Using the VARK® Modalities to Aid Qualitative Data Collection in Pediatric Patients



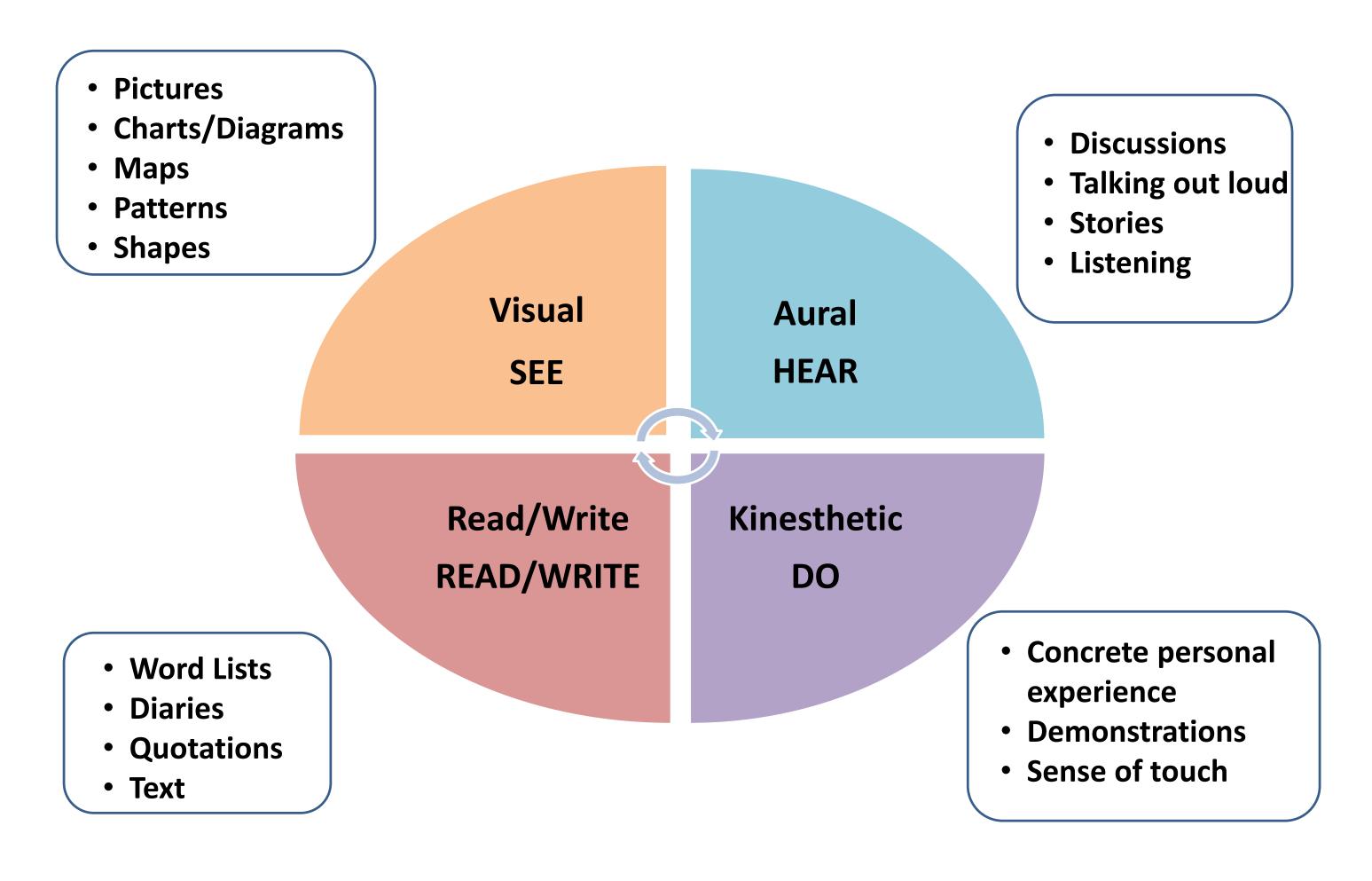
Keith, S.,¹ Randall, J.,² Kelly, K.,³ Gibbons, E.,² Daly, P.,¹ Symonds, T.²

¹ Clinical Outcomes Solutions, Chicago, IL, US; ² Clinical Outcomes Solutions, Folkestone, UK; ³ Clinical Outcomes Solutions, Tucson, AZ

BACKGROUND

- Patient interviews are a necessary part of drug development to explore the patient perspectives
 of a condition or to validate clinical outcomes assessments (COAs).
- To ensure children's experiences are represented in regulatory decisions, ISPOR states that methodological guidance is needed for pediatric research.¹
- When interviewing children, it can be helpful to explore a variety of communication modalities to help the child feel comfortable sharing information.
- One of the approaches to aid communication with children is to utilize the VARK modalities.²
 - The four VARK modalities, or learning preferences, were introduced to the field of education in 1992.²
 - The VARK theory purports that people tend to prefer different modalities for communication and learning²
- The four modality preferences are; visual, auditory, reading/writing, and kinesthetic. These are presented in **Figure 1**.

