental frequency alone?
Disclosure statements

Selah Sullivan, University of Nevada, Reno
Financial— No relevant financial relationship exists.
Nonfinancial— No relevant nonfinancial relationship exists.

Abbie Olszewski, University of Nevada, Reno
Financial— No relevant financial relationship exists.
Nonfinancial— No relevant nonfinancial relationship exists.
Abstract

Introduction: Individuals with aphasia will likely experience anomia, or word finding issues. Many treatments are used to increase word finding abilities for people with aphasia. Finding a treatment that will generalize trained targets to other untrained stimuli is desirable. Verb Network Strengthening Treatment and Semantic Feature Analysis are interventions used to address anomia.

Purpose: The purpose of this study was to identify if Verb Network Strengthening Treatment (VNeST) results in more generalization to untrained words than those receiving Semantic Feature Analysis (SFA) therapy in persons with anomia resulting from aphasia.

Method: Search terms Semantic Feature Analysis, Anomia, Aphasia, and Verb Network Strengthening Treatment were used in the Pubmed electronic database to locate external evidence. Using the Critical appraisal of treatment evidence (CATE) form, ten articles were used to identify results of VNeST and SFA to determine the validity and reliability of which treatment would be more effective in generalization for individuals with anomia.

Conclusions: Results from strong external evidence, internal evidence related to clinical practice, and internal evidence related to patient were integrated to determine the best therapy approach for a person with anomia resulting from aphasia.

Objectives:
1. Understand evidenced-based decision-making process (E³BP) in regards to providing speech language services to clients.
2. Understand how to locate and appraise external evidence in E³BP.
3. Understand how to integrate external evidence, internal evidence to clinical practice, and internal evidence to patient values/beliefs/preferences when answering the following foreground question: In persons with anomia resulting from aphasia, does Verb Network Strengthening Treatment (VNeST) result in more generalization to untrained words than those receiving Semantic Feature Analysis (SFA) therapy?

Disclosure statements
Stephanie King, University of Nevada, Reno
Financial— No relevant financial relationship exists.
Nonfinancial— No relevant nonfinancial relationship exists.

Abbie Olszewski, University of Nevada, Reno
Financial— No relevant financial relationship exists.
Nonfinancial— No relevant nonfinancial relationship exists.
NSHA 2014
Poster Proposal

Author(s): Whitney Marineau & Abbie Olszewski

Email: wmarineau@medicine.nevada.edu, aolszewski@medicine.nevada.edu

Title: Articulatory versus rhythm therapy in the treatment of apraxia of speech

Abstract

Introduction: Apraxia affects 80% of patients with Broca’s aphasia (Bose et. al, 2001). Treatment efforts should focus on improvement of motor planning ability in addition to linguistic abilities. Melodic Intonation Therapy (MIT) works to activate the right hemisphere through the use of rate and rhythm techniques. Current research indicates that individuals with left hemisphere trauma can use rate/rhythm or articulatory/kinematic techniques in treatment to activate the undamaged right hemisphere of the brain in order to re-learn language.

Purpose: The purpose of this study is to determine whether Melodic Intonation Therapy (MIT) or Sound Production Treatment (SPT) has a more significant impact on the intelligibility of patients with apraxia of speech (AoS).

Method: A collection of search terms were outlined in order to systematically search the literature. Search terms <Melodic Intonation Therapy>, <Sound Production Treatment>, <aphasia treatment> <apraxia of speech treatment>, <articulatory kinematic>, and <rate rhythm> were used in the Web of Science and Academic Search Premier electronic databases to locate external evidence. Ten research articles were appraised and evaluated for validity and reliability.

Conclusions: Results from strong external evidence, internal evidence related to clinical practice, and internal evidence related to patient were integrated to determine the best therapy approach for a patient with AoS.

Objectives:

1. Understand evidenced-based decision-making process (E3BP) in regards to providing speech language services to clients.
2. Understand how to locate and appraise external evidence in E3BP.
3. Understand how to integrate external evidence, internal evidence to clinical practice, and internal evidence to patient values/beliefs/preferences when answering the following foreground question: Is there a difference in gains in intelligibility as measured by words understood by a novel listener in individuals with apraxia who undergo Melodic Intonation Therapy (MIT) than those who undergo a program of Sound Production Treatment combined with Melodic Intonation Therapy?
Disclosure statements

Whitney Marineau, University of Nevada, Reno
Financial—No relevant financial relationship exists.
Nonfinancial—No relevant nonfinancial relationship exists.

Abbie Olszewski, University of Nevada, Reno
Financial—No relevant financial relationship exists.
Nonfinancial—No relevant nonfinancial relationship exists.