

# KLiP: An Innovative Online Tool for Screening Potential Hearing Loss in Children Aged 3 to 6

Yi-ping Chang, Ph.D., Yu-Chen Hung, Ph.D., Shu-Ting Chang, Yongfu Liao, Ming Lo, Ph.D., Yi-Chih Chan, Ph.D., Pin-Chun Chen, Yin-Chen Wang

Speech and Hearing Science Research Institute, Children's Hearing Foundation, Taiwan



## Background

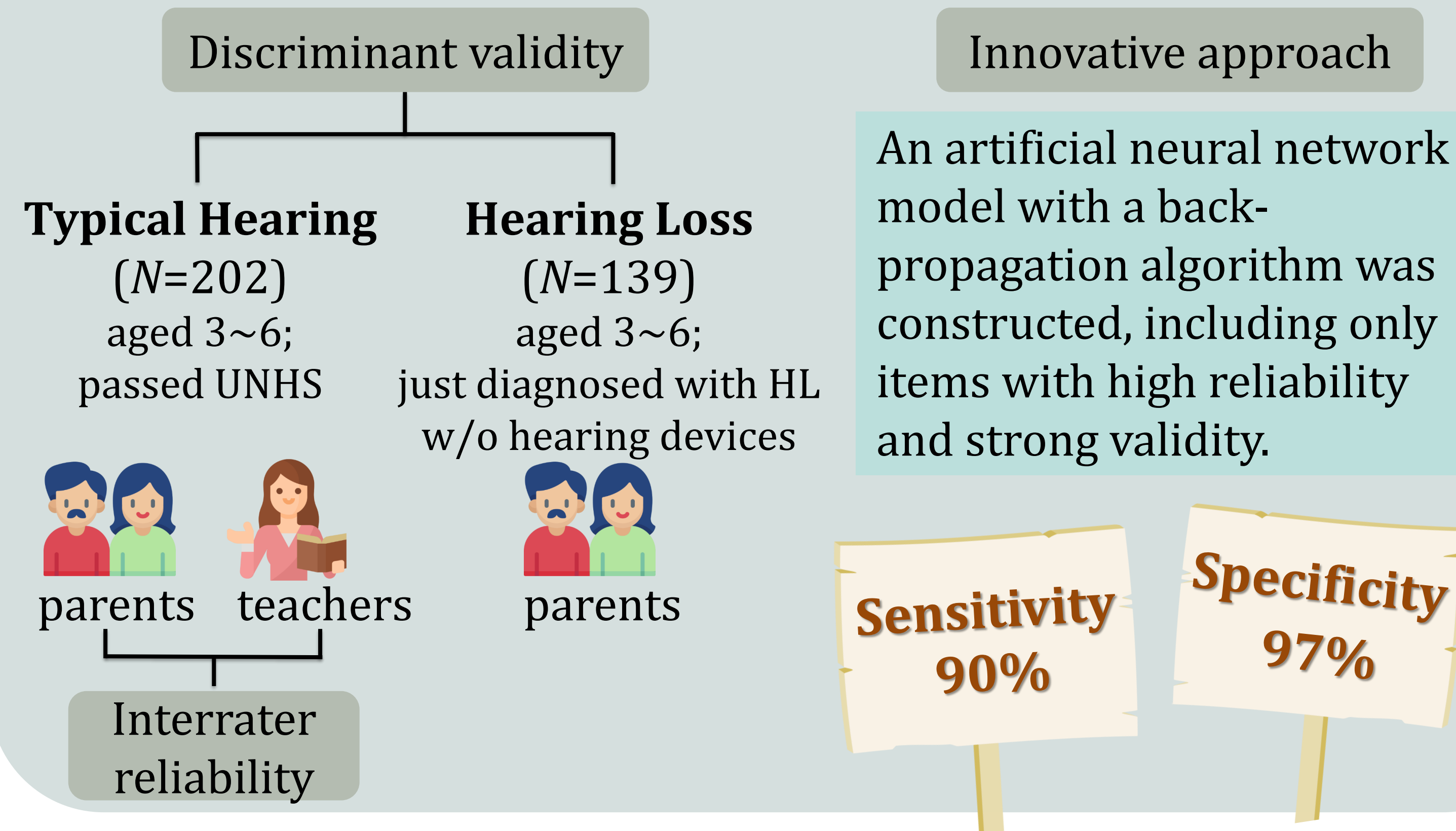
While Preschool Hearing Screening (PHS) has proven effective in identifying children with late-onset hearing loss, its full implementation in Taiwan has encountered various challenges, such as cost, limited trained personnel, and insufficient resources.

## Aim of the Study

To develop the Kid's Listening Performance (KLiP) Checklist, a user-friendly online tool designed for parents and preschool teachers to identify children who may have potential hearing difficulties.

## Validation

A comprehensive literature review and expert feedback resulted in an initial set of 29 items.



## KLiP

The final KLiP Checklist consisted of 6 clinical background questions and 8 items evaluating listening performance.



### 8 main items

(**"Red"** answers indicates potential hearing difficulties)

- ① Hears and understands most of what is said at home and in school. (Yes/**No**)
- ② Responds appropriately (e.g., answer questions, express opinions, ask questions) after listening to a story or a dialog. (Yes/**No**)
- ③ Often requests others to repeat for clarification (such as saying, "Huh? What did you say?") (**Yes**/No)
- ④ Has difficulties determining the direction of a sound. (**Yes**/No)
- ⑤ Follows longer directions, like "get the toy cars on the table and put it into the basket in the room" or "draw a small circle and a big square on the paper." (Yes/**No**)
- ⑥ Often tilts his/her head to listen with one ear. (**Yes**/No)
- ⑦ Concern has been raised regarding potential hearing difficulties in my child. (**Yes**/No)
- ⑧ Strangers can generally understand what the child is saying. (Yes/**No**)

## Significance

- ✓ The KLiP Checklist is a user-friendly, low-cost, and accessible online tool.
- Users receive immediate results which can be easily saved and shared with family members or professionals for further evaluation.
- It empowers parents and preschool teachers to identify children with potential hearing difficulties and seek early professional consultation.
- ✓ The KLiP Checklist serves as a surveillance tool to complement PHS.

