

ABSTRACT

Purpose: To assess parental acceptance of voice control (VC) and to investigate variations in acceptability based on child factors (age, medical history, cooperation level, gender), provider characteristics (gender and tone), and ethnicity within two distinct Spanish speaking populations. **Methods:** Parents of children who attended the UTHealth School of Dentistry Pediatric Dentistry Post Graduate Clinic in Houston, Texas and CES University in Medellin, Colombia completed a survey comprising five distinct videos illustrating the utilization of VC by various healthcare providers. Data was analyzed using Mann-Whitney *U* test, with p-values less than 0.05 considered significant. **Results:** The VC Assessment was completed by 54 parents (34 Colombians and 20 Texans). Mean overall acceptance of each vignette was greater than 50%, with softer VC utilization scored more acceptable (79 and 91) compared to stern VC (73 and 61). Comparative analysis revealed no statistically significant difference in parental acceptance of VC between the two study groups within each vignette ($P>.05$). There was a nonsignificant increase in VC acceptance after providing explanations for each vignette ($P>.05$). Comparison of responses of individual vignettes showed differences in acceptance of type of VC (soft versus stern) between both the Colombian ($P=.03$) and Texan ($P=.02$) subgroups. Acceptance based on child/provider characteristics found no differences ($P>.05$). **Conclusion:** Colombian and Texan parents showed similar acceptance levels of VC, with greater acceptability scores when gentle tones of VC were utilized. No significant differences were observed between the two groups across various scenarios, and explanations about VC use did not significantly change parental attitudes.

BACKGROUND

- In pediatric dentistry when choosing a technique to manage the patient, in addition to thinking about what would work best for our patient, we must also consider society perception due to legal concerns, parental acceptance, and cultural differences.
- Voice control, is a technique commonly employed by parents and pediatric dentists. Despite its widespread use, there is a noticeable lack of significant research on the psychological impact and effectiveness of voice control.
- VC is seen as a versatile tool within a spectrum of behaviors and has been traditionally associated with negative punishment, but it is also recognized as a daily tool for distraction, commonly used to ease patients through uncomfortable procedures in various ways.
- This research attempts to rectify the gap in literature by focusing solely on voice control, aiming to mitigate biases that may arise when it is overshadowed by more conventional techniques such as tell-show-do. Additionally, there is little literature concerning the influence of provider and patient gender on the acceptance of this technique. Moreover, this study seeks to address questions surrounding the acceptability of voice control across diverse cultural contexts.

METHODS

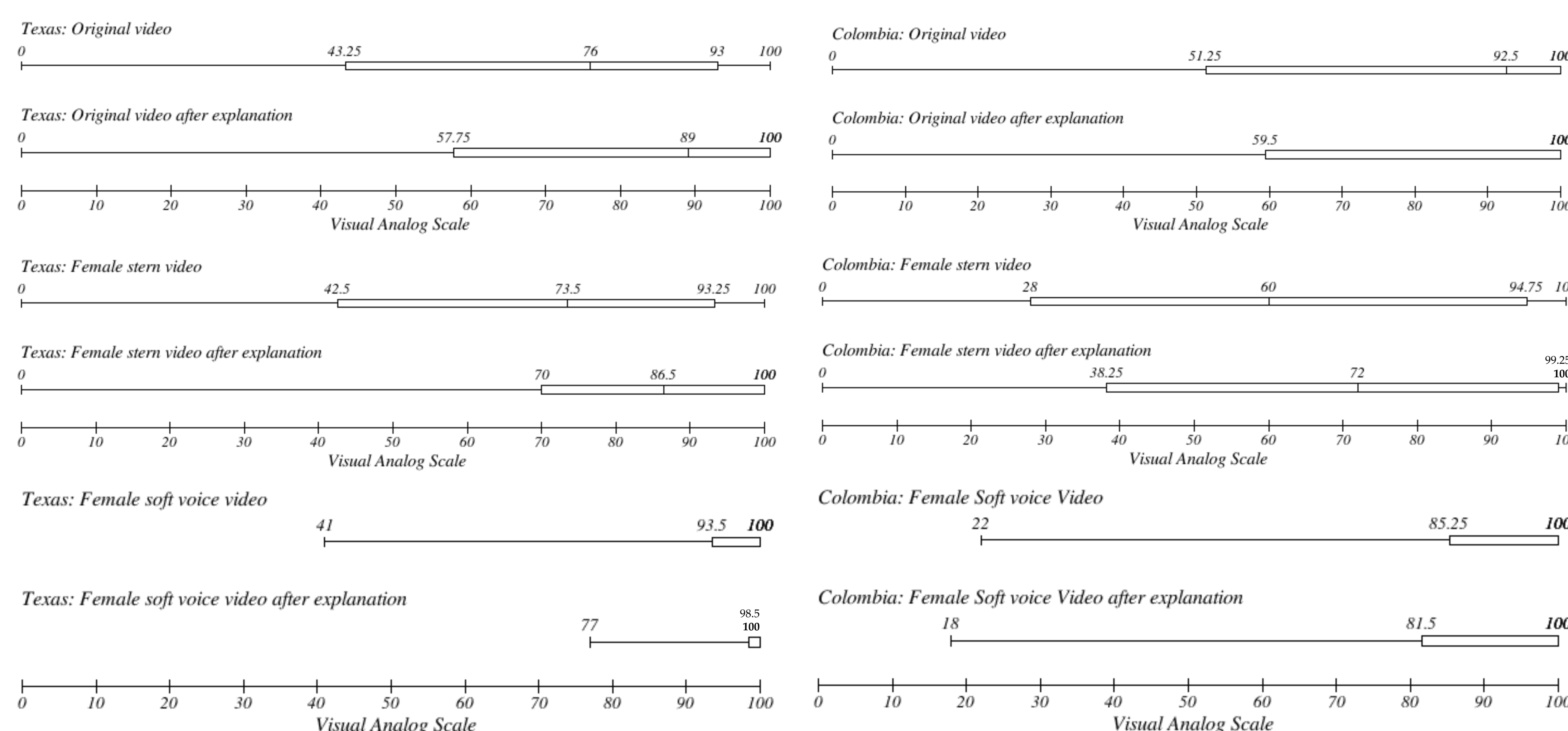
- This study was approved by the UTHealth Houston IRB for use in English and Spanish-speaking parents.
- Parents were shown 5 different videos of the spectrum of VC being utilized as an approved behavioral guidance technique and asked to rate their acceptability, using a visual analog scale (Figure 1).
- Parents were asked to rate acceptability based on provider gender, patients age, and explanation provided prior to utilizing this technique.
- There was a free response section at the end of the survey in which parents could express further concerns with the technique, when a technique would be acceptable to them, and what would cause their concerns or acceptance of the BGT to change.
- Statistical analysis completed; p-values less than 0.05 considered significant.



