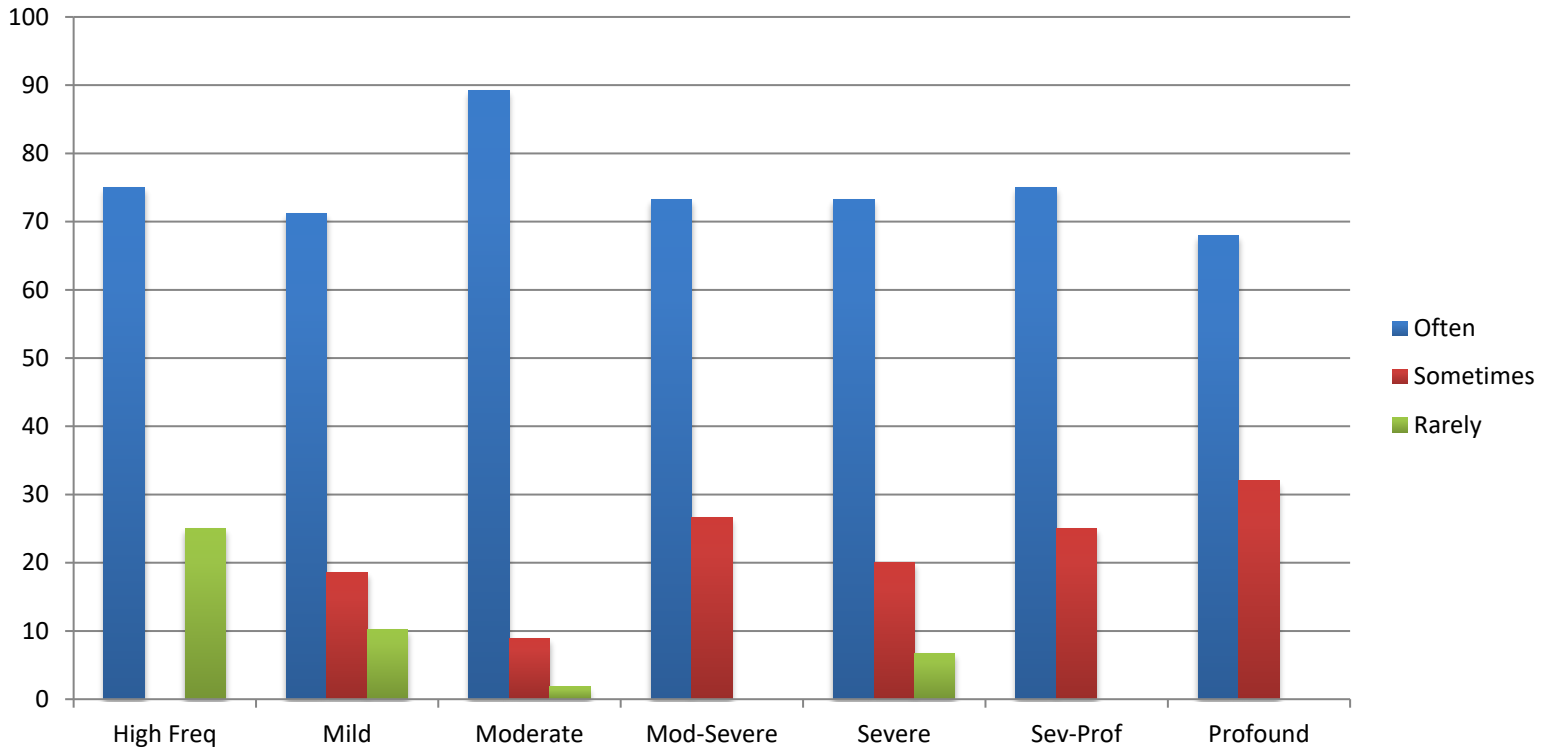
ASC item by age and degree of HL (Tyberg, 2012; Meagher, 2013)

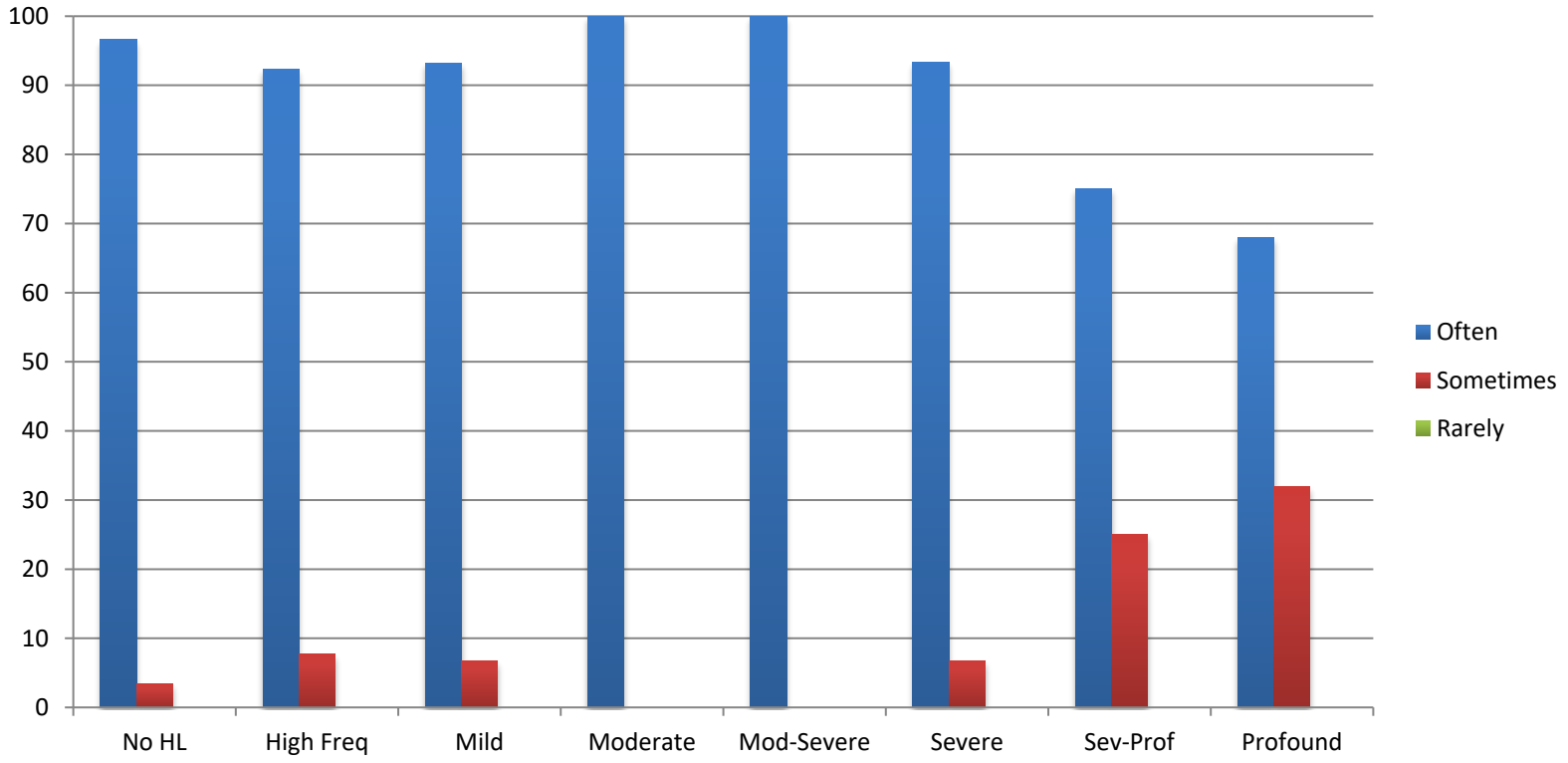
Question 1 (Meagher et al., 2013, DHH)

- Does your child wear the amplification device during his/her waking hours?+



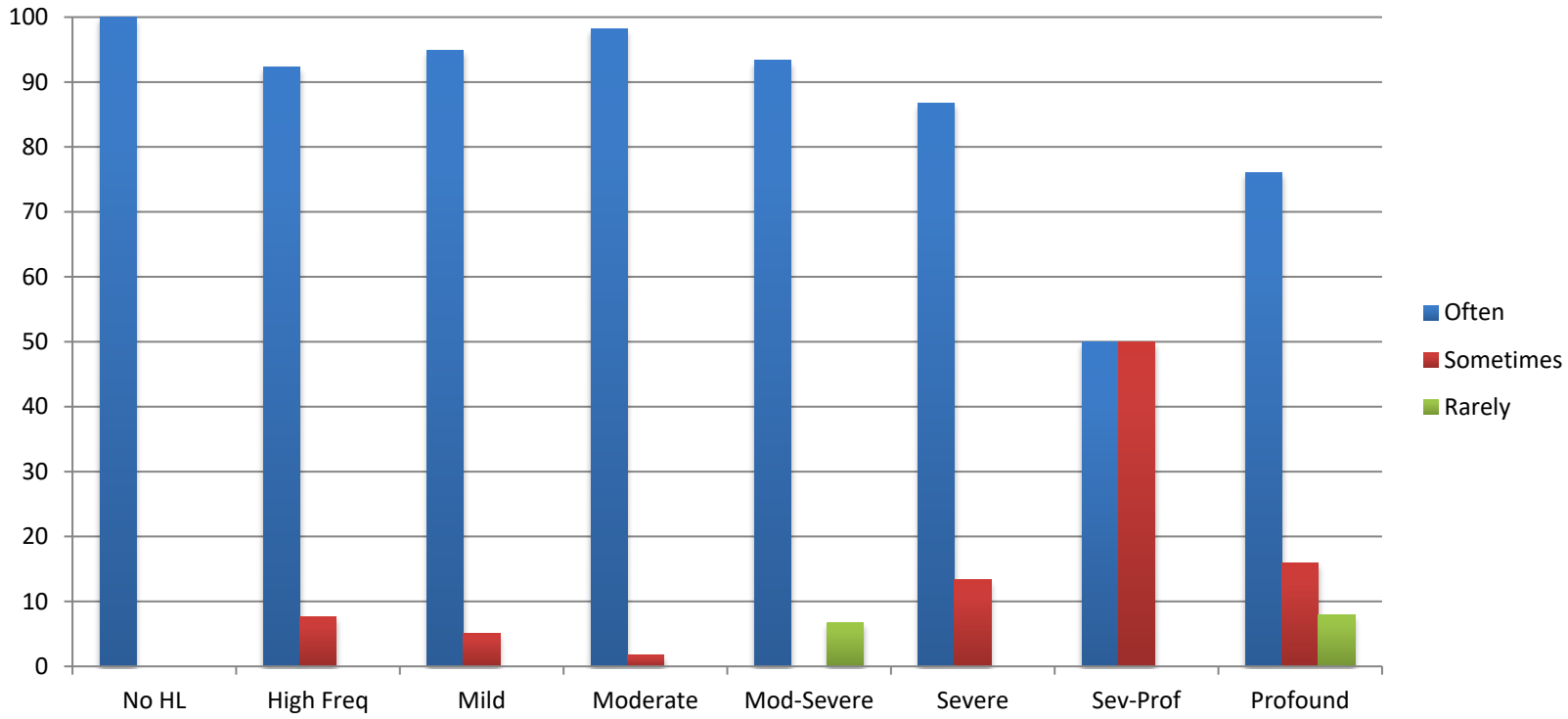
Question 2 (Meagher et al., 2013, DHH)

- Does your child use body language to indicate when something is heard?



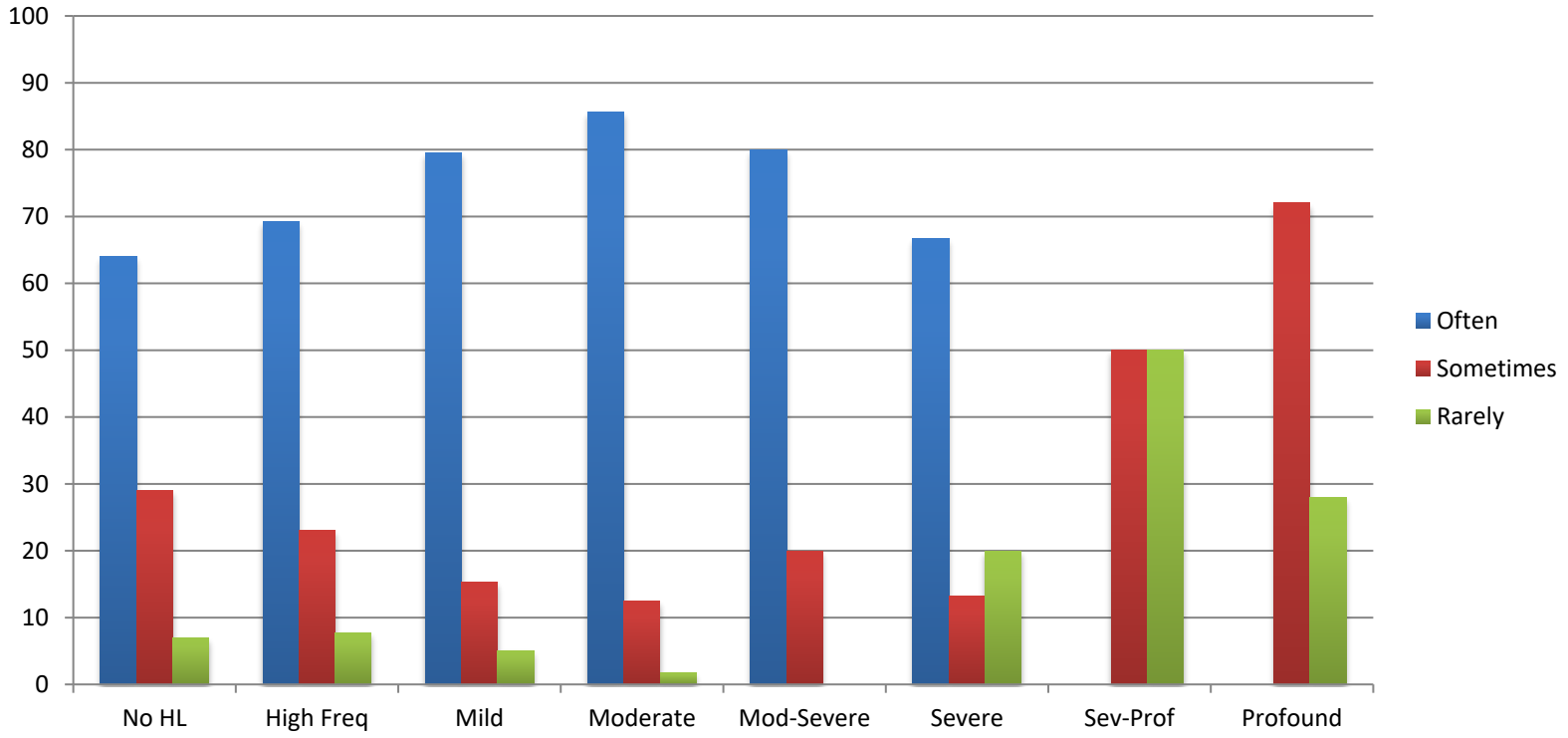
Question 3 (Meagher et al., 2013, DHH)

- Does your child show awareness of loud environmental sounds?



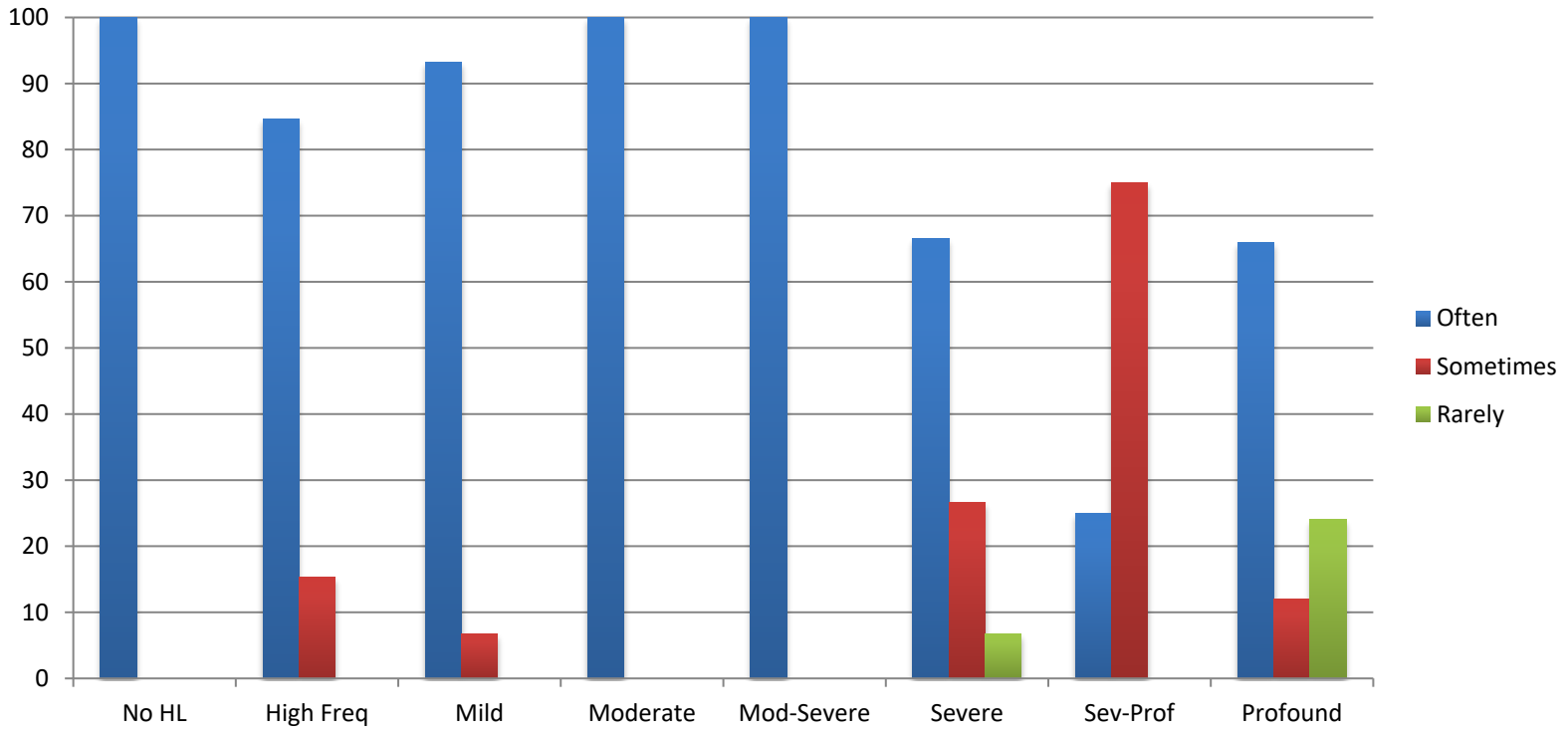
Question 4 (Meagher et al., 2013, DHH)

- Does your child show awareness of soft environmental sounds?



