

Supplementary digital content II: Characteristics of identified applications (n=146)

	Date	Database	App /Internet	Name	Device	Area of application	Area of application 2	User /Facilitated	Setting	Broad setting	Broad setting 2	Adult/ Children	Broad type of study	Broad type of study 2	Sample size	Product availability	Country Conducted	WHO Region conducted	High or LMIC Conducted
1.	2019	Scopus	App	Ear Scale	Smartphone	Screening		Self	School	School		Children	Validation		85	Commercial	Taiwan	Western Pacific	High
2.	2020	Scopus	App	Kids Hearing Game	Ipad(tablet)	Screening		Self	Clinic	Clinic		Children	Validation		516	Commercial	China	Western Pacific	Upper Middle
3.	2017	Scopus	App	_	Smartphone	Treatment	Support	Self	Audiology clinic (Uni)	Clinic		Adults	Feasibility		6	Research	America	Americas	High
4.	2020	Scopus	App	Ear Scale	Smartphone	diagnostic		Self	Outpatient department	Clinic		Adults	Validation		88	Commercial	Taiwan	Western Pacific	High
5.	2019	Scopus	App	_	Smartphone	diagnostic		Self	Hospital	Clinic		Adults	Validation		60	Commercial	Israel	Eastern Mediteranian	High
6.	2018	Scopus	App	_	Tablet	Screening		Self	School	School		Children	Design and usability	Validation	122	Research	Thailand	South east Asia	Upper Middle
7.	2020	Scopus	App	HearTest	Smartphone	diagnostic		Self	Clinic	Clinic		Adults	Validation		63	Proprietary	South Africa	African	Upper Middle
8.	2016	Scopus	App	ShoeBox	Tablet	diagnostic		Self	Consultation room	Clinic		Both	Validation		49	Proprietary	America	Americas	High
9.	2017	Scopus	App	ShoeBox and EarTrumpet	Tablet	diagnostic		Self	Hospital (sound booth)	Clinic		Adults	Validation		33	Proprietary	Canada	Americas	High
10.	2018	Scopus	App	uHear	Smartphone	Screening		Self	Audiology clinic (quiet room)	Clinic		Adults	Validation		22	Commercial	America	Americas	High
11.	2019	Scopus	App	ShoeBox	Tablet	diagnostic		Self	Clinic	Clinic		Adults	Validation		124	Proprietary	Canada	Americas	High
12.	2017	Scopus	App	_	Smartphone	Support		Self	Audiology clinic (quiet room)	Clinic		Adults	Validation		9	Research	Jordan	Eastern Mediteranian	Upper Middle
13.	2018	Scopus	App	_	Smartphone	Treatment		Self	Home environments	Daily life		Adults	Design and usability		20	Proprietary	UK	European	High
14.	2017	Scopus	App	uHear	Tablet	Screening		Self	Room simulating home or clinic	Clinic		Adults	Validation		77	Commercial	Israel	Eastern Mediteranian	High
15.	2020	Scopus	App	Petralex®	Smartphone	Treatment		Self	Audiology clinic	Clinic		Adults	Validation		68	Commercial	Spain and Italy	European	High
16.	2013	Scopus	App	EarTrumpet	Smartphone	diagnostic		Self	Audiology clinic	Clinic		Adults	Feasibility		42	Commercial	America	Americas	High
17.	2019	Scopus	App	EarBone	Smartphone	diagnostic		Self	Audiology clinic	Clinic		Adults	Validation		40	Research	America	Americas	High
18.	2017	Scopus	App	HearTest	Smartphone	diagnostic		Self	Audiology clinic	Clinic		Both	Validation		95	Proprietary	South Africa	African	Upper Middle

19.	2019	Scopus	App	iBrateMe© vibration application	Smartphone	Screening		Facilitated	Hospital	Clinic		Adults	Validation		20	Commercial	UK	European	High
20.	2012	Scopus	App	_	Smartphone	diagnostic		Self	Audiology clinic	Clinic		Adults	Validation		100	Research	Australia	Western Pacific	High
21.	2016	Scopus	App	hearScreen	Smartphone	Screening		Facilitated	School	School		Children	Validation		1070	Proprietary	South Africa	African	Upper Middle
