

Supplementary Table 7. Synthesized concepts about experiences related to hearing aid sub-optimal use: device-related challenges (sub-domain 3a).

Synthesized concepts	Density	Hearing aid categories			List of studies
		Conventional HAs	Smartphone-connected HAs	DTC HAs	
Handling & continuous care (including maintenance, repairs)	13	✓		✓	Choi et al. (2019); Chundu et al. (2021); Dawes et al. (2014); Gallagher & Woodside (2018); Guerra-Zúñiga et al. (2014); Laplante-Levesque et al. (2012); Linssen et al. (2013); McPherson & Wong (2005); Moroe & Vazanna (2019); Ritter et al. (2020); Solheim et al. (2018); Stephens & Meredith (1991); Tyler et al. (1983)
Background noise & group conversations	13	✓	✓	✓	Choi et al. (2019); Gallagher & Woodside (2018); Holman et al. (2019); Laplante-Levesque et al. (2013); Linssen et al. (2013); Lockey et al. (2010); Maidment et al. (2019); McPherson & Wong (2005); Moroe & Vazanna (2019); Ritter et al. (2020); Skagerstrand et al. (2014); Stephens & Meredith (1991); Tyler et al. (1983)
Sound quality	11	✓		✓	Chundu et al. (2021); Dawes et al. (2014); Holman et al. (2019); Laplante-Levesque et al. (2013); Linssen et al. (2013); Manchaiah et al. (2019); McPherson & Wong (2005); Skagerstrand et al. (2014); Solheim et al. (2018); Stephens & Meredith (1991); Tyler et al. (1983)
Physical fit: hearing aid, sound delivery system	9	✓		✓	Choi et al. (2019); Chundu et al. (2021); Gallagher & Woodside (2018); Holman et al. (2019); Laplante-Levesque et al. (2013); Moroe & Vazanna (2019); Ritter et al. (2020); Stephens & Meredith (1991); Tyler et al. (1983)
Listening situation specific challenges	6	✓			Gallagher & Woodside (2018); Greasley et al. (2020); Linssen et al. (2013); Skagerstrand et al. (2014); Stephens & Meredith (1991); Vaisberg et al. (2019)
Appearance and design	4	✓			Chundu et al. (2021); Ritter et al. (2020); Solheim et al. (2018); Stephens & Meredith (1991)
Acoustic feedback	4	✓		✓	Choi et al. (2019); Linssen et al. (2013); McPherson & Wong (2005); Tyler et al. (1983)
Device limitations	2	✓			Chundu et al. (2021); Laplante-Levesque et al. (2013)
Cost	2	✓			Chundu et al. (2021); Ritter et al. (2020)
Additional use challenges: smartphone related	1		✓		Ng et al. (2017)

Note: DTC = Direct-to-consumer; HA = hearing aids