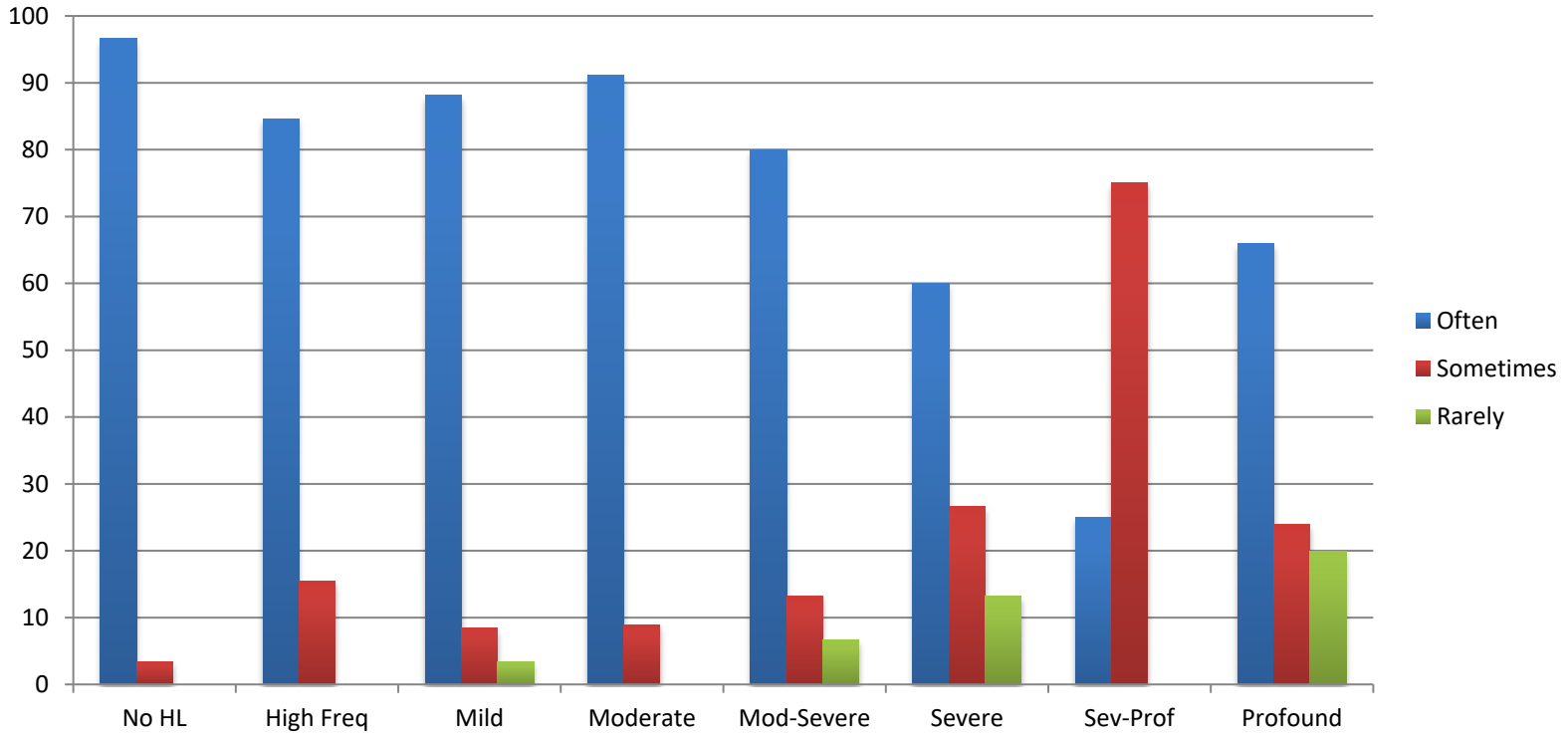
Question 5 (Meagher et al., 2013, DHH)

- Does your child show awareness of voices spoken at typical loudness levels?



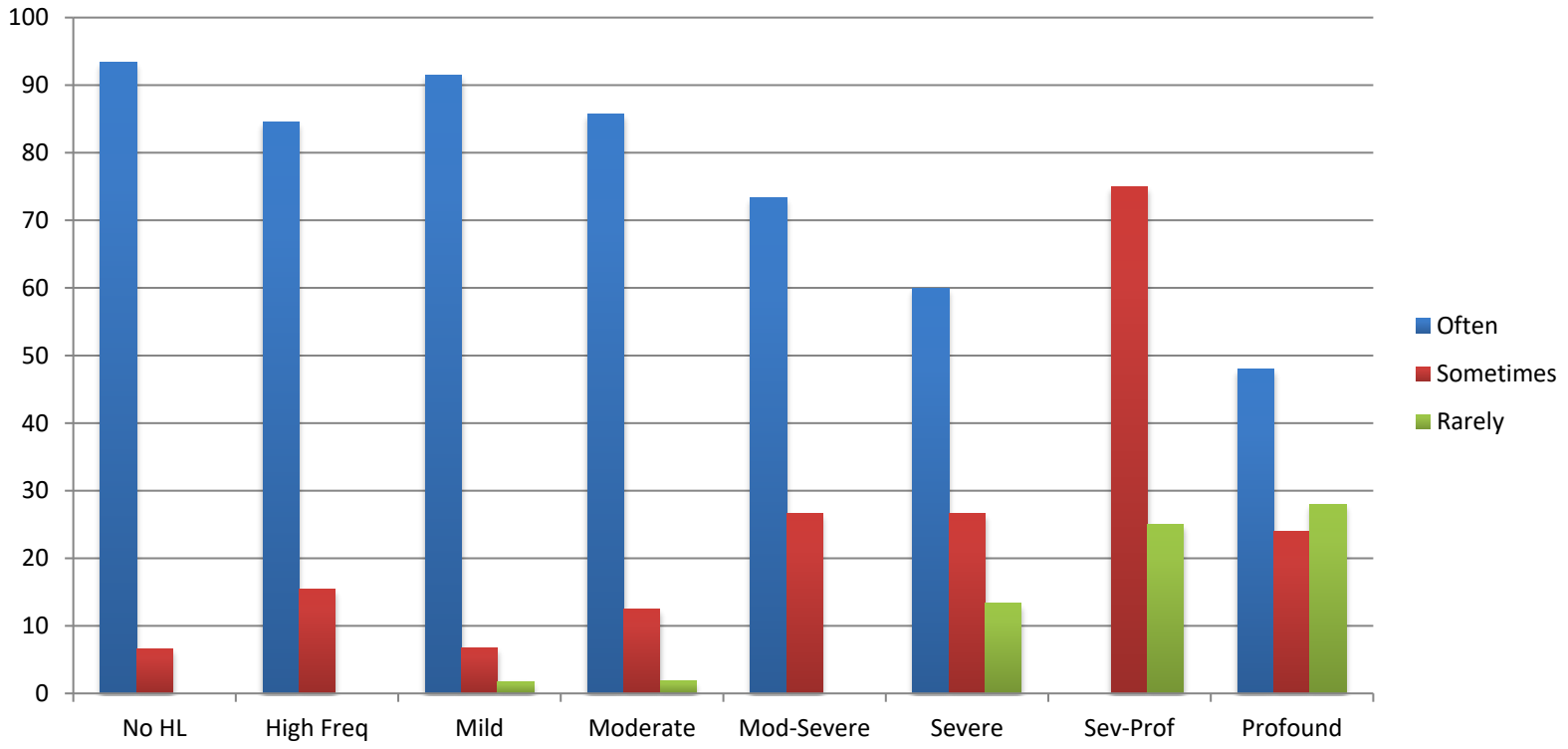
Question 6 (Meagher et al., 2013, DHH)

- Does your child detect the Ling Six Sounds (, M, AH, OO, E, SH, S)?



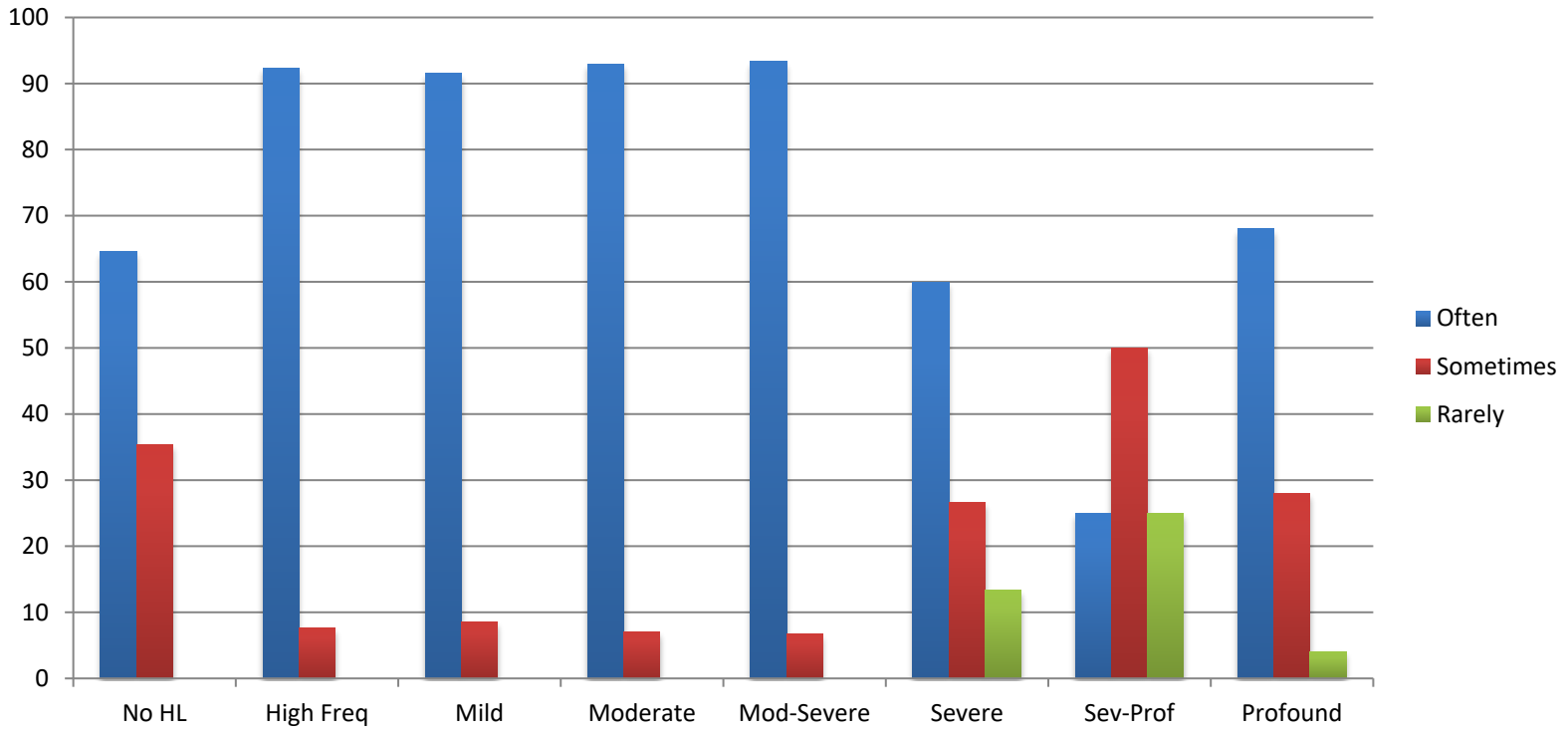
Question 7 (Meagher et al., 2013, DHH)

- Does your child detect the speaker's voice when background noise is present?



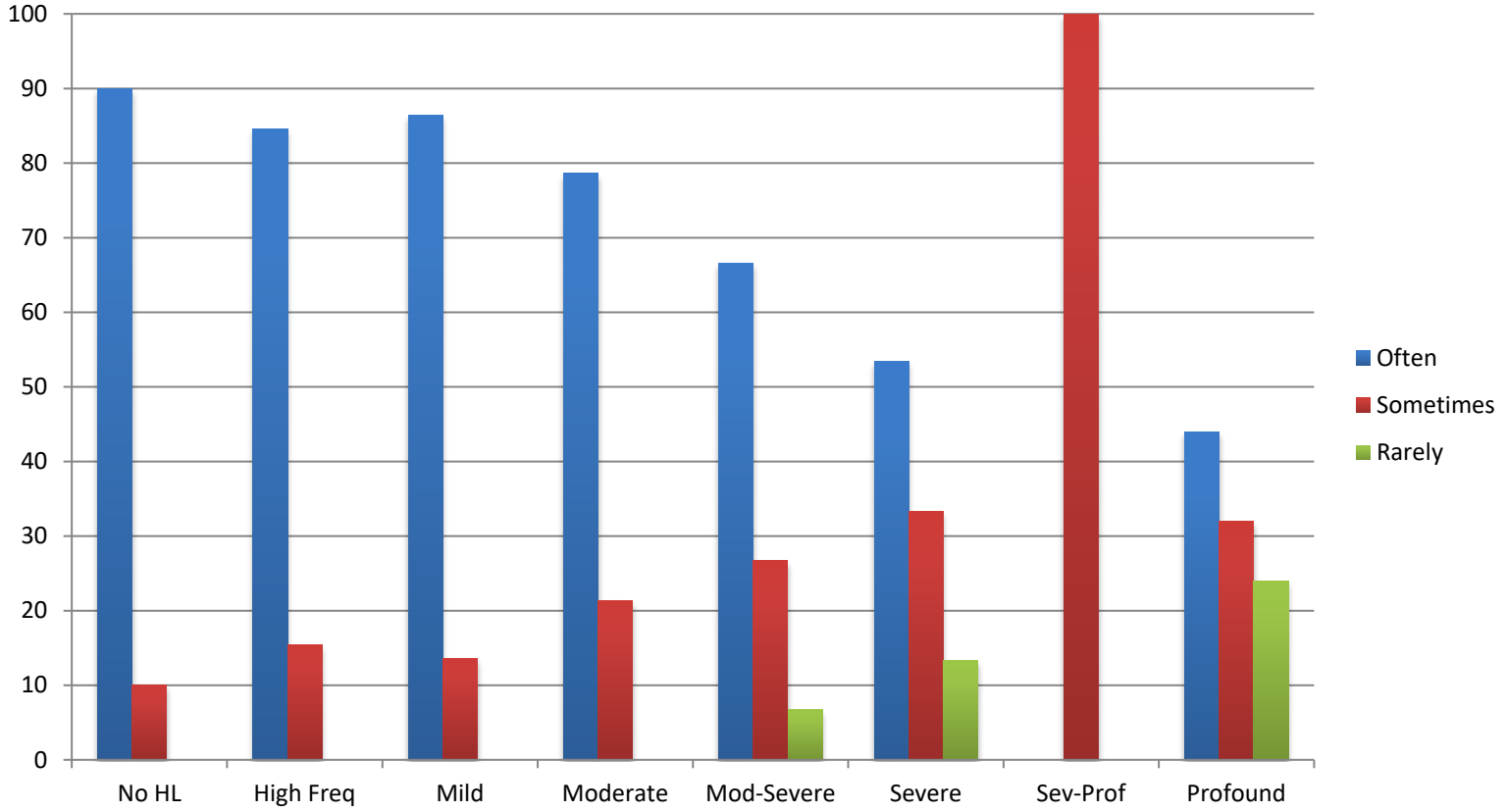
Question 8 (Meagher et al., 2013, DHH)

- Does your child search to find out where a sound is coming from?



