



TOY VRA vs. Video VRA

What Works Best for Which Ages and Optimal Placement

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At Conditioned Play Innovations, we are committed to supporting audiologists with evidence-based guidance on best practices for pediatric audiologic testing. Recent research comparing toy and video reinforcers in Visual Reinforcement Audiometry (VRA) provides helpful insights for clinicians and test setup. Here is what the research shows:

Younger Children and Toy Reinforcers

Infants and younger toddlers (under ~18 months) respond more consistently to toy reinforcers. Clarke (2006) found that toy reinforcers produced, on average, two more threshold estimates than video. Bright colors, movement, and sound helped sustain interest and improve responses in children aged 16–24 months.

Older Children and Video Reinforcers

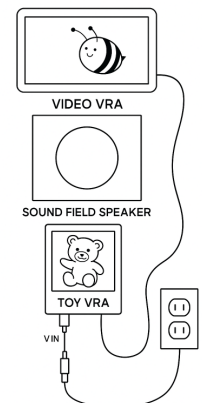
For older toddlers (19–24 months), video reinforcers often produce more reliable results. Schmida, Peterson, & Tharpe (2003) showed that children in this age group generated an average of 15.5 head-turn responses to video versus 10.8 for toys. Videos provided complexity, dynamic visuals, and luminosity that helped maintain focus.

Developmental Head Turn Abilities

Gelfand's developmental audiology research highlights how head-turning ability changes with age:

- 6–13 months: Lateral (side-to-side) and downward turns are consistent.
- 13–17 months: Upward turns begin to emerge.

- **This reinforces optimal placement for VRA for 5 unit systems:**
 - Toy reinforcers should be positioned **below** the soundfield speakers.
 - Video reinforcers should be positioned **above** the speakers.
- **For single modality systems (Only Toy or Only Video):**
 - The reinforcer should be **below** the soundfield speakers so it captures the younger children of VRA ranges 6-13 months, who only have lateral and downward head turn abilities.



Optimal Placement 180°

The American Academy of Audiology recommends placing reinforcers at 90° to each side (180° separation) and ideally at eye level. Placement at 45° is generally insufficient. Using toys below and videos above the speakers aligns with developmental head-turn patterns and maximizes observable responses.

Key Takeaways

- Toy reinforcers are more effective for younger children (<18 months).
- Video reinforcers are more effective for older toddlers (19–24 months).
- Placement matters: Toys below, videos above, both at 180° separation.

References

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