22.	2019	Scopus	App	HearScreen	Smartphone	Screening		Facilitated	School	School		Children	Validation		104	Proprietary	Kenya	African	Lower middle
23.	2018	Scopus	App	HearScreen	Smartphone	Screening		Facilitated	School	School		Children	Feasibility		6242	Proprietary	South Africa	African	Upper Middle
24.	2019	Scopus	App	Hearing Test	Smartphone	Screening		Self	Audiology clinic (quiet room)	Clinic		Both	Validation		52	Commercial	India	South east Asia	Lower middle
25.	2020	Scopus	App	_	Smartphone	Support		Self	Home environments	Daily life		Adults	Validation		44	Commercial	UK	European	High
26.	2020	Scopus	App	Sound Scouts	Tablet	Screening		Self	School	School		Children	Validation		297	Commercial	Australia	Western Pacific	High
27.	2015	Scopus	App	AudCal	Smartphone	diagnostic		Self	Clinic (quiet room)	Clinic		Adults	Validation		110	Commercial	Spain	European	High
28.	2016	Scopus	App	DIN	Smartphone	Screening		Self	Hospital (quiet room)	Clinic		Adults	Design and usability	Validation	186	Proprietary	South Africa	African	Upper Middle
29.	2019	Scopus	App	HearTest	Tablet	diagnostic		Facilitated	clinic	Clinic		Adults	Validation		617	Proprietary	Malawi	African	Low
30.	2017	Scopus	App	_	Smartphone	Support		Self	Home environments	Daily life		Adults	Validation	Feasibility	29	Research	Australia	Western Pacific	High
31.	2014	Scopus	App	_	Tablet	diagnostic		Self	audiology clinic (soundproof booth)	Clinic		Adults	Validation		9	Research	uk	European	High
32.	2018	Scopus	App	MyHearingApp	Tablet	support		self	Home environments	Home		Adults	Feasibility		16	Research	Netherlands	European	High
33.	2018	Scopus	App	DIN	Smartphone	diagnostic		Self	audiology clinic (soundproof booth)	Clinic		Adults	Validation		109	Proprietary	South Africa	African	Upper Middle
34.	2020	Scopus	Internet	m2Hear	Smartphone	Support(education)		Self	Home environments	Daily life		Adults	Feasibility		16	Commercial	UK	European	High
35.	2020	Scopus	App	Audimatch app	Tablet	Screening		Self	audiology clinic (soundproof booth)	Clinic		Adults	Validation	Feasibility	68	Research	Germany	European	High
36.	2017	Scopus	Internet	_	Smartphone	Screening		Self	School	School		Children	Validation		94	Proprietary	Netherlands	European	High

37.	2020	Scopus	App	Hearing test	Smartphone	Screening		Facilitated	ENT Clinic	Clinic		Children	Validation		50	Commercial	Turkey	Eastern Mediterranean	Upper Middle
38.	2020	Scopus	App	ShoeBox	Tablet	Screening		Facilitated	Clinic (no booth)	Clinic		Both	Validation		70	Proprietary	India	South east Asia	Lower middle
39.	2019	Scopus	App	HearTest	Smartphone	diagnostic		Self	clinic (sound booth)	Clinic		Adults	Validation		61	Proprietary	South Africa	African	Upper Middle
40.	2020	Scopus	App	HearTest	Smartphone	diagnostic		Facilitated	home	Home		Adults	Feasibility		30	Proprietary	Malawi	African	low
41.	2020	Scopus	App	HearTest	Smartphone	diagnostic		Facilitated	home	Home		Adults	Feasibility		1344	Proprietary	China	Western Pacific	Upper Middle
42.	2019	Scopus	App	hearScreen	Smartphone	Screening		Facilitated	School	School		Children	Feasibility		10362	Proprietary	South Africa	African	Upper Middle
43.	2020	Scopus	App	Sound Scouts	Tablet	Screening		Self	School	School		Children	Prevalence		288	Commercial	Australia	Western Pacific	High
44.	2015	Scopus	App	uHear	Smartphone	Screening		Self	hospital (quiet and in booth)	Clinic		Both	Validation		25	Commercial	South Africa	African	Upper Middle