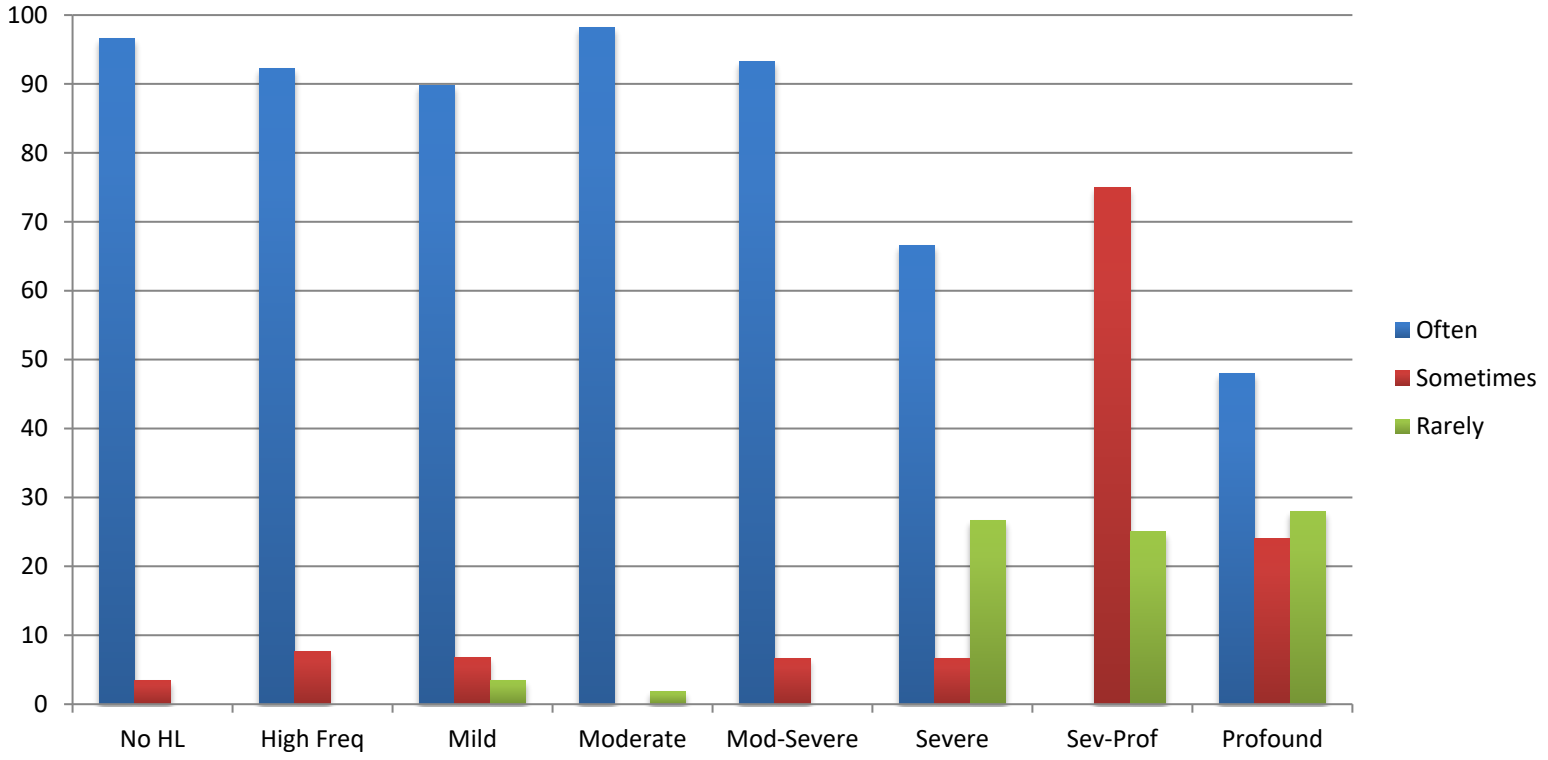
Question 9 (Meagher et al., 2013, DHH)

- Does your child localize the the correct sound source?



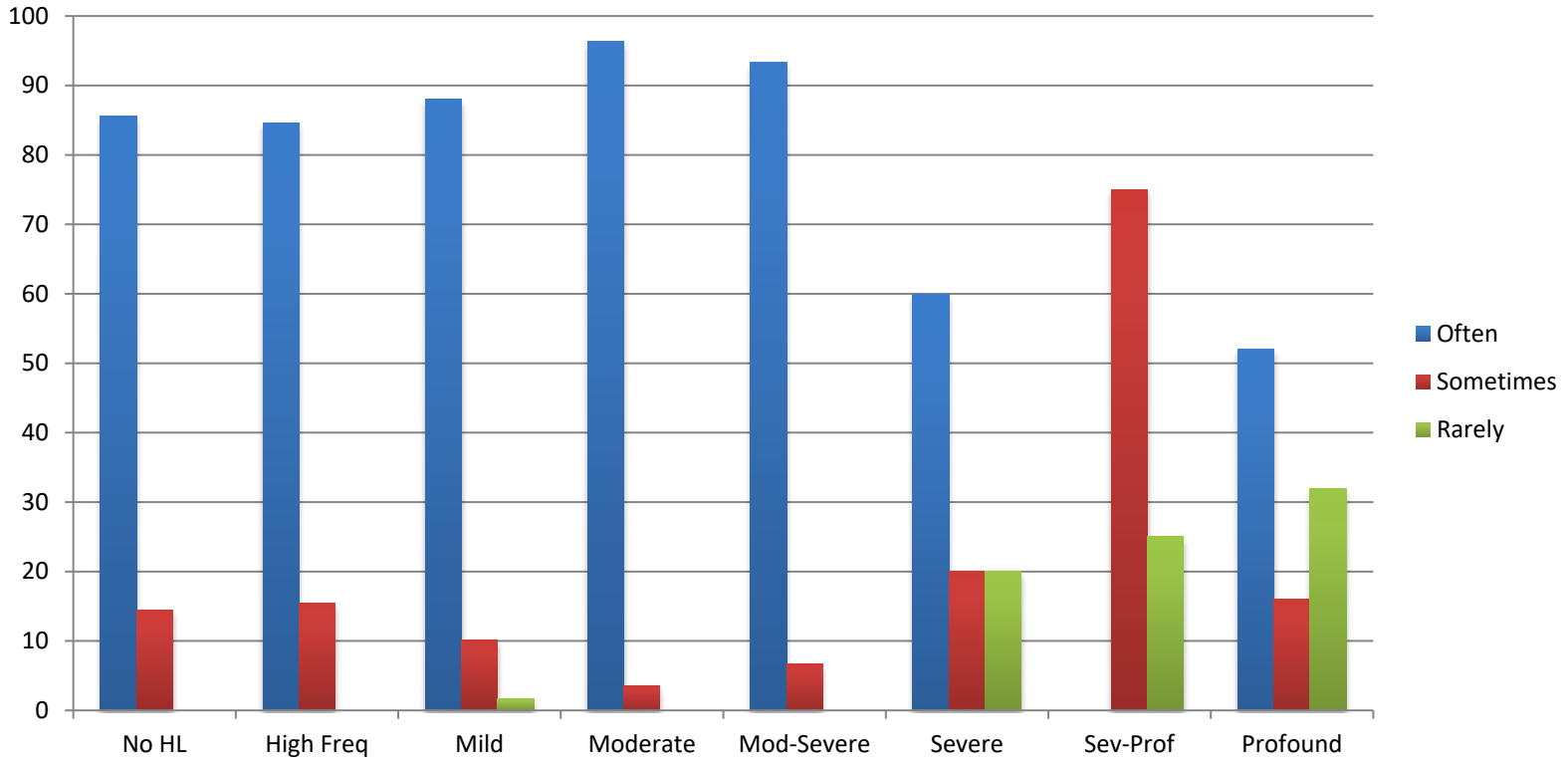
Question 10 (Meagher et al., 2013, DHH)

- Does your child notice a difference or respond differently between someone talking vs. a common environmental sound?



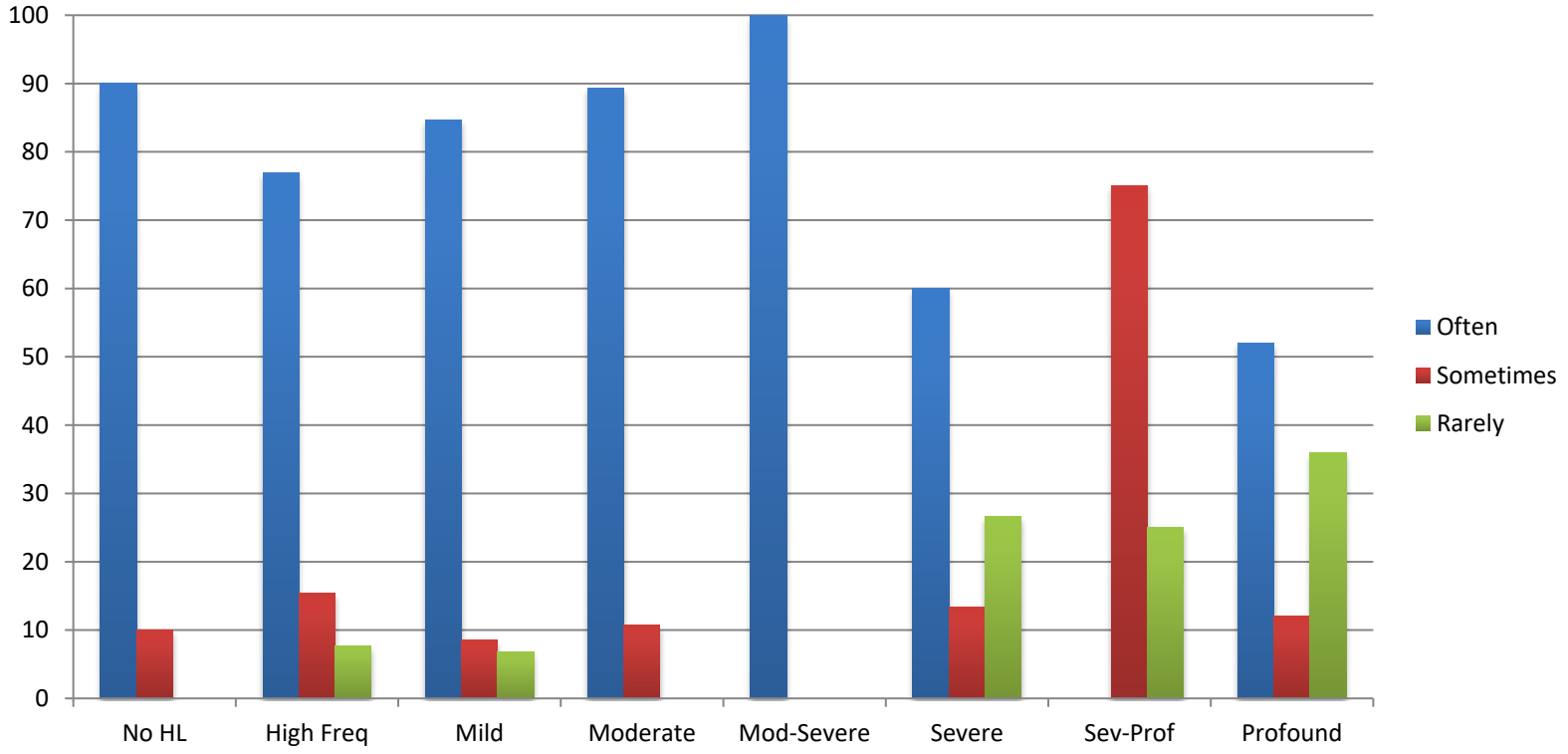
Question 11 (Meagher et al., 2013, DHH)

- Does your child notice a difference or respond differently between different environmental sounds?



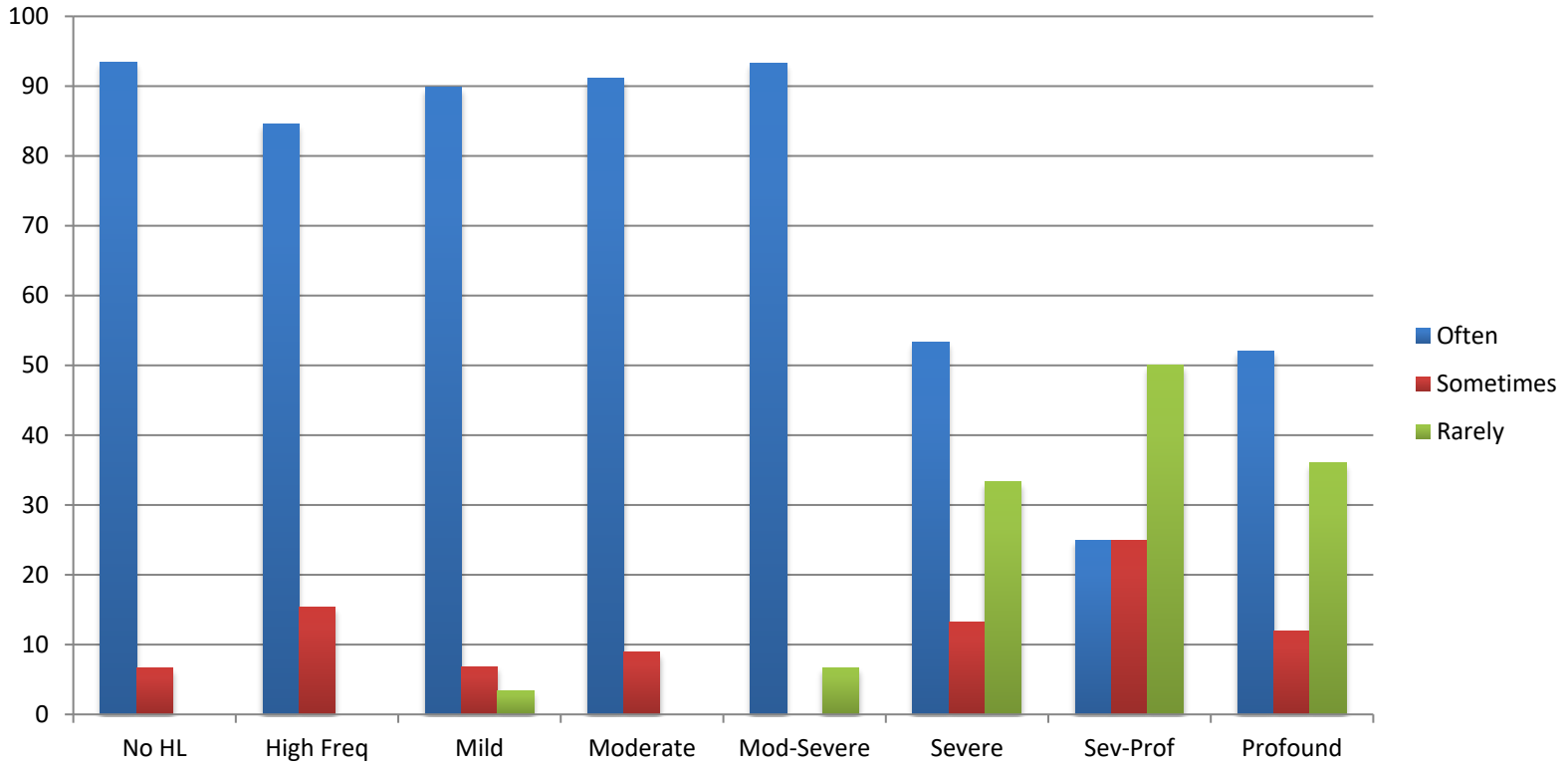
Question 12 (Meagher et al., 2013, DHH)

- Does your child notice a difference or respond differently between a speaker using a soft voice and a speaker using a loud voice?