Figure 1: Visual Analog Scale

RESULTS

- Mean overall acceptance of each vignette was greater than 50 percent.
- There was a nonsignificant increase in VC acceptance after providing explanations for each vignette ($p>0.05$).



Comparison of responses of individual vignettes showed differences in acceptance of type of VC (soft versus stern) between both the Colombian ($p=0.03$) and Texan ($p=0.02$) subgroups.

DISCUSSION

The study revealed that both Colombian and Texan Hispanic parents exhibited similar levels of acceptance towards VC, suggesting a degree of universality in attitudes towards this technique within Hispanic populations.

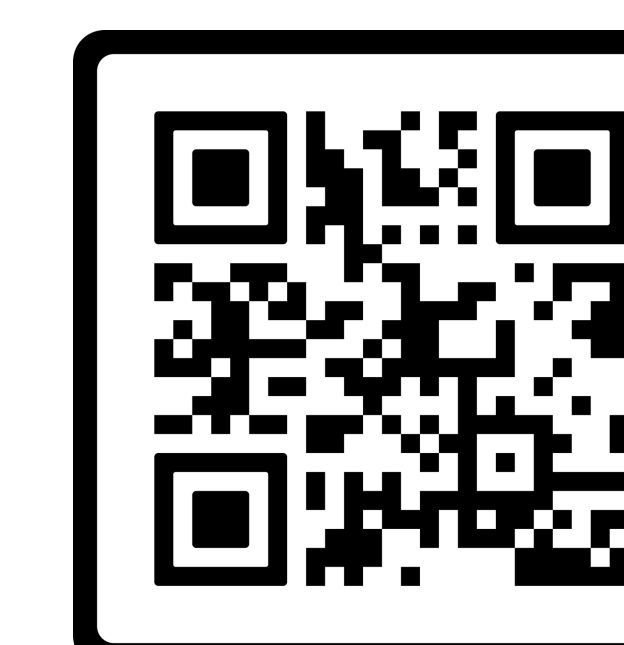
Factors such as child age, medical history, cooperation level, provider gender, and ethnicity were not significant determinants of VC acceptance. This suggests that parental attitudes towards VC may be influenced more by the way the technique is presented and each specific situation rather than individual characteristics of the child or healthcare provider.

Limitations:

- Small sample size, which may not be representative of the broader population.
- Bias of answers related to the order the videos were shown.
- Study limited to only Hispanic population, which may not be generalizable to other cultural or linguistic groups.
- Utilizing a survey to assess parental acceptance introduced challenges in participation and could have led to biased responses, particularly depending on the sequence in which the videos were presented.

Further research should aim to address these limitations by employing larger samples, including a broader range of ethnic groups. Additionally, other methodologies such as interviews or focus groups could provide a better understanding into the underlying factors influencing parental attitudes towards VC.

REFERENCES



- Softer VC utilization: 78.8% and 90.8%
- Stern VC: 73.1% and 61.3%
- No statistically significant difference in parental acceptance of voice control (VC) between the two study groups within each vignettes ($p>0.05$).
- Acceptance based on child/provider characteristics found no differences ($p>0.05$).