45.	2018	Scopus	App	Sound Scouts	Tablet	Screening		Self	School	School		Children	Design and usability	Validation	541	Commercial	Australia	Western Pacific	High
46.	2016	Scopus	App	Hearing Test	Smartphone	diagnostic		Self	Audiology clinic (booth)	Clinic		Adults	Validation		8620	Commercial	Poland	European	High
47.	2020	Scopus	App	ShoeBox	Tablet	Screening		Self	Hospital (emergency department)	Clinic		Adults	Validation		23	Proprietary	America	Americas	High
48.	2017	Scopus	App	_	Smartphone	Treatment		Self	audiology clinic (sound booth)	Clinic		Adults	Validation		100	Research	China	Western Pacific	Upper Middle
49.	2020	Scopus	App	DIN	Smartphone	Screening		self	Uni, clinic, private practice	Clinic		Adults	Validation		122	Proprietary	South Africa	African	Upper Middle
50.	2020	Scopus	App	_	Tablet	Support		Self	Home	Home		Adults	Feasibility		11	Research	Japan	Western Pacific	High
51.	2016	Scopus	App	Ear Trumpet	Smartphone	diagnostic		Self	Audiology clinic at Uni (quiet room)	Clinic		Adults	Validation		32	Commercial	Turkey	Eastern Mediteranian	Upper Middle
52.	2018	Scopus	App	ShoeBox	Tablet	diagnostic		Self	Audio clinic (booth)	Clinic		Children	Validation		32	Commercial	America	Americas	High
53.	2021	Scopus	App	HearScreen	Smartphone	Screening		Facilitated	School	School		Children	Validation		6805	Proprietary	South Africa	African	Upper Middle
54.	2006	Scopus	App	_	Smartphone	Treatment	Support	Self	Audio booth	Clinic		Adults	Validation		10	Research	Sweden	European	High
55.	2017	Scopus	App	ShoeBox	Tablet	diagnostic		Self	Home	Home		Children	Validation		1	Proprietary	Canada	Americas	High
56.	2008	Scopus	App	MobileASL	Smartphone	Support		Self	Clinic	Clinic		Adults	Validation		18	Research	America	Americas	High
57.	2019	Scopus	App	HearTest	Smartphone	diagnostic		Facilitated	Clinic (quiet room)	Clinic		Adults	Validation		200	proprietary	South Africa	African	Upper Middle

58.	2020	Scopus	App	DIN	Smartphone	Screening		Self	Home	Home		Adults	Validation		665	proprietary	South Africa	African	Upper Middle
59.	2019	Scopus	App	HearScreen	Smartphone	Screening		Facilitated	School	School		Children	Validation		155	proprietary	Kenya	African	Lower middle
60.	2017	Scopus	App	Oticon Opn hearing aids	Smartphone	Treatment (Bluetooth Has)		Self	Home and work environments	Daily life		Adults	Validation		6	Proprietary	Denmark	European	High
61.	2013	Scopus	App	PhoSHA	Smartphone	diagnostic		Self	Soundproof booth	Clinic		Adults	Validation		15	Research	South Korea	Western Pacific	low
62.	2020	Scopus	App	_	Tablet	diagnostic		Self	School	School		Children	Feasibility		120	Proprietary	Nicaragua	Americas	Lower middle
63.	2020	Scopus	App	uHear	Smartphone	Screening		Facilitated	Otology clinic	Clinic		Adults	Validation		41	Commercial	Taiwan	Western Pacific	High
64.	2020	Scopus	App	_	Tablet	Screening		Self	Community centre (quiet room)	Clinic		Adults	Validation		132	Research	China	Western Pacific	Upper Middle
65.	2015	Scopus	App	ShoeBox	Tablet	diagnostic		Self	Audio clinic (quiet room)	Clinic		Children	Validation		80	Proprietary	Canada	Americas	High
66.	2018	Scopus	App	Hearing Test	Smartphone	diagnostic		Self	police station	Occupational		Adults	Validation		88	Commercial	India	South east Asia	Lower middle
67.	2018	Scopus	App	SmartHear	Smartphone	Treatment (Hearing aid replacement)		Self	Home environments	Daily life		Adults	Validation		5	Research	Taiwan	Western Pacific	High