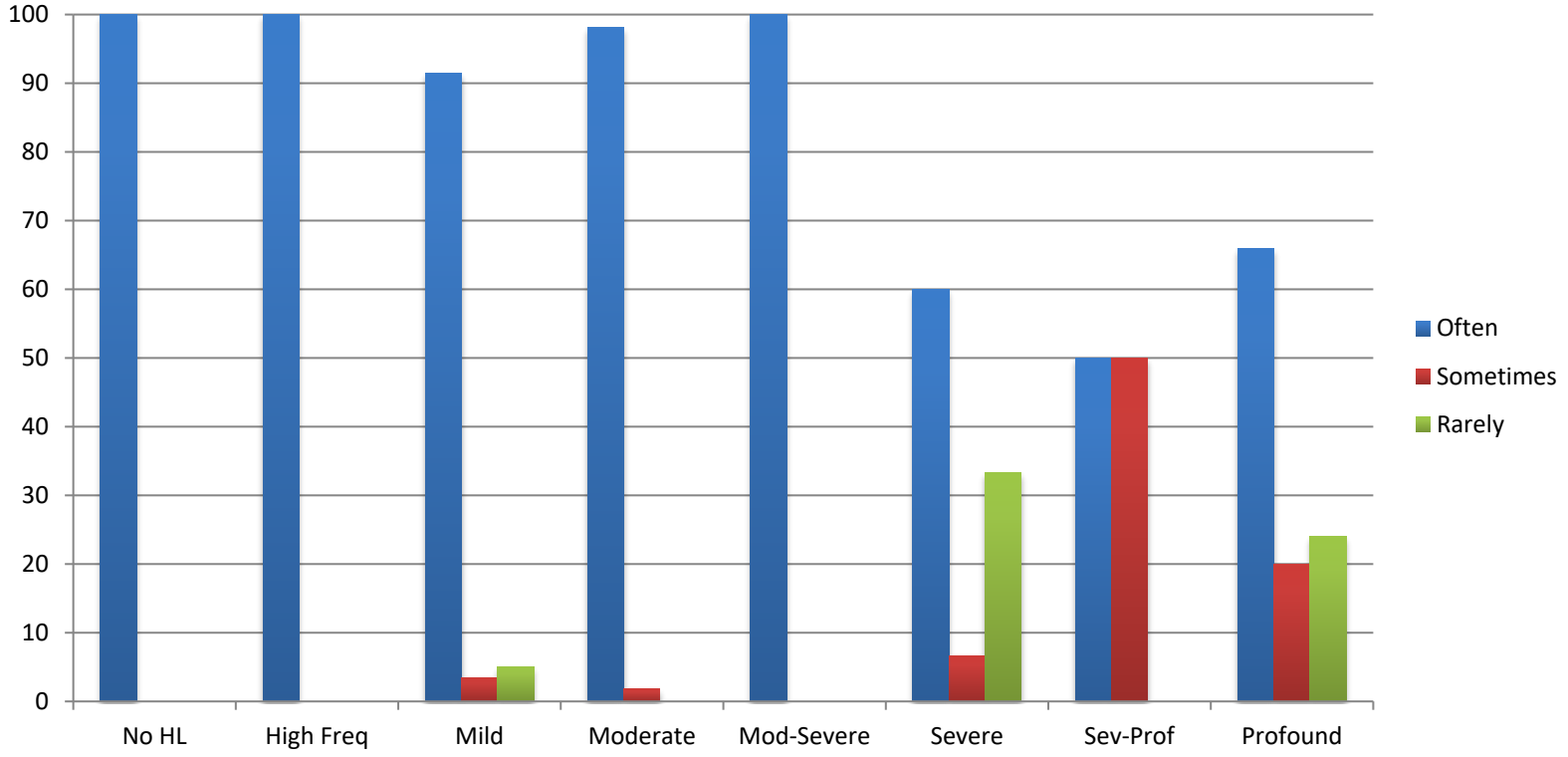
Question 13 (Meagher et al., 2013, DHH)

- Does your child notice a difference (discriminate) between a person singing from a person having a conversation?



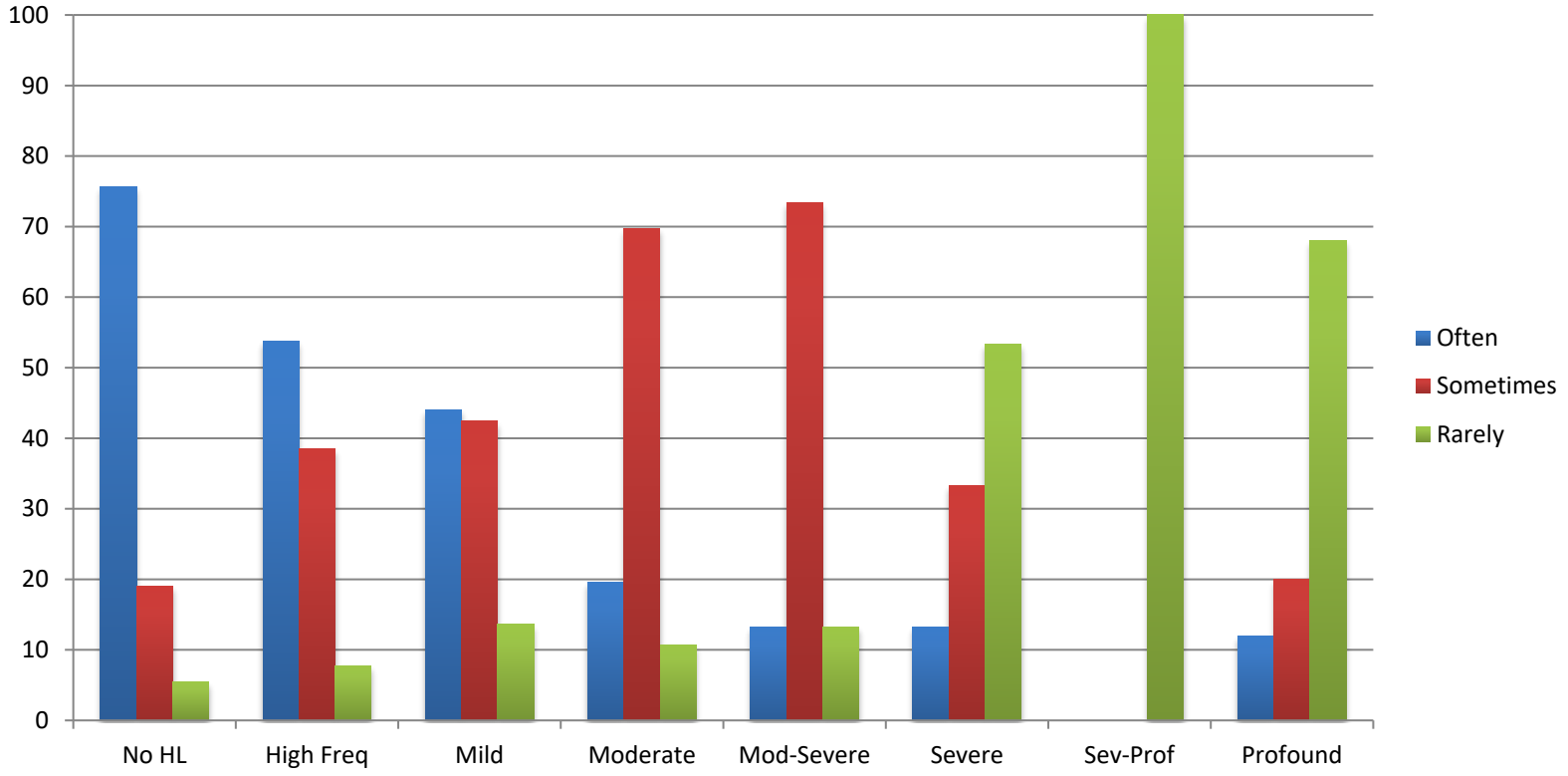
Question 14 (Meagher et al., 2013, DHH)

- Does your child notice the difference between family members' voices?



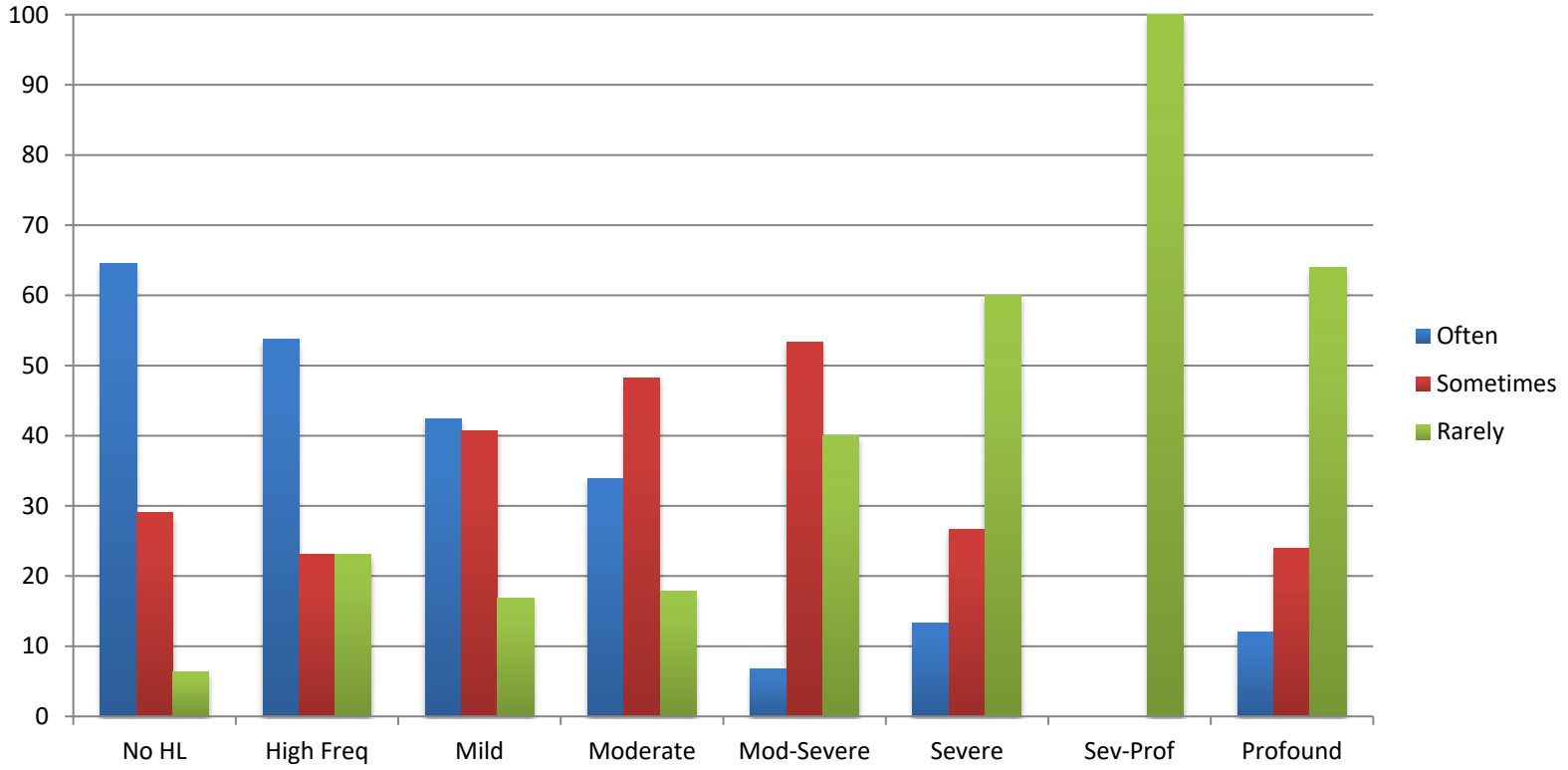
Question 15 (Meagher et al., 2013, DHH)

- Does your child notice the difference between minimal pair words?



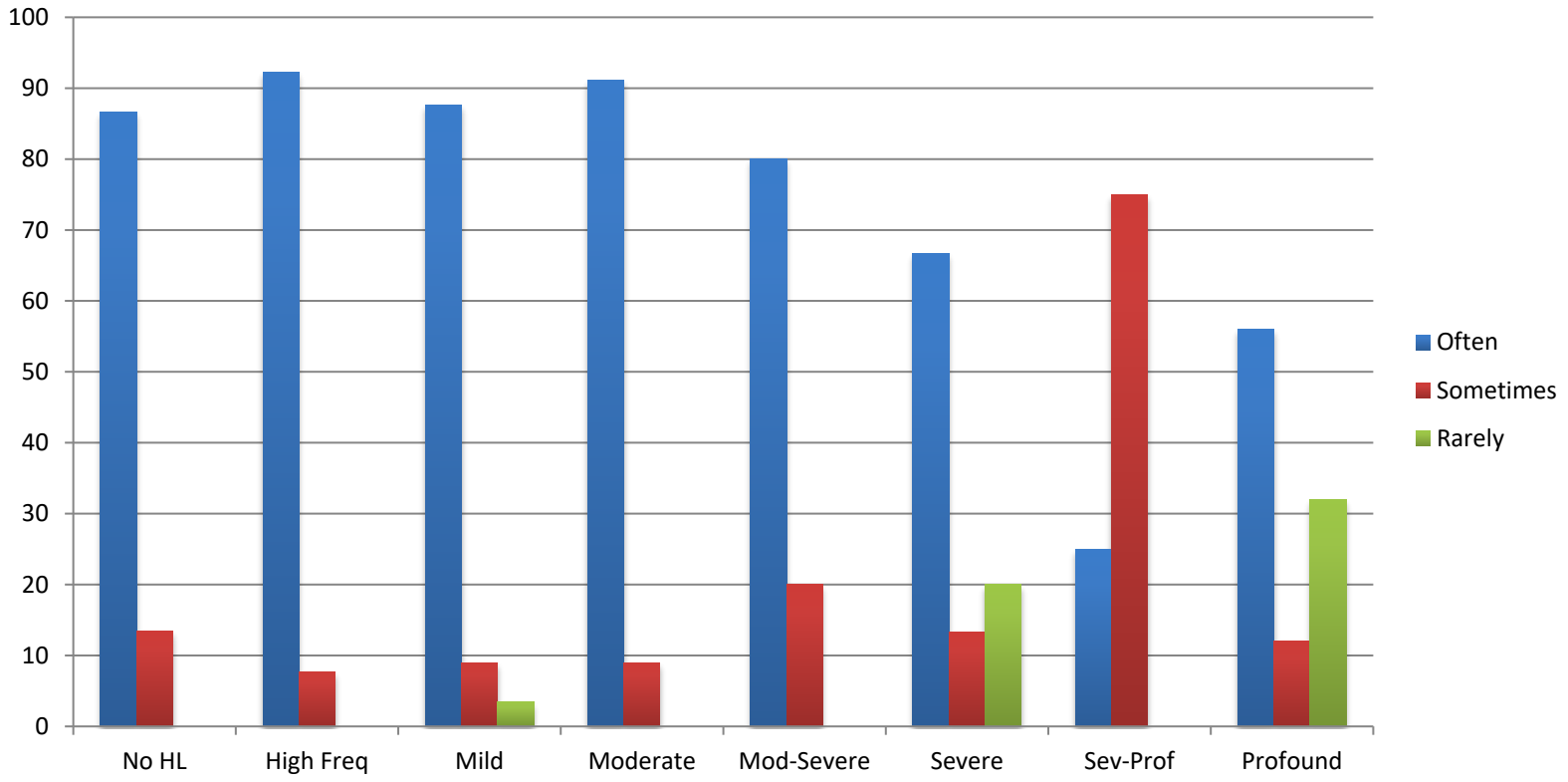
Question 16 (Meagher et al., 2013, DHH)

- Does your child notice the difference between similar sounding phrases and sentences?



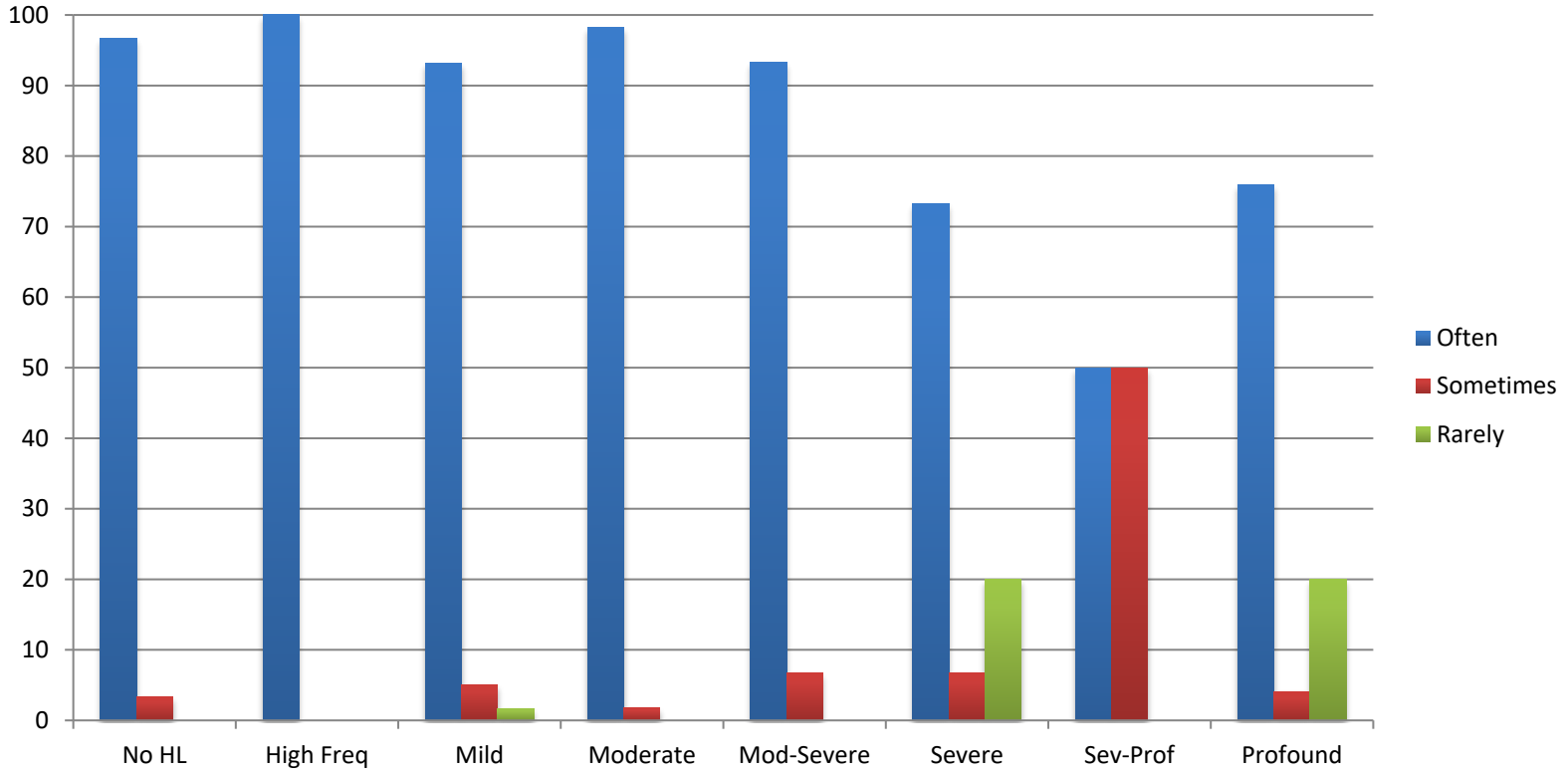
Question 17 (Meagher et al., 2013, DHH)

- Does your child identify if the speaker is happy, angry, or surprised by the change in vocal tones?



