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Being deaf at the playground: the effects of hearing loss on children's social participation

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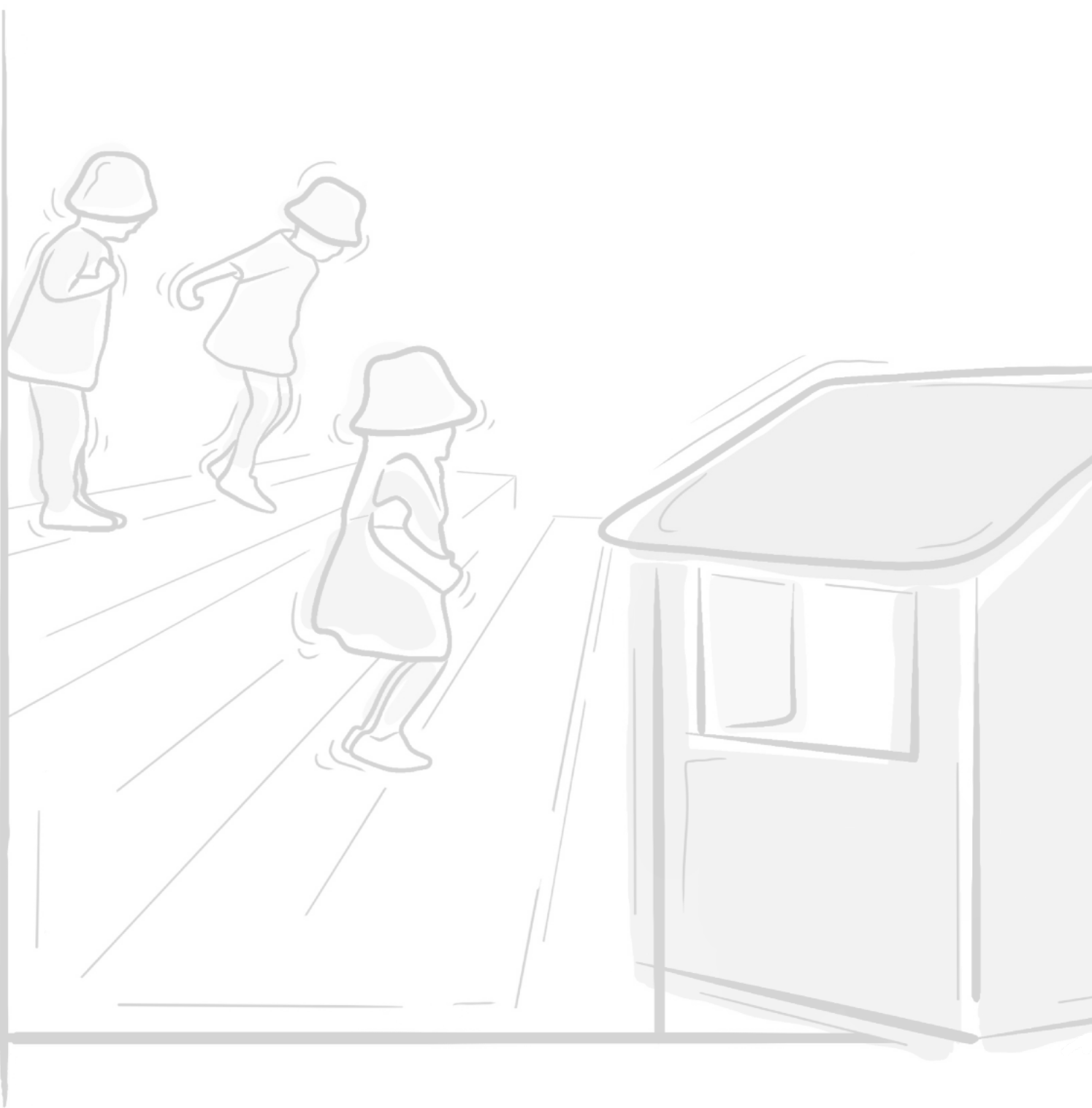
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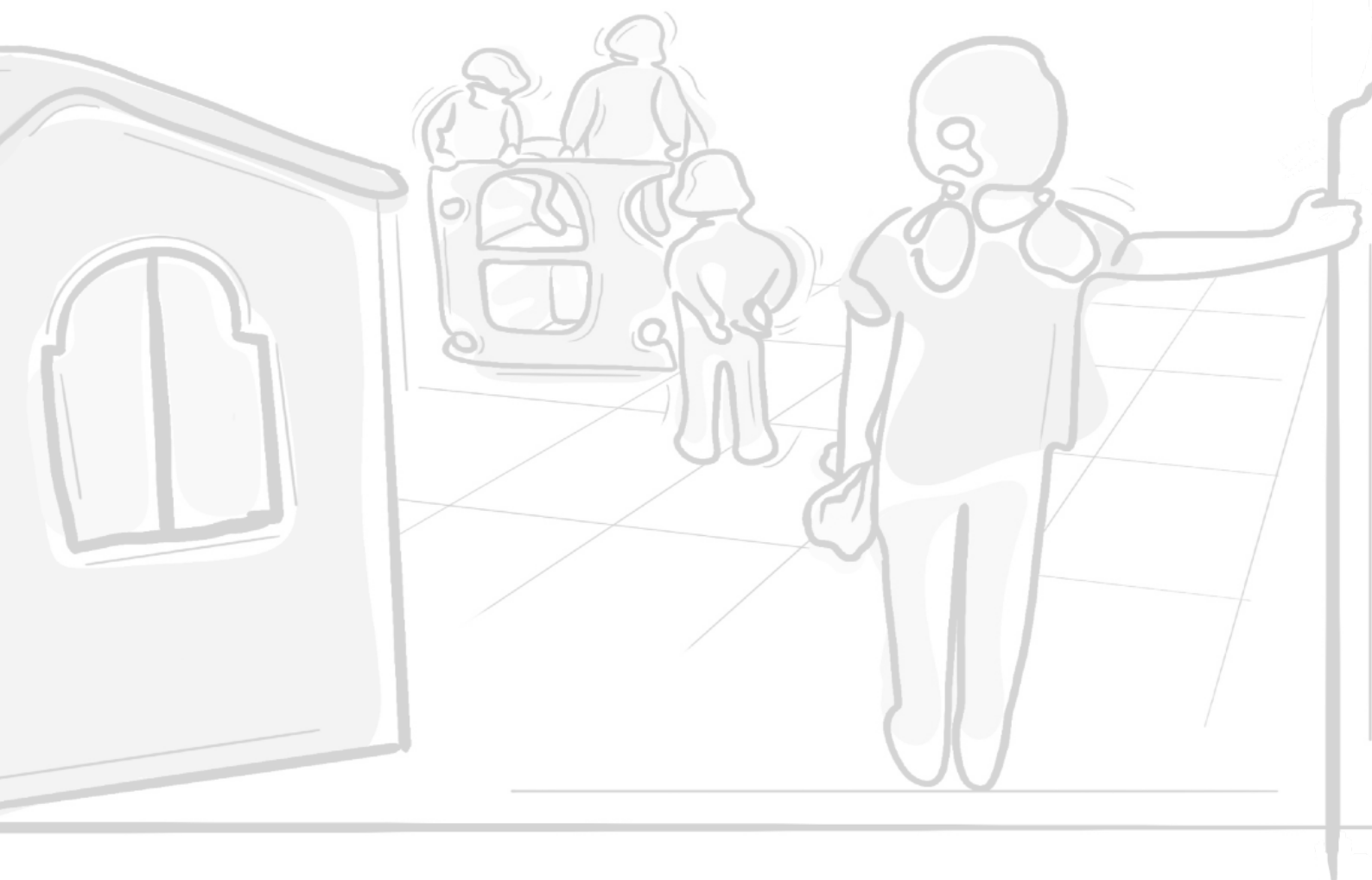
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Appendices