68.	2016	Scopus	App	HearScreen	Smartphone	Screening		Facilitated	Home	Home		Both	Validation		706	Proprietary	South Africa	African	Upper Middle
69.	2014	Scopus	App	HearScreen	Smartphone	Screening		Facilitated	School	School		Children	Validation		162	Proprietary	South Africa	African	Upper Middle
70.	2016	Scopus	App	uHear	Smartphone	Screening		Facilitated	Home	Home		Adults	Validation		26	Commercial	Israel	Eastern Mediteranian	High
71.	2017	Scopus	App	HearScreen	Smartphone	Screening		Self	Clinics	Clinic		Both	Validation		1236	Proprietary	South Africa	African	Upper Middle
72.	2014	Scopus	App	_	Smartphone	Screening		Self	Soundproof booth	Clinic		Adults	Validation		16	Research	Korea	Western Pacific	Low
73.	2019	Scopus	App	_	Smartphone	diagnostic		Self	Soundproof booth	Clinic		Adults	Validation		15	Research	China	Western Pacific	Upper Middle
74.	2013	Scopus	App	uHear	Smartphone	diagnostic		Self	hospital office	Clinic		Adults	Validation		32	Commercial	Israel	Eastern Mediteranian	High
75.	2016	Scopus	App	Hearing Aid Learning and Inference Controller (HALIC).	Smartphone	Treatment	Support	Self	Home environments	Daily life		Adults	Design and usability		16	Research	America	Americas	High
76.	2019	Scopus	App	HearScreen and HearTest	Smartphone	Screening	Diagnostic	Facilitated	home	Home		Both	Validation		511	Proprietary	South Africa	African	Upper Middle

77.	2020	Scopus	App	ShoeBox	Tablet	diagnostic		Facilitated	Outpatient department	Clinic		Adults	Validation		126	Proprietary	uk	European	High
78.	2016	Scopus	App	ShoeBox	Tablet	screening		self	School	School		Children	Validation		218	Proprietary	Canada	Americas	High
79.	2018	Scopus	App	ShoeBox	Tablet	screening		self	School	School		Children	Feasibility		423	Proprietary	Dominican Republic	Americas	Upper Middle
80.	2017	Scopus	App	_	Tablet	Screening		Self	Clinic	Clinic		Adults	RCT		30	Research	Brazil	Americas	Upper Middle
81.	2019	Scopus	App	ShoeBox	Tablet	diagnostic		Self	Soundproof booth	Clinic		Children	Validation		40	Proprietary	America	Americas	High
82.	2018	Scopus	App	EarTrumpet, Audiogram Mobile, Hearing Test with Audiogram	Tablet	screening		Self	clinic (quiet room)	Clinic		Adults	Feasibility		107	Commercial	America	Americas	High
83.	2020	Scopus	App	P.E.T.I.T	Tablet	screening		Self	Quiet room	School		Children	Validation		244	Research	Brazil	Americas	Upper Middle
84.	2020	Scopus	App	_	Smartphone	Support		Self	Home environments	Daily life		Adults	Feasibility		51	Research	America	Americas	High
85.	2021	Scopus	Internet	m2Hear	Smartphone	Support		Self	home	Daily life		Adults	Feasibility		59	Commercial	uk	European	High
86.	2020	Scopus	App	GoAudio	Tablet	diagnostic		Self	Clinical test room (no sound booth)	Clinic		Adults	Validation		24	Proprietary	America	Americas	High
87.	2013	Scopus	App	_	Tablet	diagnostic		Self	Soundproof booth	Clinic		Children	Validation		85	Research	Canada	Americas	High
88.	2018	Scopus	App	DIN	Smartphone	screening		Self	Quiet room (clinic, private practice < university)	Clinic		Adults	Validation		454	Proprietary	South Africa	African	Upper Middle
89.	2017	Scopus	App	ShoeBox	Tablet	screening		Self	School	School		Children	Validation		120	Proprietary	Canada	Americas	High
90.	2020	Scopus	App	_	Smartphone	Support		Self	Home environments	Daily life		Adults	Validation		19	Research	America	Americas	High
91.	2017	Scopus	App	Easy Alarm	Smartphone	Support		Facilitated	Home and work environments	Daily life		Adults	Feasibility		8	Commercial	Italy	European	High