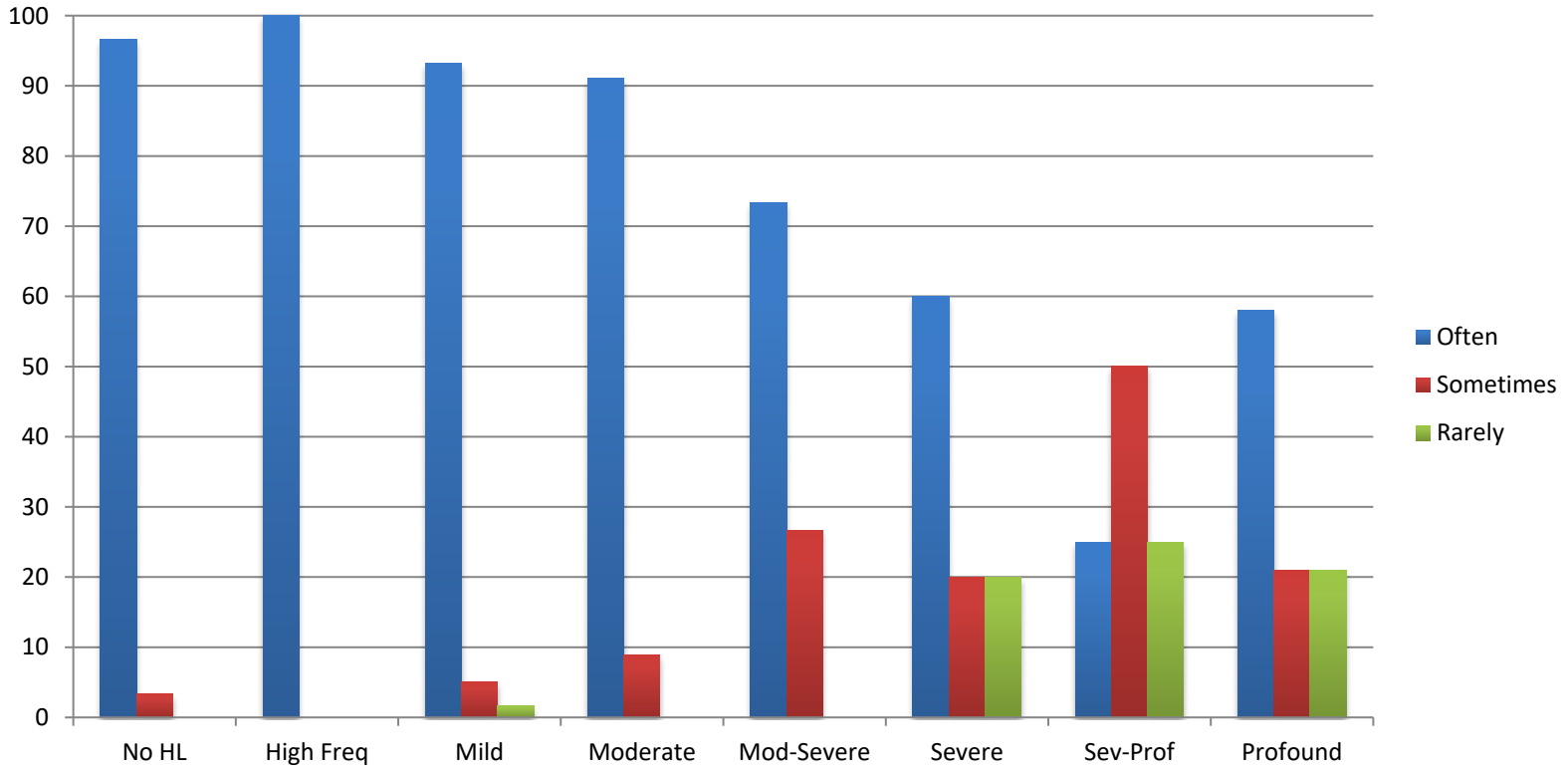
Question 18 (Meagher et al., 2013, DHH)

- Does your child respond to his or her name when called?



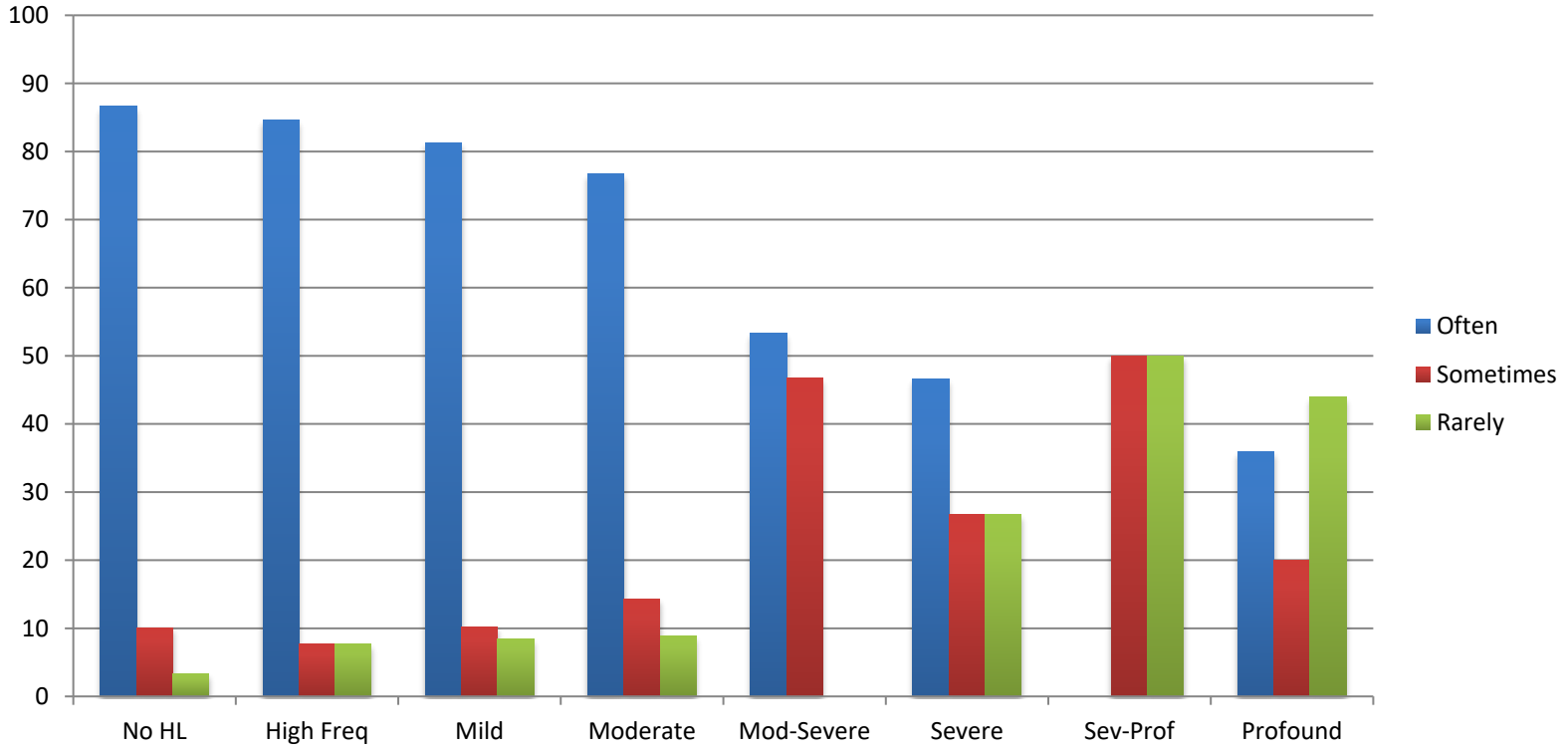
Question 19 (Meagher et al., 2013, DHH)

- Does your child identify an object or item with an associated sound?



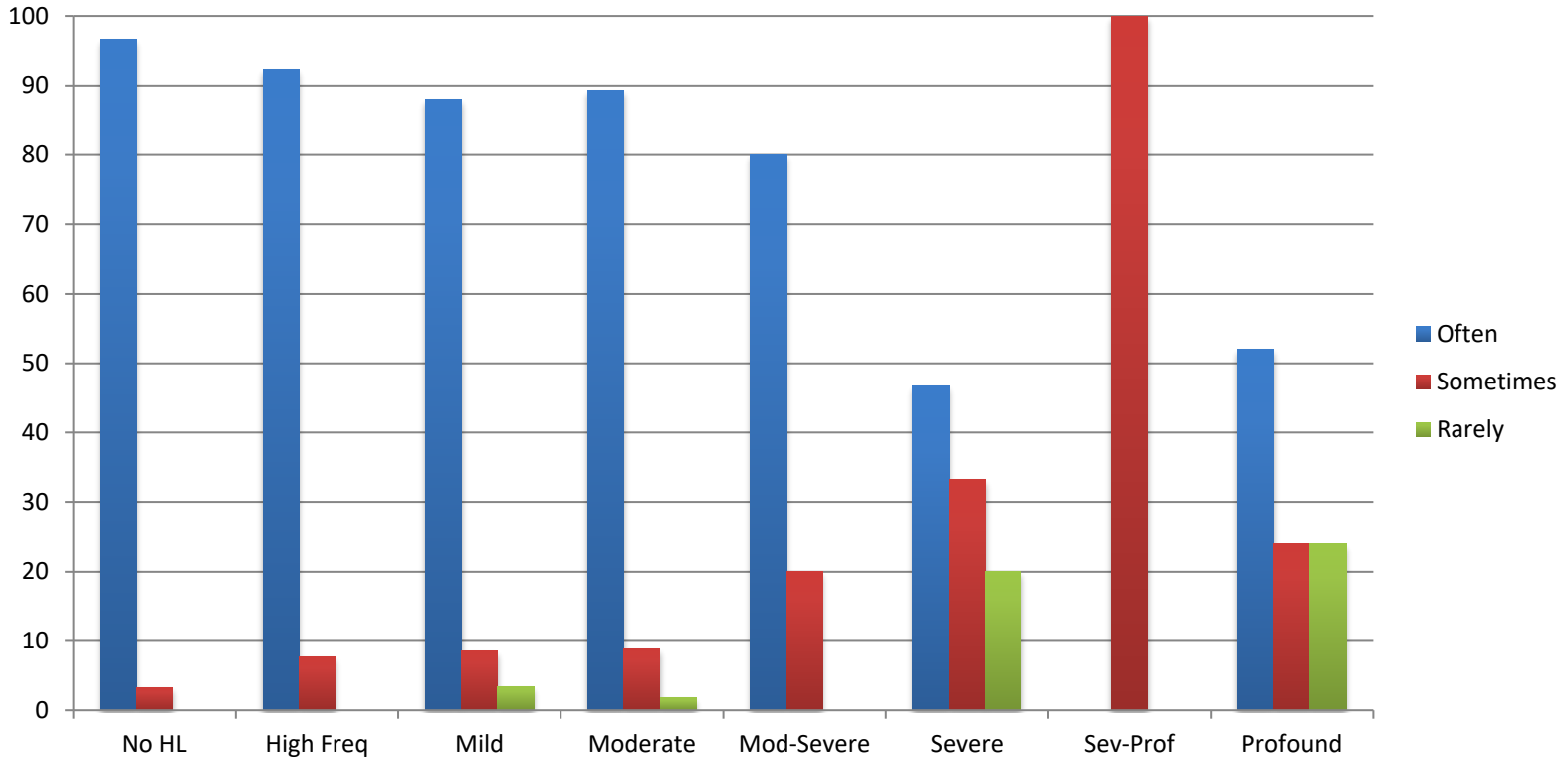
Question 20 (Meagher et al., 2013, DHH)

- Does your child identify one syllable words vs. two syllable words vs. three syllable words?



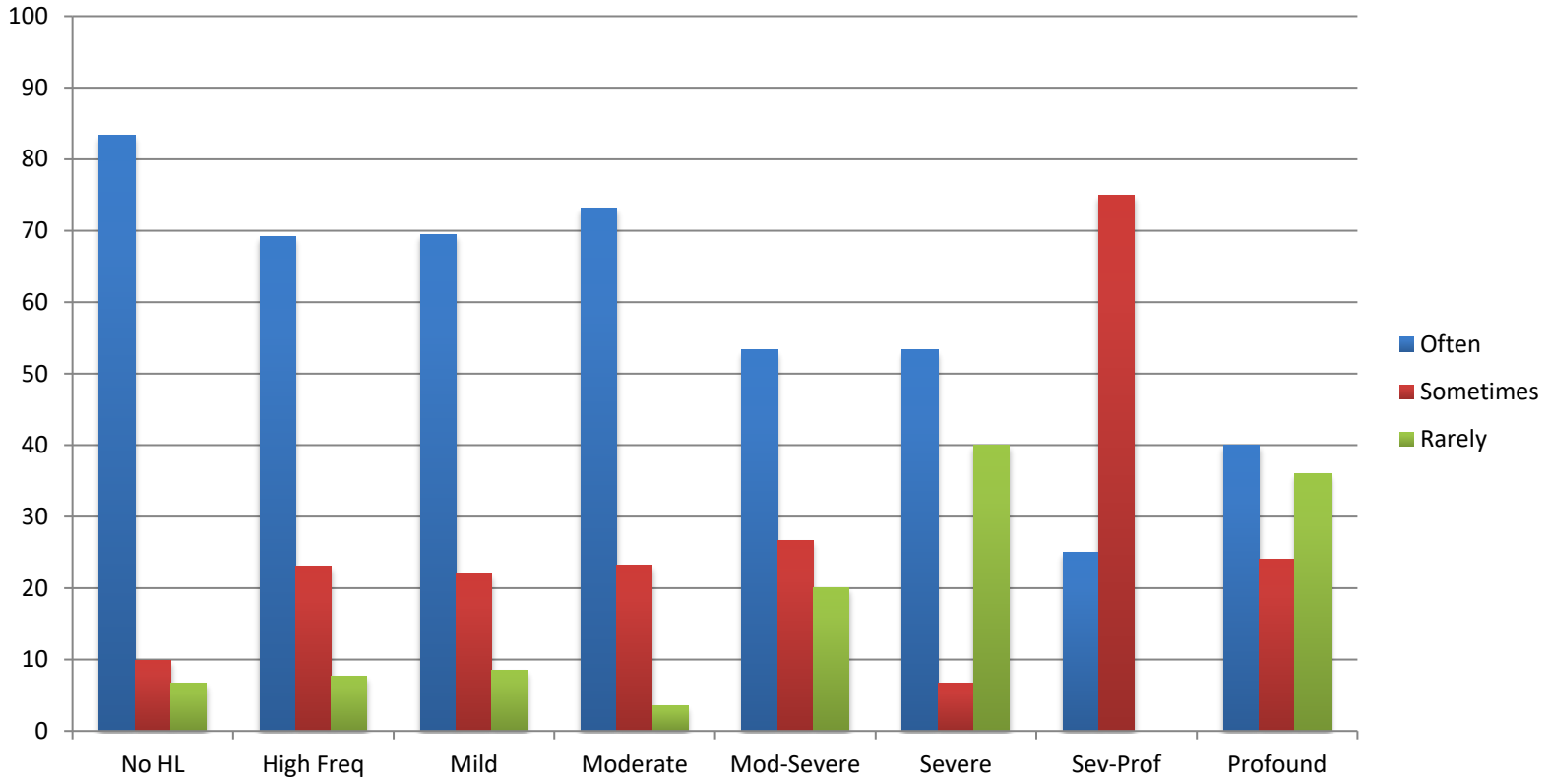
Question 21 (Meagher et al., 2013, DHH)

- Does your child identify or recognize words used in the child's natural environment?