Figure 1: VARK Modalities²



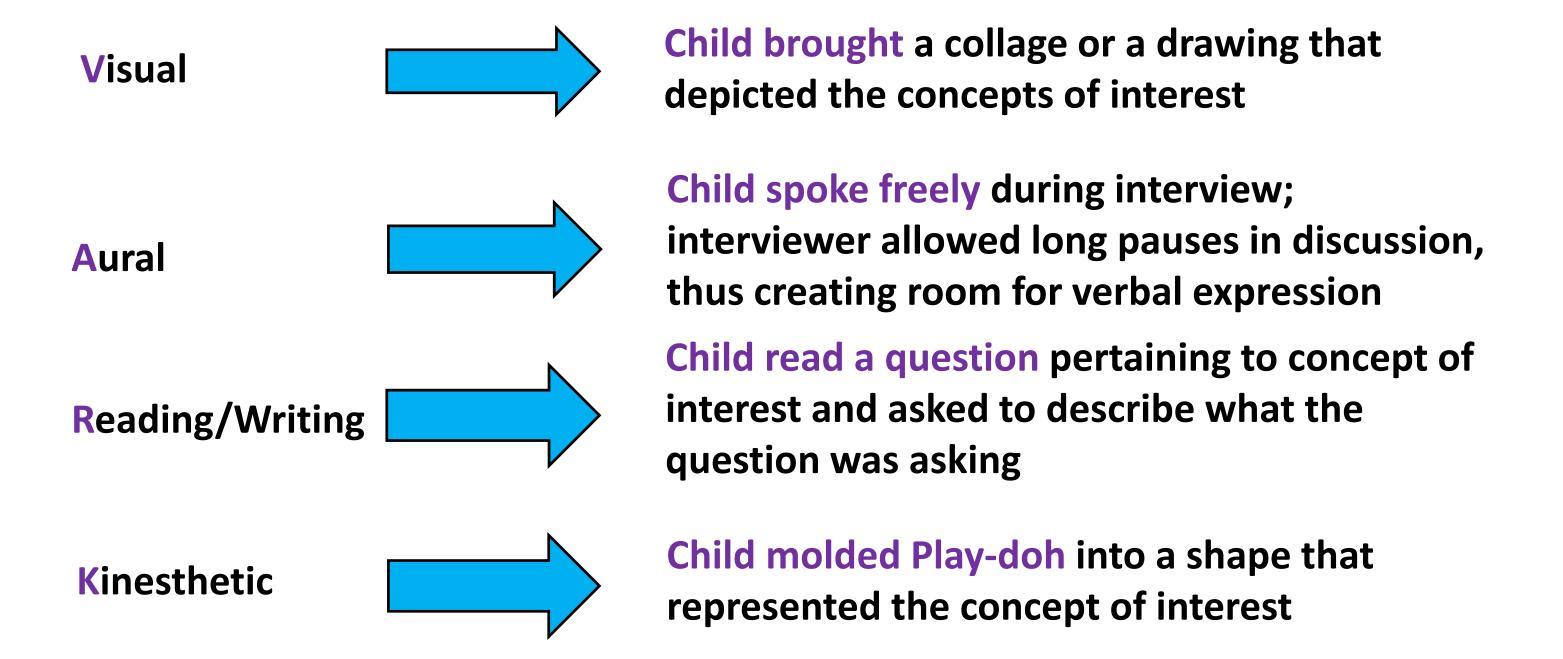
OBJECTIVE

• To introduce the concept of VARK modalities alongside ISPOR guidance with the goal of aiding the collection of patient experience data in the pediatric population.

METHODOLOGY

- Child interviews were conducted across various studies utilizing VARK principals and the ISPOR guidance for pediatric studies.
- Each interview was designed to incorporate elements or activities that allow communication in each one of the VARK modalities, as shown in Figure 2.
- The results of these studies, along with interviewer experience and feedback from experienced qualitative researchers, were discussed and reviewed to generate feedback on best practices for interviewing children.

Figure 2: Incorporating VARK Modalities Into Pediatric Interviews



METHODOLOGY CONTINUED

- To maximize the VARK principals when interviewing children there are different things that can be used in the interview room to help communicate and engage a child. These could include:
 - Different furniture layout so the child can decide where to sit i.e., floor/chair.
 - Play-doh and toys that could help the child describe their feelings.
 - Drawing materials so the child can write or draw what they are discussing.
- It can also be helpful to ask the child to bring in a collage that represents aspects of their condition to the interview to act as a talking point.

A Classroom Resemblance



2-3 different seating spaces

Child-friendly materials on mat



Floor Mat is large enough for child to lay down comfortably

RESULTS

- After reviewing the interview recordings and coding the data, the researchers agreed that the use of VARK modalities can increase child engagement by allowing them to communicate in their preferred modality.
- Consideration of the available data indicated that children with a visual preference may prefer to develop a drawing or collage relating to their experience of their condition for discussion during the interview.
- In comparison, children who prefer reading/writing could be presented with a list of words relating to their condition and asked to put them in a certain order or categories.
- Children with a kinesthetic preference may prefer creating a model of their symptoms using Play-Doh or other materials.
- Children with an auditory preference may prefer to discuss their condition with the interviewer.

CONCLUSIONS

- Although the VARK modalities were designed in the field of education, they can be used to aid data collection in the pediatric space.
- Having a multi-modal discussion guide means that each child will have the same stimuli but will still have an opportunity to communicate in their preferred modality.
- Doing so appears to increase data quality, engagement, and communication during child interviews, and could improve the quality of pediatric data in studies.

REFERENCES

- 1 Matza, L. S., Patrick, D. L., Riley, A. W., Alexander, J. J., Rajmil, L., Pleil, A. M., & Bullinger, M. (2013). Pediatric patient-reported outcome instruments for research to support medical product labeling: report of the ISPOR PRO good research practices for the assessment of children and adolescents task force. *Value in Health*, 16(4), 461-479.
- ²Adapted from Fleming, N. D., & Mills, C. (1992). Vark. A Guide to Learning Styles.[On-line: http://www.vark-learn.com/english/page.asp.