

MCNAIR SCHOLARS PROGRAM

## Abstract

The purpose of this study is to justify edutainment as a possible and viable source among Speech Language Pathologist's (SLPs) treatment options. Educational television is the source analyzed for its beneficial factors towards children's development through teaching the youth academic skills, social communication, expressive and receptive skills, critical thinking and prediction skills, and fast mapping with motivational factors that engage the children in developing these skills. The skills are applied to use of educational activities, apps, websites, or games related to educational programs on various media devices. This survey research is constructed by the responses of SLP professionals on topics pertaining to the overall beliefs or uses of edutainment on child development. Responses from 16 SLPs throughout the state of Texas

were received. Majority of the responses retrieved on the likert scale came back as *Agree* that cover the topics of coviewing, interaction, and the media. There was partial response to the peer reviewed question of educational programs, so that data is unreliable. The open-ended question received mainly beneficial information in relation to edutainment. For this study, Speech Language Pathologist believe the use of edutainment can be helpful among the child audience. If there were more participants, it is possible this study would retrieve nearly the same results, but there is a chance the data could've been very different.

### Introduction

The purpose of this study is to determine whether Speech Language Pathologists (SLPs) professional opinions go in favor of making edutainment a learning experience for speech therapy. Edutainment is the use of entertainment and education at once. Educational programs can influence child academic skills, social skills, receptive and expressive skills, fast mapping skills, critical thinking and prediction skills etc.

Motivating factors include fun activities, pictures, action, surprise, animation, repetition, songs, catchy phrases, engaging characters and stories

Not only are these motivational factors, but for the survey question on the likert scale (*strongly disagree to strongly* disagree), "Children are learning from shows when they can make a connection from their life to the characters," a child's must be intrigued by these factors to enable their will to learn.

## Literature Review

#### **Attention Span**

- Children can only focus for a limited time: ranges 15-30 minutes.
- "A child's attention span ranges among 15-30 minutes giving it enough time for absorbing an educational program's episode of the same time limit," is a question on the likert scale because most studies with videos or children episodes mention their times which were within the range.

#### **Coviewing & Interaction**

- **Coviewing-** act of a parent and child watching a show together
- "Educational television has an interactive component." is strongly disagree to strongly agree question on the survey because the information is derived from the use of coviewing, and media related activities.

# **Educational Television Meets Learning Chelsi Pena** Mentor: Stephen D. Oller PhD **Texas A&M University- Kingsville**

- **Dialogic Questioning-** pause, ask questions, and encourage children to tell parts of the story
- "Children can learn through co-viewing television with parents by answering questions during and after viewing." Ultimately, a study to support this likert scale question on the survey states that dialogic questioning has the best effect on children by maintaining interaction.
- **Dialogic Actress** shows the videos with dialogic questioning by an on-screen actress embedded in them
- *Directed Attention-* pause and comment but do not ask questions

#### Media Related Activities

- **Prediction and Critical thinking:** Dora the Explorer, *Ruff-Ruff, Tweet and Dave* can build on critical thinking and prediction from being presented in hypothetical situations. Ex. If the dog buries the bone in the garden, will he: a) make birds angry, b) turn purple, or c) damage the flowers?
- *Learning letter and sounds:* songs, chants, action, rhymes, and fingerplays for integrating wordplay. Specifically, these activities relate to the use of phonological awareness that were a focus of *Sesame Street* and *Between Lions*, which is why the likert scale question, "Segment videos from Between the Lions pertaining to the subjects of Phonemic Awareness, Phonics, Fluency, Vocabulary, Text Comprehension and more can be teaching children in Kindergarten, 1st grade, and Preschool levels, " was created.
- **Addressing print concept:** Ex. Super Why! shows a princess waving her wand from the left to right of the screen to show the direction on how to spell (Cahill & Bigheart, 2016). It can be applied to reading activities to teach children what order information should be read in or is presented.
- **Addressing vocabulary:** Ex. "Blue [illustrating] the clue: "glide." In the segment, Blue's paw moves back and forth. The character Joey states, "Our third clue is sliding back and forth" pairing a contextual definition with the action. He then states the word, "gliding."
- These are a few examples to support the survey question within the likert scale (strongly disagree-strongly disagree), "Educational television is a branch of media." and "Media Related activities motivate children to learn.

#### Media Devices & Interaction

- Devices: include television, laptops, computers, tablets, phones, and any sort of mobile device
- Apps, websites, videos, or games can be used as an educational tool. "Television, computers, and mobile devices all entail the use of educational tools from screen-viewing," on the survey's likert scale comes from the ideas that there is a correlation of the mobile devices and the abilities electronics perform for educational purposes.
- Infants can learn sign language from video
- A study supports this question, "Infants can learn sign language within 2 weeks of watching sign videos," that's on the likert scale.
- Solo apps/games can be turned into an interactive activity Ex. Kids learn to take turns, repeating, switching roles, direct other on how to play with an app, giving directions and expanding language







Pretests and post-tests determine gains and results Results from the pretest and post test didn't show significant differences so the likert survey question created is, "Cartoons and storybooks bring out the same fast mapping skills in bilingual children."

16 experienced Speech Language Pathologists (SLPs) throughout the state of Texas voluntarily responded to our online survey.

gathered from Healthgrades.com. Each SLP was called and if so, SLPs provided emails to be sent the online survey.

SLP participants' office numbers and occupation company were individually to determine whether they'd be willing to participate,

In order to incorporate best practices into therapy and education using media devices, it is important to assess what practitioners like SLPs currently know about best practices using edutainment.

• Mobile devices are for television screen time on the go

• With there being evidence that educational programs are frequently viewed on the television at home or taken elsewhere because of mobile devices, this led to the creation of this other likert scale question, "The use of mobile devices is mainly to display television programs."

#### **Encouraged Reading**

Two long aired shows: *Sesame Street* and *Between the Lions* with literacy as a main theme.

- Examples:
  - Sesame Street Ex.: The letter of the day was Y, describing the letter Y through a song named "Don't Know Why."
  - Between the Lions Ex.: compared the use of similar words such as "walk," "strut," and "stride.

• Literacy skills, learning to understand a printed word, and how letters create a word from the examples above influenced the survey question, "I believe children are reading more because of exposure to educational television, "on the likert scale.

### Fast Mapping

Fast Mapping- "The initial stage of word learning, in which lexical and semantic representations of new words are learned and mapped after one to two exposures to the words."

- Stimuli: Cartoon and storybook created through iMovie over clips of *Road Runner and Coyote*

### Methods

#### **Participants:**

#### Procedure

#### Materials

SLPs must be experienced and currently practicing

• Therefore the purpose of this project is to compare SLP opinions regarding edutainment to current literature. The long-term goal of a project like this is create an education resource for SLPs who are wanting to make use of edutainment.

From the 16 responses to the 13 survey questions on the likert scale, 6 questions had mostly *Agree*, 4 mostly *Disagree*, and 3 with mostly *Neutral*. The check box question had only 5 responses which doesn't give an accurate representation of peer reviewed shows known to SLPs. The open-ended question was optional and retrieved mainly positive and beneficial feedback on edutainment involvement in therapy. There are a few that are against the

edutainment idea, but majority are in favor. The goal isn't to make educational programs the sole use for learning, but to ensure it supports and teaches children in a fun experience. With there being many treatments in existence of therapy, a new treatment involving television can be refreshing.

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### Results

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