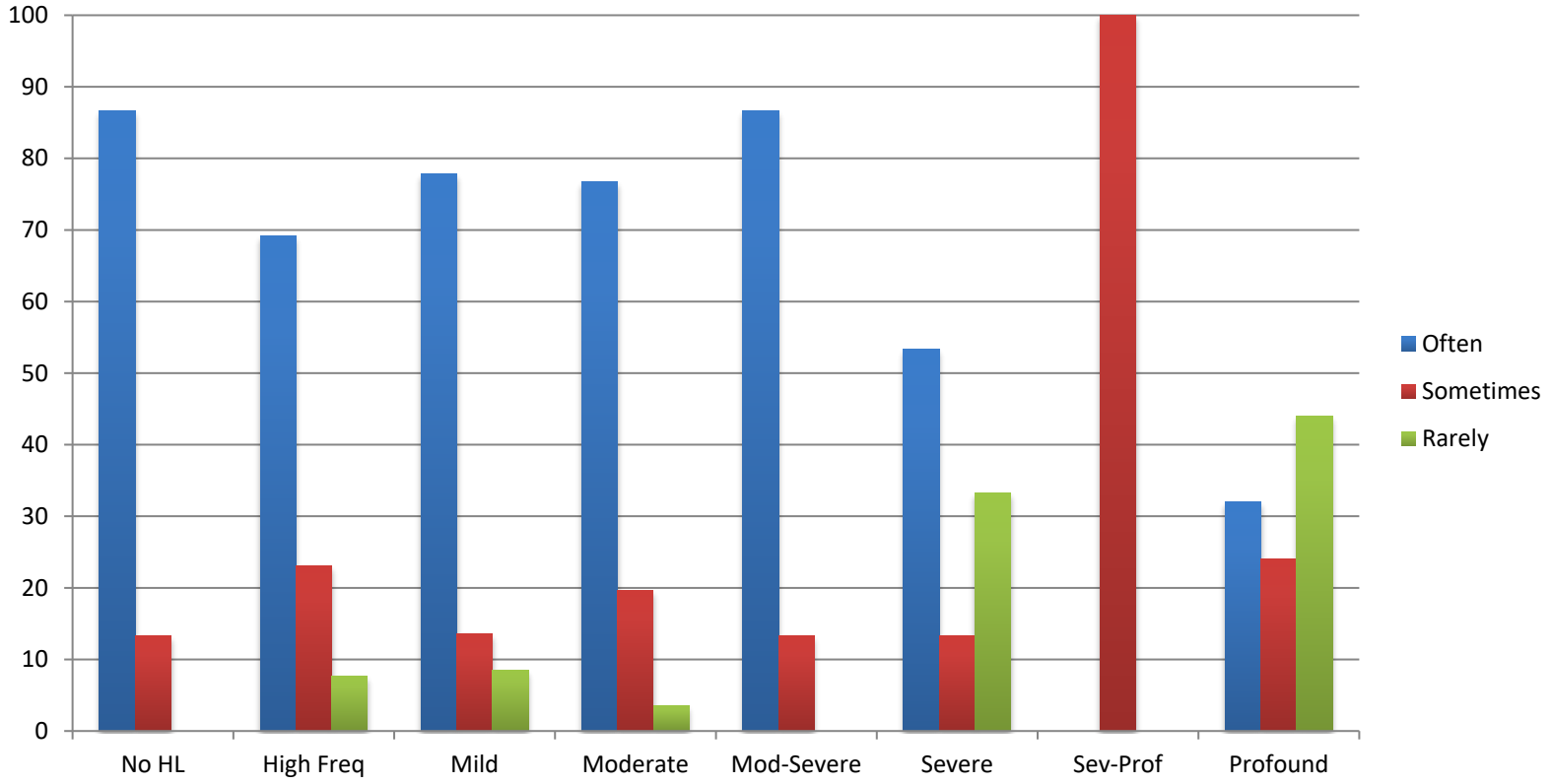
Question 22 (Meagher et al., 2013, DHH)

- Does your child identify the Ling Six Sounds?



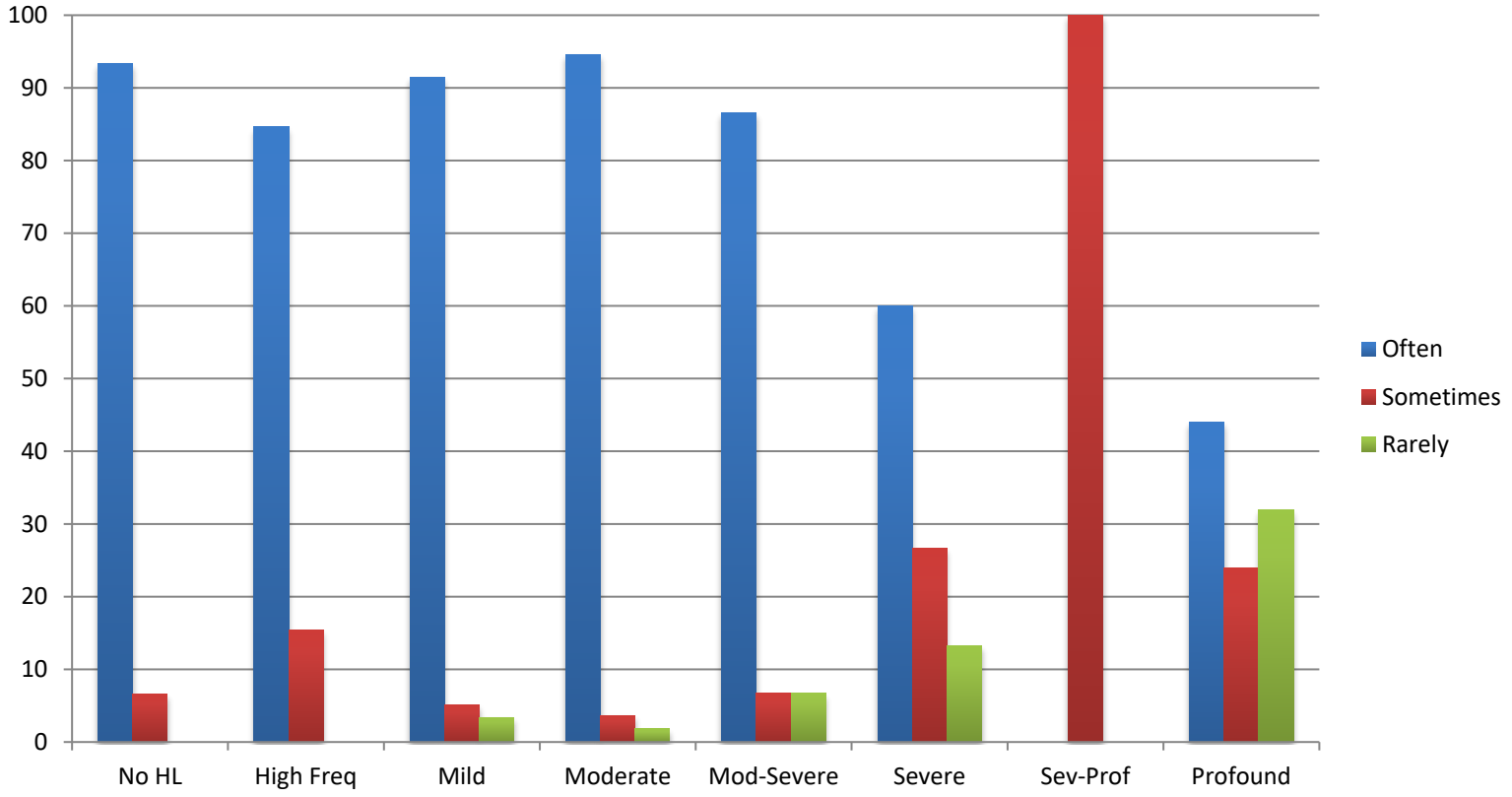
Question 23 (Meagher et al., 2013, DHH)

- Does your child identify familiar songs?



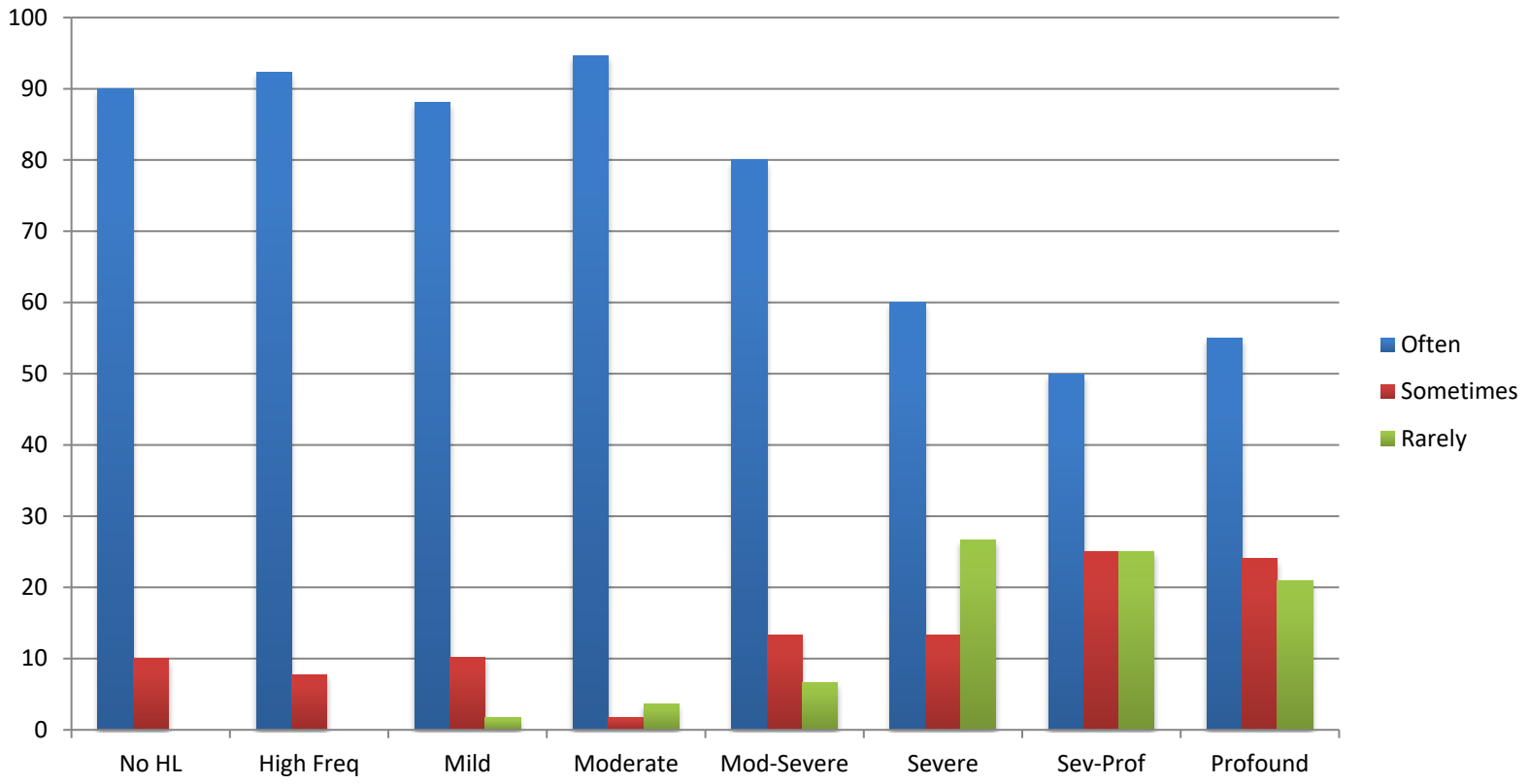
Question 24 (Meagher et al, 2013, DHH)

- Does your child understand frequently heard phrases/sentences?



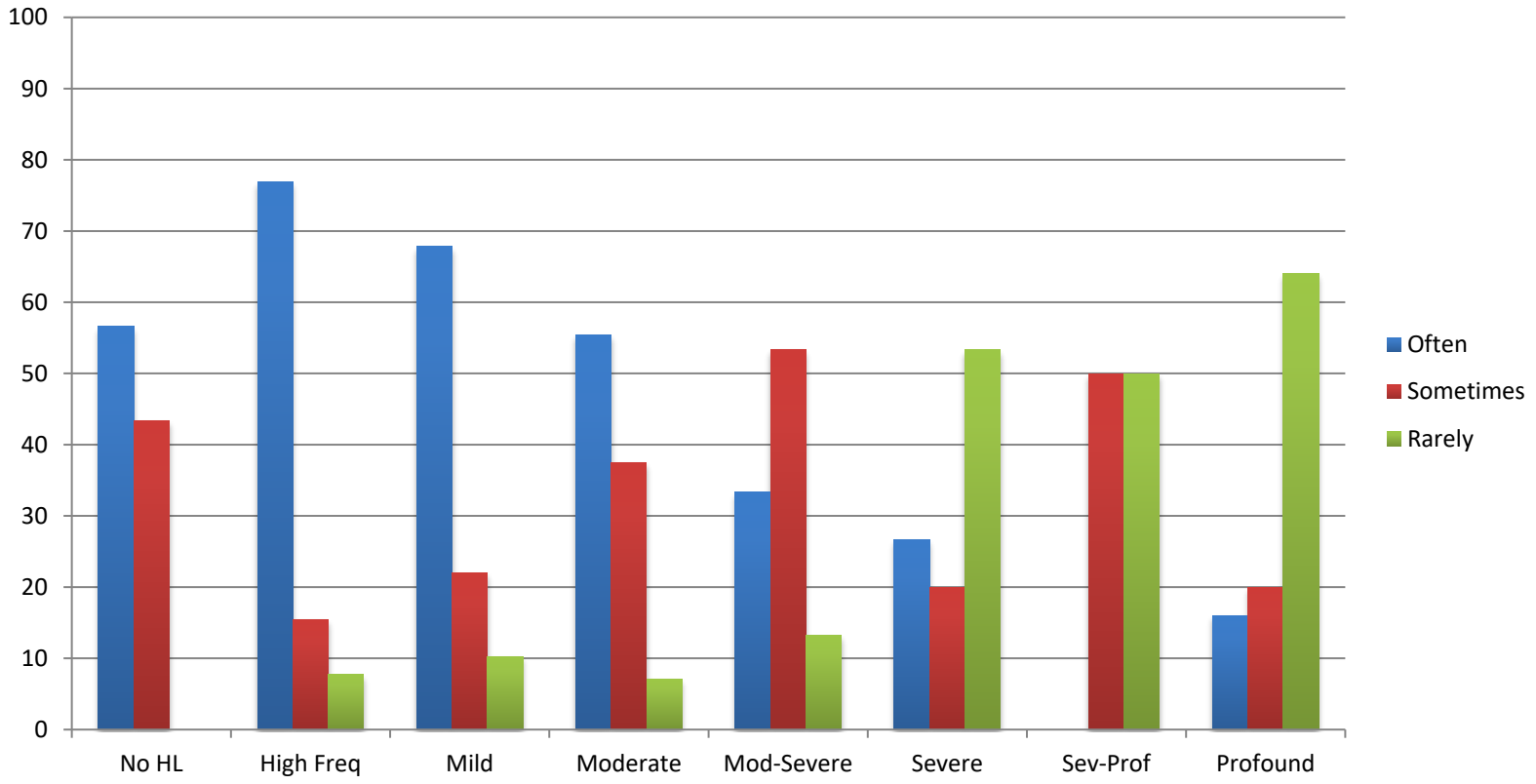
Question 25 (Meagher, et al., 2013, DHH)

- Does your child follow one step directions?