Supplemental Material Chapter 4

S.4.1 – Differences between peer preference assessment with 45 and 80 pairs

In order to assess Peer Preference, a computerized assessment of paired comparison was conducted (Endedijk and Cillessen 2015). On the day of the assessment, an individual picture of each child from the class was taken and uploaded to one tablet. All pictures were numbered where each child was assigned a specific number on the classroom list. The experimenter would call each child to a separate room, and present the tablet to run the experiment. To introduce the task, children were presented with pictures of a pair of toys on the screen and the experimenter asked the child to touch the toy that he/she liked to play with the most. Once it was clear that the children understood how this worked, the experimental task started.

During the experiment, pairs of photos of classmates were presented on the screen, and the experimenter would ask the child “which one of these children do you like to play with the most?”. The child was again asked to indicate his/her preference by touching the screen, after which another pair of photos would be presented. Initially the maximum number of pairs (with random matching of photos of all children in the classroom; no pairs were repeated, thus all pairs presented were unique combinations) that were to be shown to each child was set up to 80, but after the first four data collection sessions, it was clear that the younger children were distracted and uneasy after 40/50 pairs of the experiment. Therefore, the maximum number of pairs presented was adjusted to 45 to ensure that all children were focused. The first 29 children to perform the experiment saw 80 pairs and the remaining 106 children saw 45. To test whether the average results for children who performed the task after viewing 45 pairs and 80 pairs, the participants were divided by into two groups and t-tests were conducted. Our results revealed no significant differences in the average peer preference score between groups ($t(133) = -.906$, $p = .183$), therefore we maintained all results in our analysis.

References

Endedijk, Hinke M., and Antonius H. N. Cillessen. 2015. “Computerized Sociometric Assessment for Preschool Children.” *International Journal of Behavioral Development* 39 (4): 383–88.

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in more ways than you realize, and I hope we continue to be part of each other's lives for decades to come.

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Curriculum Vitae

Brenda de Sousa da Silva was born in 1991 in Benguela, Angola. In 2009 she graduated from Colégio de Albergaria, and then went on to pursue her bachelor in Psychomotor Rehabilitation from University of Évora, and a Master's degree in Psychomotor Rehabilitation at University of Lisbon in 2014. Brenda has completed her training in clinical settings with children with mental health problems, related to emotional problems. She has also worked with adults with addiction disorders and mental health problems. In 2016, Brenda started her PhD at the Developmental and Educational Psychology unit of the Institute of Psychology at Leiden University, within the Focus on Emotions lab under the supervision of Prof.dr. Carolien Rieffe, Prof.dr. Berna Güroğlu, Prof.dr. ir. Johan H.M. Frijns (LUMC, Leiden) and Dr. Guida Veiga (University of Évora, Portugal). Brenda's PhD project focused on play, socialization and emotional development in children with and without hearing loss. The aim of the project was to better understand how hearing loss can impact on social participation of children within their peer group. Since 2019 her research project has been financed by the Portuguese Foundation for Science and Technology (FCT 2019 Studentship Grant SFRH/BD/144768/2019). Currently Brenda is coordinator of research projects in a private solidarity institution that shelters people/families who suffer from social vulnerability. Her role is to conduct and partner in research projects aimed towards improving services provided to those in need, but also maintain synergies with Portuguese government to promote changes in national policies regarding vulnerable people.

List of publications

da Silva, B. M. S., Veiga, G., Rieffe, C., Endedijk, H. M., & Güroğlu, B. (2023). Do my reactions outweigh my actions? The relation between reactive and proactive aggression with peer acceptance in preschoolers. *Children*, 10(9), 1532. <https://doi.org/10.3390/children10091532>

Moreira, M., Cordovil, R., Lopes, F., **Da Silva, B. M. S.**, & Veiga, G. (2022). The Relationship between the Quality of Kindergartens' Outdoor Physical Environment and Preschoolers' Social Functioning. *Education Sciences*, 12(10), 661. doi: 10.3390/educsci12100661

Da Silva, B. M. S., Rieffe, C., Frijns, J. H. M., Sousa, H., Monteiro, L., & Veiga, G. (2022). Being Deaf in Mainstream Schools: The Effect of a Hearing Loss in Children's Playground Behaviors. *Children*, 9(7), 1091. <http://dx.doi.org/10.3390/children9071091>

Da Silva, B. M. S., Rieffe, C., & Veiga, G. (2022). Empathy in preschool Portuguese children: Validation of the Empathy Questionnaire (EmQue). *Social Development*: 1–12. <https://doi.org/10.1111/sode.12588>

Da Silva, B.M.S., Ketelaar, L., Veiga, G., Tsou, Y. T., & Rieffe, C. (2022). Moral emotions in early childhood: Validation of the Moral Emotions Questionnaire (MEQ). in *International Journal of Behavioral Development*, 46(2):157–168. <https://doi.org/10.1177/01650254221075031>

Rieffe, C., Broekhof, E., Eichengreen, A., Kouwenberg, M., Veiga, G., **Sousa da Silva, B.M.**, & Frijns, J.H. (2018). Friendship and emotion control in pre-adolescents with or without hearing loss. *The Journal of Deaf Studies and Deaf Education*, 23(3), 209-218. doi: 10.1093/deafed/eny012