92.	2018	Scopus	App	Agilis Audiogram	Tablet	diagnostic		Self	Soundproof booth	Clinic		Both	Validation		27	Proprietary	America	Americas	High
93.	2016	Scopus	App	_	Tablet	diagnostic		Self	home	Home		Adults	Validation		19	Research	America	Americas	High

94.	2021	Scopus	App	Vibrator'	Smartphone	screening		Self	otolaryngology department	Clinic		Adults	Validation		50	Commercial	Israel	Eastern Mediteranian	High
95.	2020	Scopus	App	HearTest	Smartphone	diagnostic		Facilitated	Quiet room (Speech, Language and Hearing (SLH) Teaching Centre)	Clinic		Both	Validation		340	Proprietary	Brazil	Americas	Upper Middle
96.	2020	Scopus	App	HearTest	Smartphone	diagnostic		Self	Brazilian Social Service of Industry (quiet room)	Occupational		Adults	Validation		242	Proprietary	Brazil	Americas	Upper Middle
97.	2020	Scopus	App	Hearing Test	Smartphone	diagnostic		Self	home	Home		Adults	Validation		8194	Commercial	Poland	European	High
98.	2014	Reference	App	Smart Hearing	Tablet	Screening		Self	School	School		Children	Validation		6288	Proprietary	China	Western Pacific	Upper Middle
99.	2019	Reference	App	_	Smartphone	Treatment	Support	Self	Home and work environments	Daily life		Adults	Validation		11	Proprietary	Australia	Western Pacific	Upper Middle
100.	2018	PubMed	App	HearZA	Smartphone	diagnostic		Self	Home environments	Home		Adults	Validation		24072	Proprietary	South Africa	African	Upper Middle
101.	2013	Reference	App	_	Tablet	screening		Self	School	School		Children	Validation		325	Research	China	Western Pacific	Upper Middle
102.	2014	Reference	App	_	Tablet	screening		Facilitated	School	School		Children	Validation		6231	Research	china	Western Pacific	Upper Middle
103.	2018	PubMed	App	WordRec	Smartphone	diagnostic		Self	Audiology clinic (quiet room)	Clinic		Adults	Design and usability	Validation	20	Research	America	Americas	High
104.	2016	PubMed	App	Mobile Based Assistive Listening System (MoBALS)	Smartphone	Treatment	Support	Self	Home environments	Daily life		Adults	Design and usability	Validation	2	Commercial	Brazil	Americas	Upper Middle
105.	2016	Reference	App	hearScreen	Smartphone	Screening		Facilitated	School	School		Children	Validation		1070	Proprietary	South Africa	African	Upper Middle
106.	2018	Reference	Internet	DDT	Tablet	diagnostic		Self	quiet room	Clinic		Adults	Validation		82	Proprietary	Belgium	European	High
107.	2018	Reference	App	MobEval app	Smartphone	Support		Self	Home environments	Daily life		Adults	Validation		10	Commercial	Australia	Western Pacific	High
108.	2014	Reference	App	_	Smartphone	Treatment		Self	Home environments	Daily life		Adults	Validation		30	Proprietary	Korea	Western Pacific	low
109.	2018	Reference	App	ShoeBox	Tablet	screening		both	School	School		Both	Validation		87	Proprietary	Kenya	African	Lower middle

110.	2018	PubMed	App	ShoeBox	Smartphone	screening		Facilitated	clinic and school	Clinic	School	Children	Feasibility		87	Proprietary	Kenya	African	Lower middle
111.	2016	Web of Science	App	Hearing Test Pro™	Smartphone	screening		Facilitated	quiet clinic room	Clinic		Both	Feasibility		60	Commercial	Nigeria	African	Lower middle
112.	2017	Reference	App	Wireless Automated Hearing Test System (WAHTS)	Tablet	diagnostic		Facilitated	conference room	Occupational		Adults	Validation		20	Research	America	Americas	High
113.	2014	Reference	App	uHear	Smartphone	screening		Self	quiet room (audiology clinic)	Clinic		Adults	Validation		60	Commercial	America	Americas	High