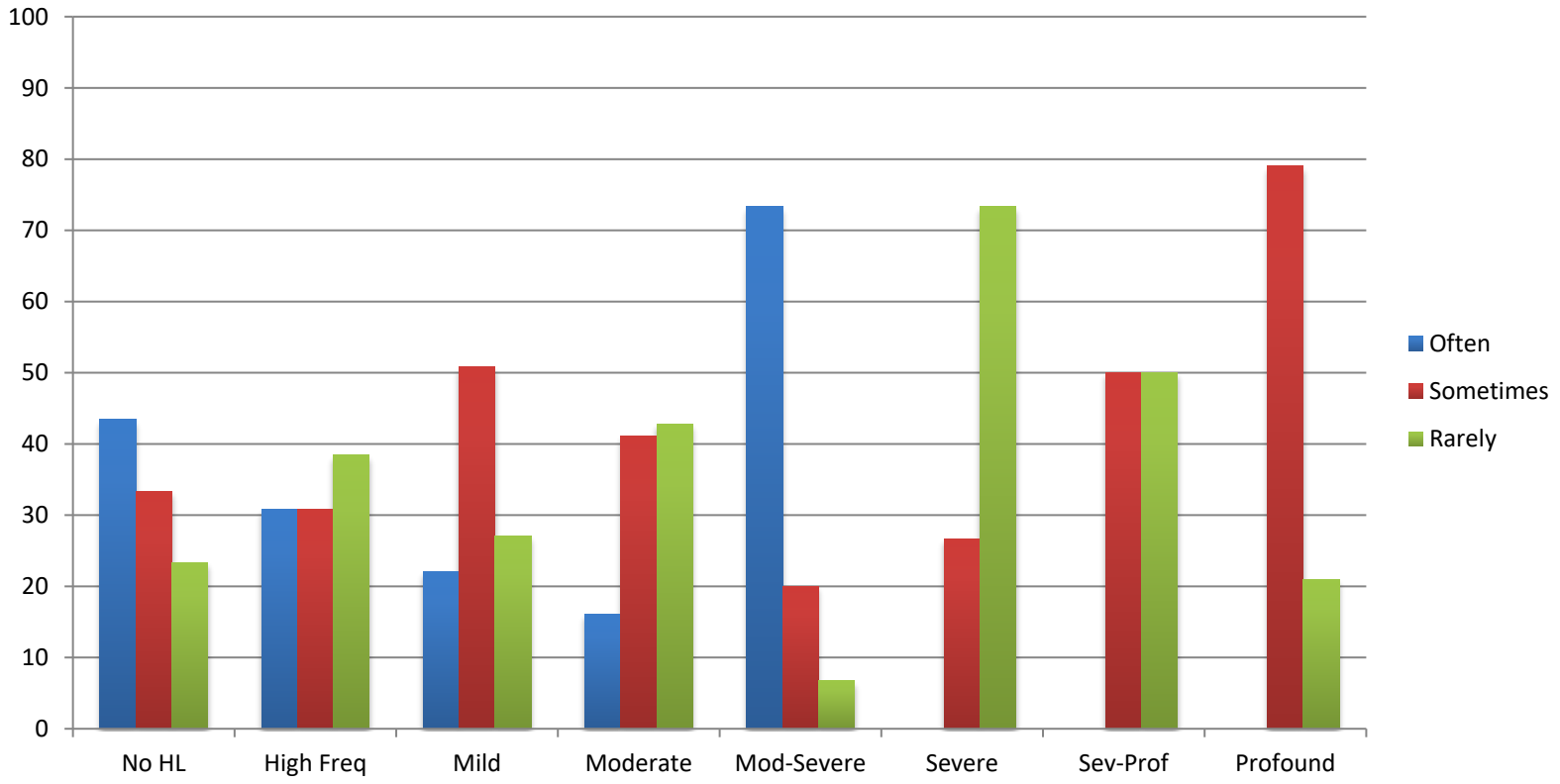
Question 26 (Meagher et al., 2013, DHH)

- Does your child follow two step directions?



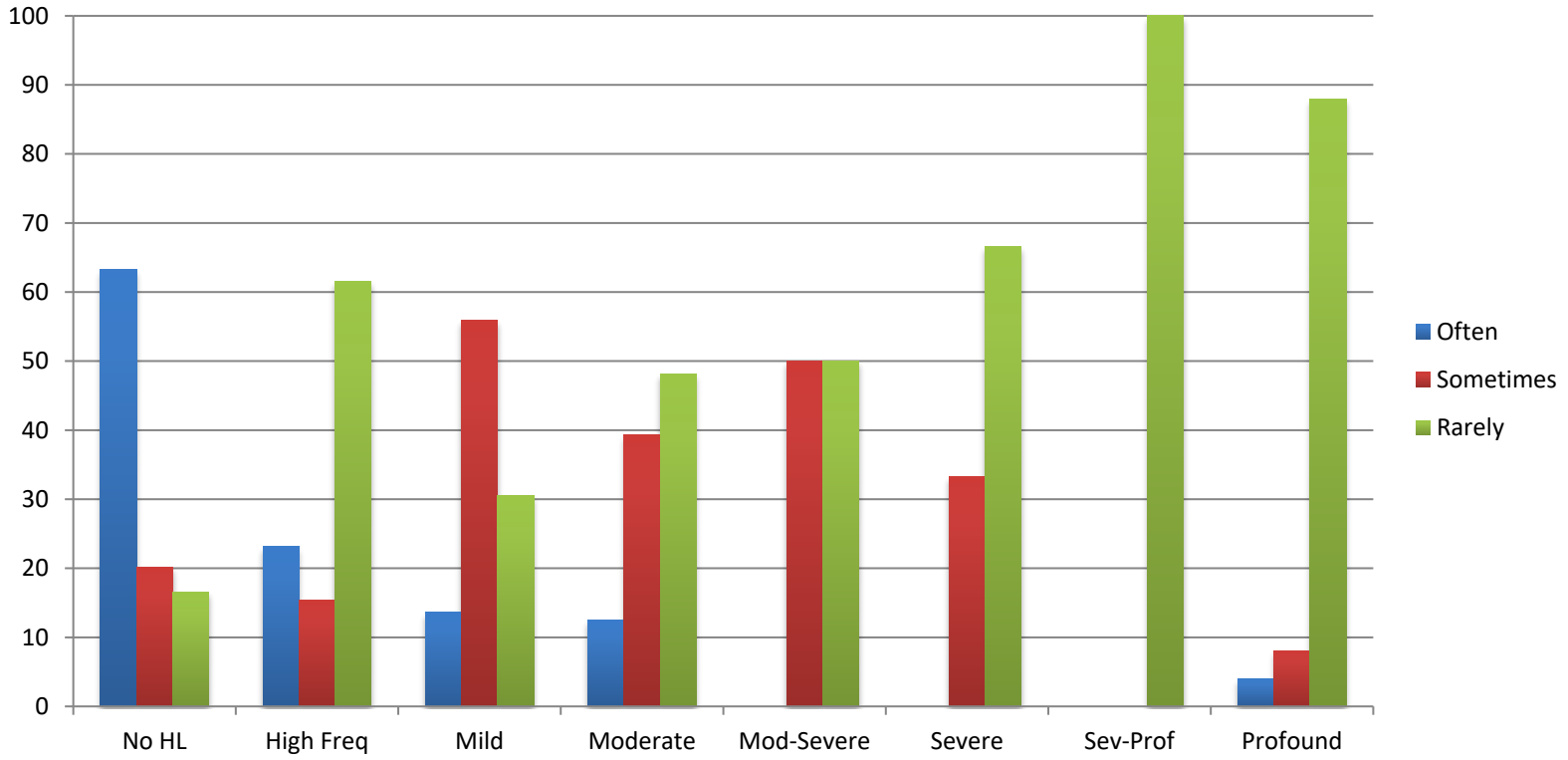
Question 27 (Meagher et al., 2013, DHH)

- Does your child follow three step directions?



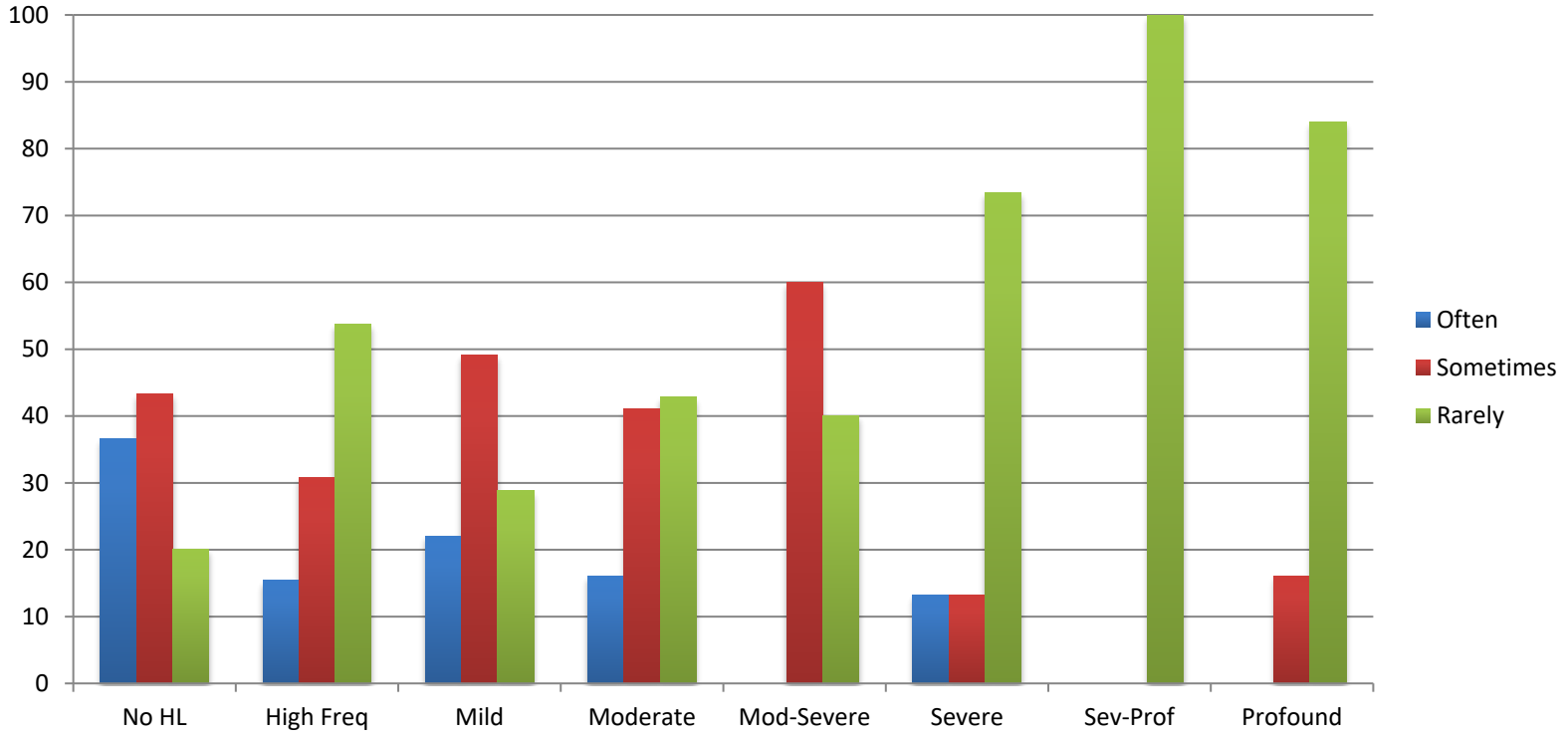
Question 28 (Meagher et al., 2013, DHH)

- Does your child have an auditory memory for phrases/sentences?



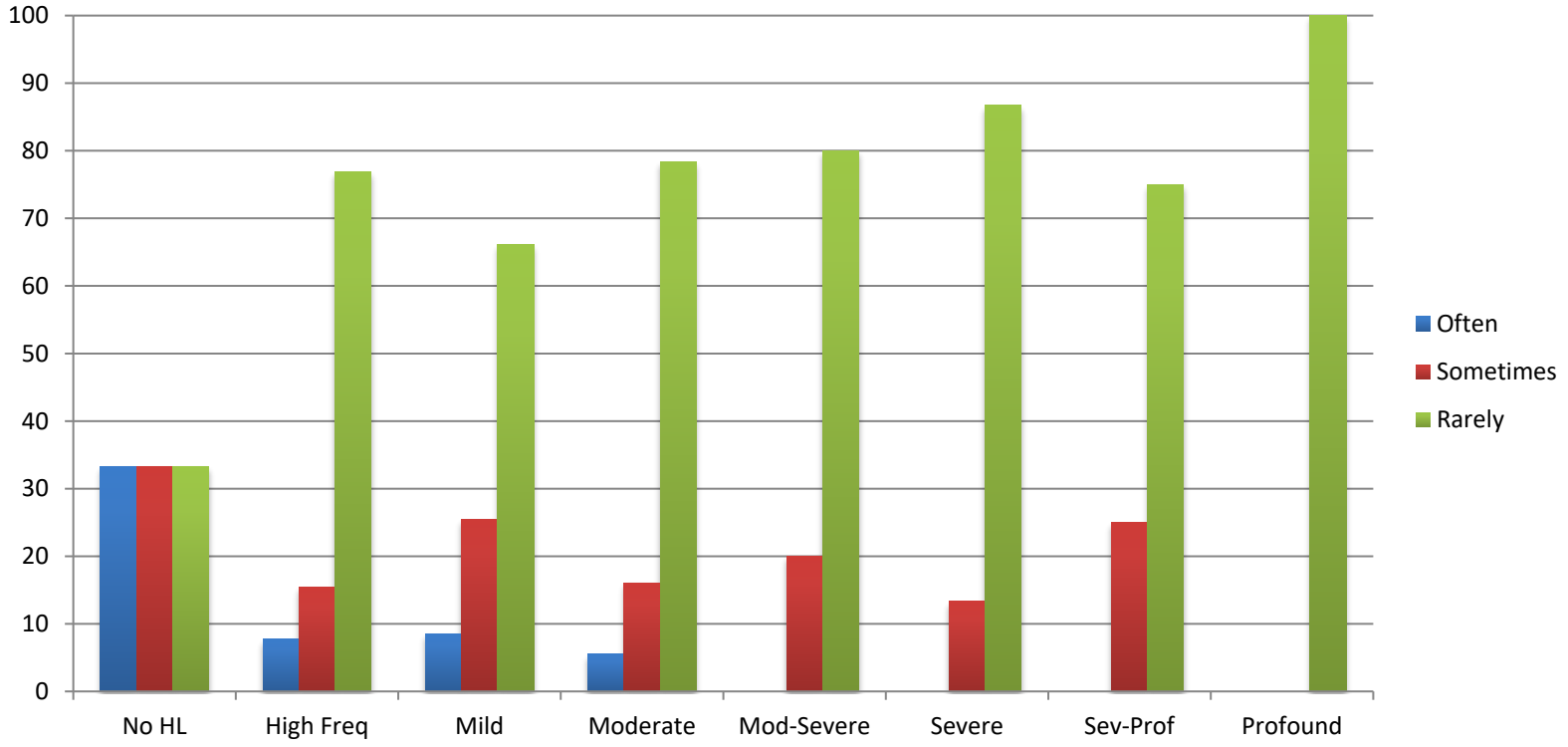
Question 29 (Meagher et al., 2013, DHH)

- Does your child have an auditory memory for items _ 2 _3 _4 _5 _6 _7 _8 _9?



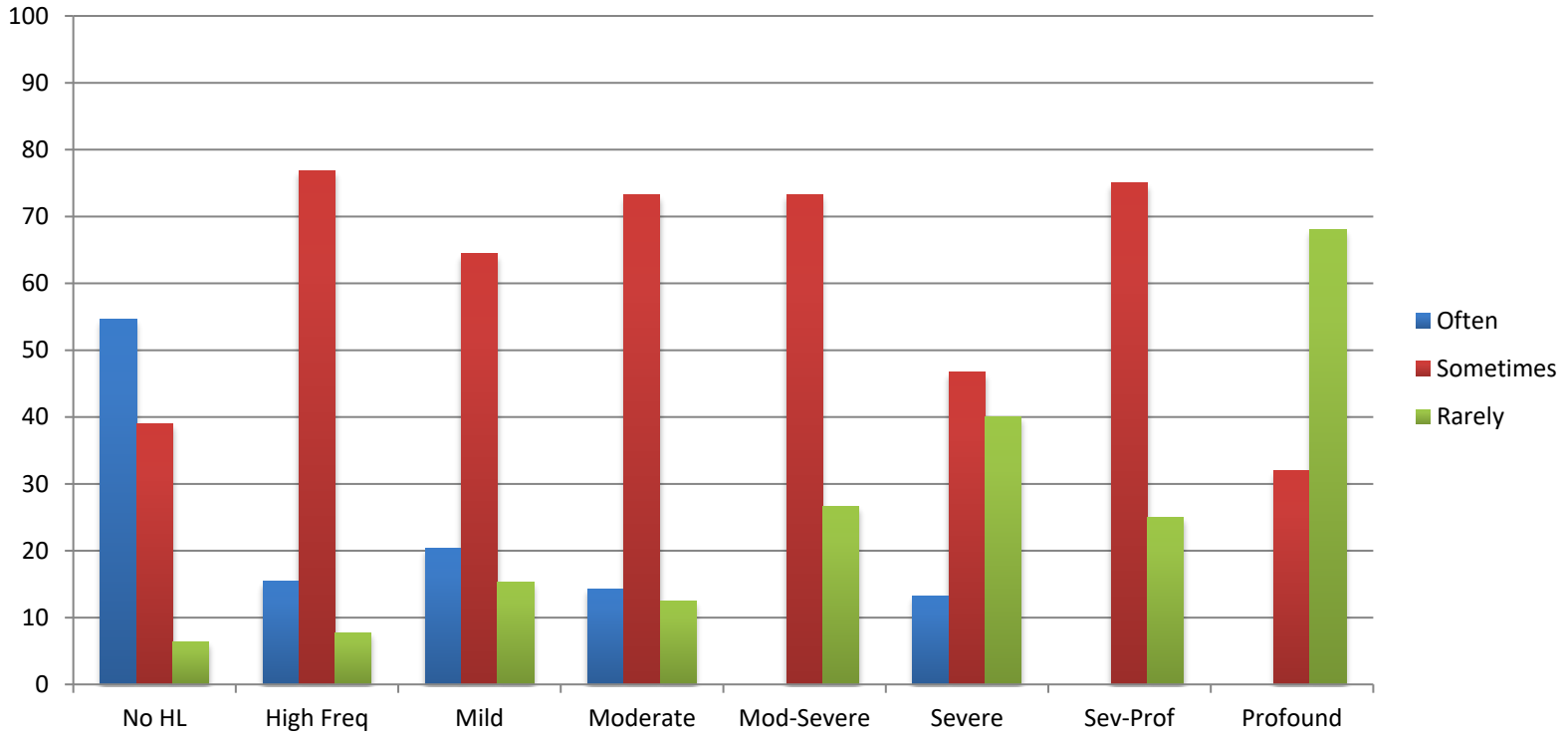
Question 30 (Meagher et al., 2013, DHH)

- Does your child sequence _ 3 events _ 4 events _ 4+ events of a story?



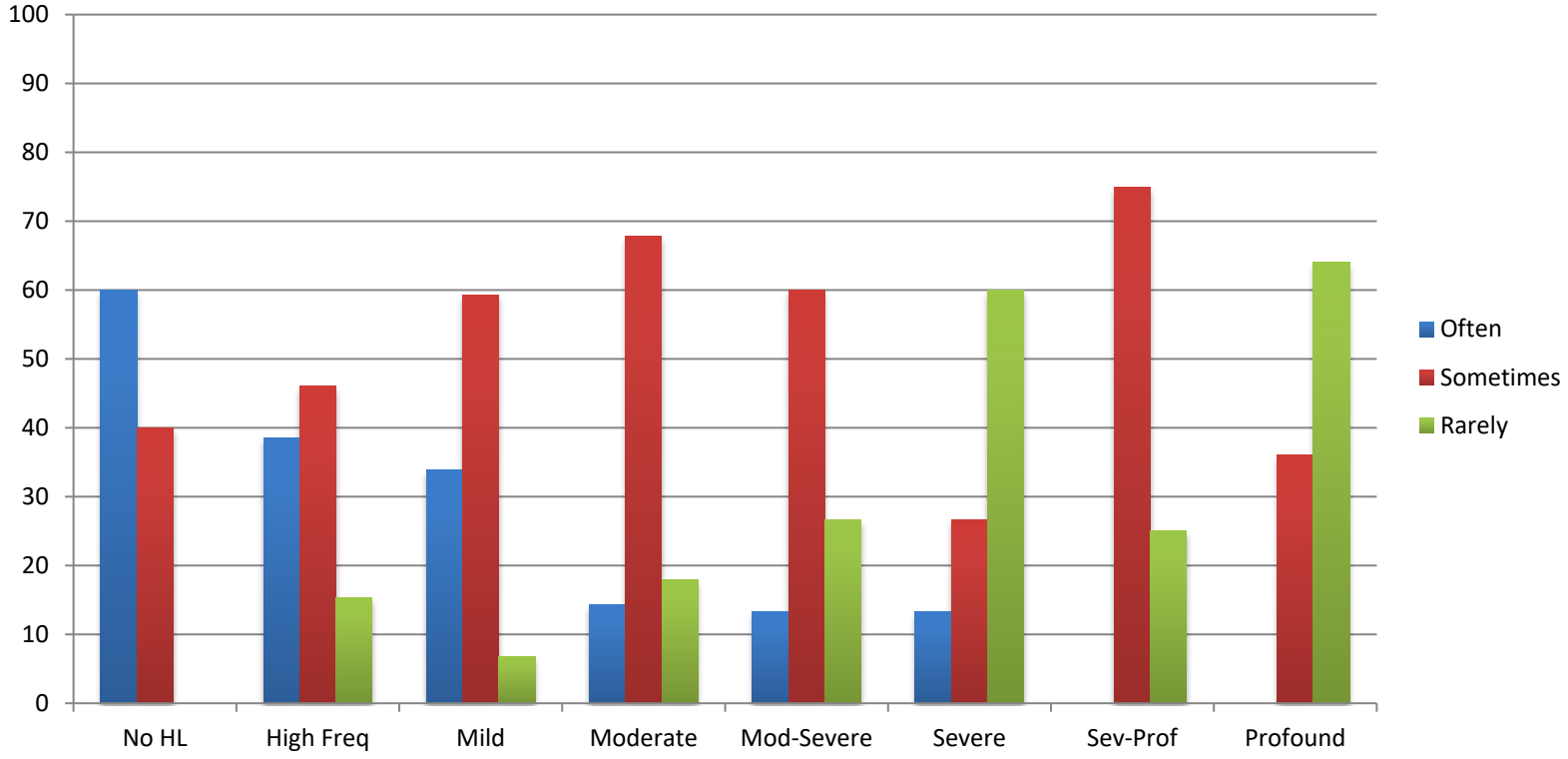
Question 31 (Meagher et al., 2013, DHH)

- Does your child understand the question forms _ what _ where _ who _ why _ when?



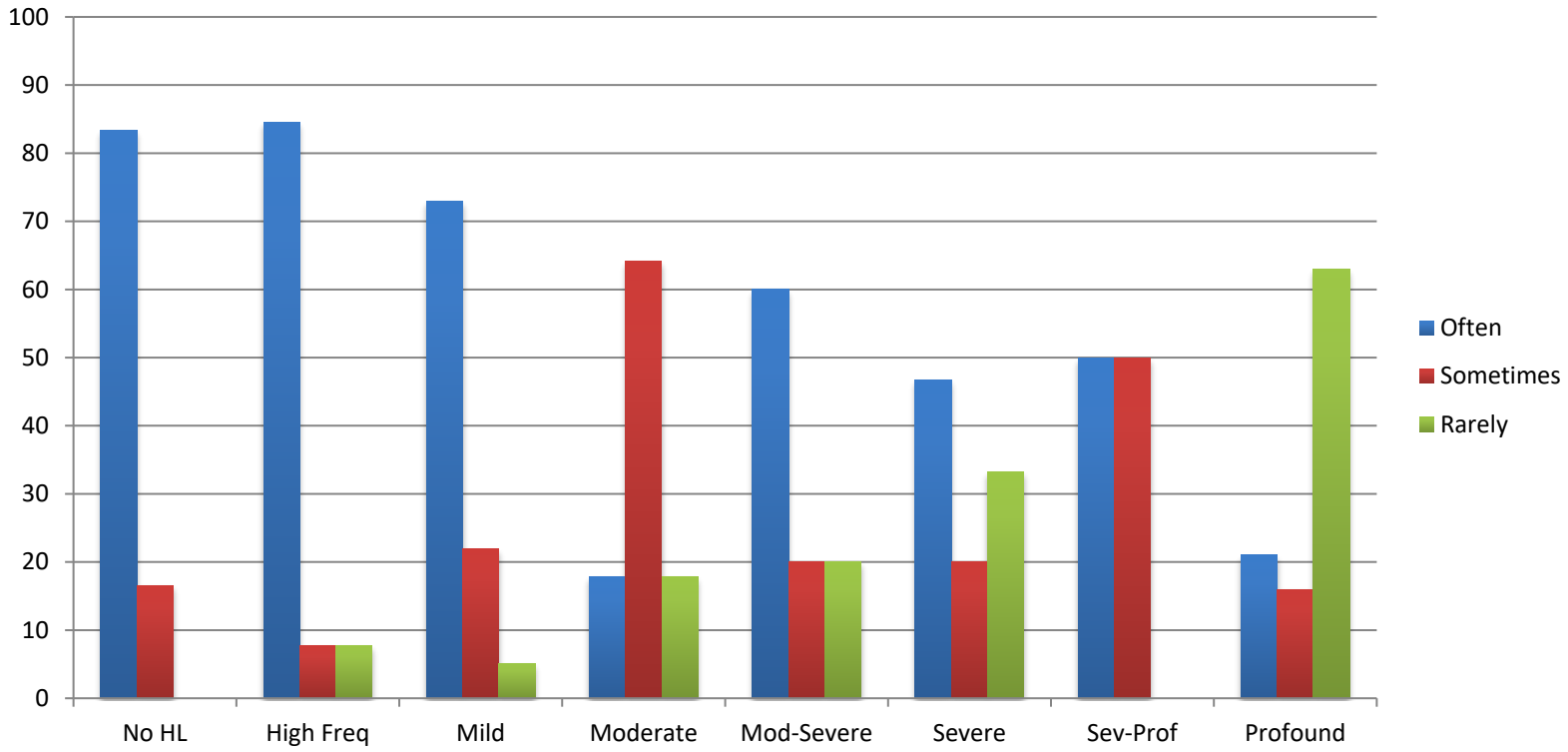
Question 32 (Meagher et al., 2013, DHH)

- Does your child understand concepts in phrases and sentences?



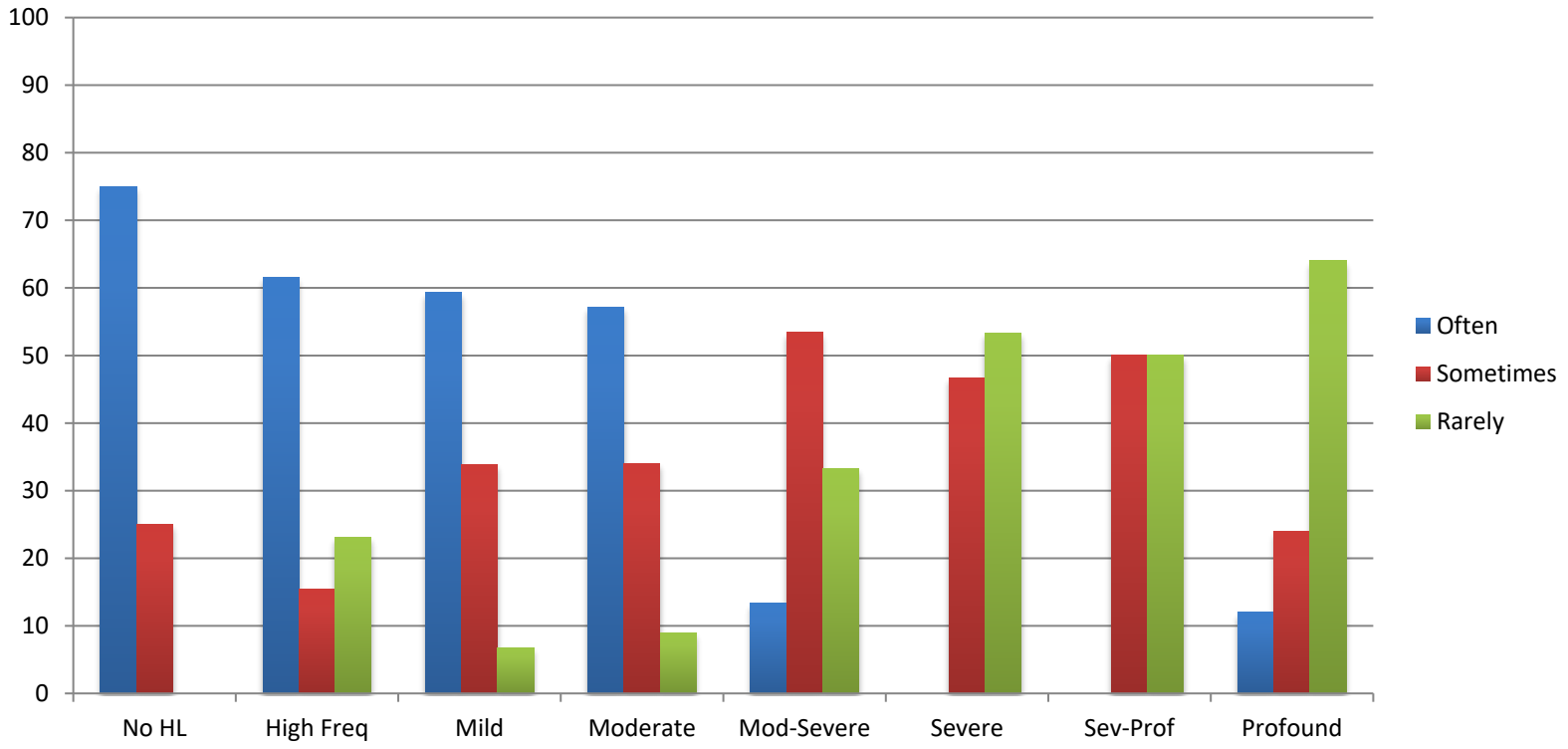
Question 33 (Meagher et al, 2013, DHH)

- Does your child understand the use of negatives in phrases and sentences?



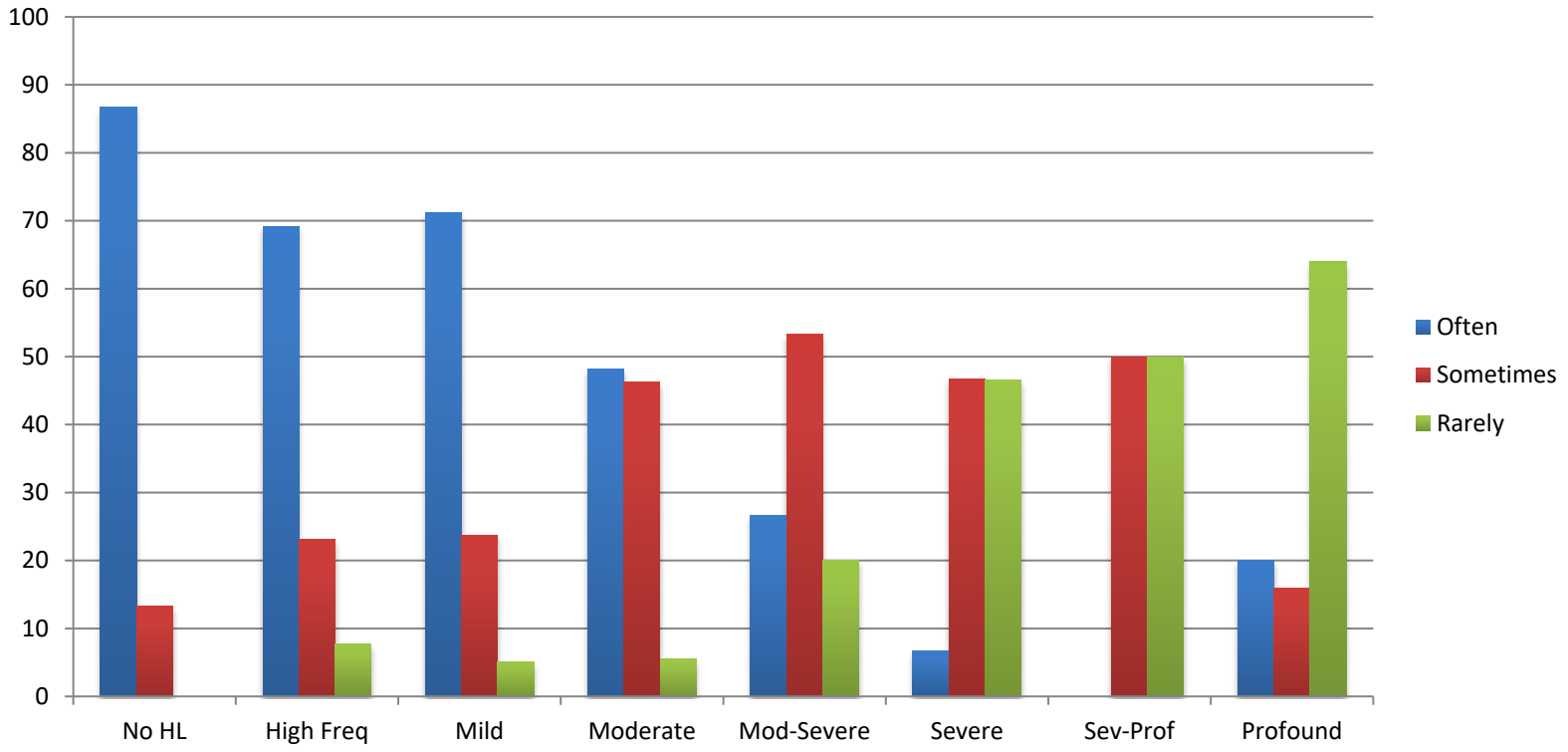
Question 34 (Meagher et al., 2013, DHH)

- Does your child obtain information incidentally through audition/hearing alone?



Question 35 (Meagher et al., 2013, DHH)

- Does your child, through audition/hearing alone, understand most of what is said?



Subjects

- Children 24 – 36 months with normal cognition
- Minnesota CDI
  - Combination of Self-Help and Situational Comprehension
    - Developmental quotient: chronological age/developmental age

Group	Number (n)
No hearing loss*	30
High frequency	13
Mild	59
Moderate	56
Moderate-Severe	15
Severe	15
Severe-Profound	4
Profound	25

Limitations

- Small/uneven sample sizes
  - Especially Severe-Profound group (n=4)
- Descriptive study
  - While there appear to be differences, we do not know without doing statistical analysis
- Some items have not been mastered by typically-developing group
  - No studies have normed the ASC to date
  - A preliminary study was completed in 2013 as a capstone

SUMMARY

- The LittlEars is highly related to language measures in the first year of life and moderately related to language measures in the second and third years of life.
- The strongest relationship between LittlEars and the Auditory Skills Checklist is for children with profound hearing loss.
- Discrimination scores on the Visual Reinforcement Infant Speech Discrimination Test are highly related to the Auditory Skills Checklist scores
- The Auditory Skills Checklist differentiates skills by degree of hearing loss from birth through 36 months.

- This research was supported by the Rehabiitation Engineering Research Center (RERC) Disability Research and Dissemination Center (DRDC) through its Cooperative Agreement Number 5U01DD001007, from the Association of University Centers on Disabilities, and from the Centers for Disease Control (CDC) and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the DRDC, AUCD, the CDC or OE-NIDRR (RERC).