114.	2018	Reference	App	Hearing Test	Smartphone	diagnostic		Self	Soundproof booth	Clinic		Adults	Validation		70	Commercial	Poland	European	High
115.	2016	Reference	App	uHear	Smartphone	screening		Self	Clinic	Clinic		Adults	Validation		33	Commercial	Belgium	European	High
116.	2015	Reference	App	EarTrumpet	Tablet	diagnostic		Self	conference room	Clinic		Adults	Validation		208	Commercial	America	Americas	High
117.	2017	PubMed	App	ShoeBox	Tablet	diagnostic		Self	home	Home		Children	Validation		1	Proprietary	Canada	Americas	High
118.	2018	Reference	App	Companion (SoundWorld Solutions)	Smartphone	Treatment		Self	home	Home		Adults	Validation		57	Commercial	Australia	Western Pacific	High
119.	2019	Web of Science	App	ShoeBox	Tablet	diagnostic		Facilitated	Vehicle with sound tested booth	Clinic		Children	Validation		387	Proprietary	Ghana	African	Lower middle
120.	2016	Reference	App	Companion (SoundWorld Solutions)	Tablet	Treatment		Self	Home environments		Daily life	Adults	Validation		5	Commercial	Australia	Western Pacific	High
121.	2018	Reference	App	hearScreen	Smartphone	screening		Facilitated	Clinic room (no sound booth)	Clinic		Both	Prevalence		1236	Proprietary	South Africa	African	Upper Middle
122.	2017	Reference	App	hearScreen	Smartphone	screening		Facilitated	Quiet room in community	Clinic		Children	Prevalence		281	Proprietary	Malawi	African	low
123.	2013	Reference	App	-	Tablet	diagnostic		Self	Audiology clinic and Lab	Clinic		Adults	Validation		55	Research	Canada	Americas	High
124.	2019	PubMed	App	Etymotic 'Home Hearing Test' (HHT),	Tablet	diagnostic		Self	Carpeted classroom	School		Adults	Validation		112	Proprietary	America	Americas	High
125.	2018	Reference	Internet	DTT	Tablet	screening		Self	School	School		Children	Validation		10252	Proprietary	Belgium	European	High

126.	2018	Reference	App	hearScreen	Smartphone	screening		Facilitated	Clinic room (no sound booth)	Clinic		Both	Validation		1084	Proprietary	South Africa	African	Upper Middle
127.	2016	Reference	App	Hearing Test	Smartphone	diagnostic		Facilitated	Outpatient department (quiet room)	Clinic		Adults	Validation		100	Commercial	Turkey	Eastern Mediteranian	Upper Middle
128.	2016	Web of Science	App	hearScreen	Smartphone	screening		Facilitated	Audiology clinic (booth) and clinic (quiet room)	Clinic		Adults	Validation		94	Proprietary	South Africa	African	Upper Middle
129.	2019	PubMed	App	HearScreen and ShoeBox	Smartphone	Screening		Facilitated	School	School		Children	Evaluation		127	Proprietary	Kenya	African	Lower middle
130.	2017	Reference	App	Audiogram Mobile	Tablet	diagnostic		Facilitated	audiology clinic (sound booth)	Clinic		Adults	Validation		20	Commercial	New Zealand	Western Pacific	High
131.	2016	Reference	App	uHear	Smartphone	screening		Self	Soundproof booth and clinic room	Clinic		Adults	Feasibility		70	Commercial	Oman	Eastern Mediteranian	High
132.	2020	Web of Science	Internet	m2Hear	Smartphone	support		Self	Home environments	Home		Adults	Design and usability	Validation	15	Research	uk	European	High
133.	2016	PubMed	App	DIN	Tablet	diagnostic		Self	audiology clinic (soundproof booth)	Clinic		Adults	Validation		12	Proprietary	Netherlands	European	High
134.	2013	Reference	App	Ears (Ear Machine, LLC) and Microphone (PocketLab),	Smartphone	Treatment		Self	Audiology clinic (quiet room)	Clinic		Adults	Validation		18	Commercial	America	Americas	High
135.	2020	PubMed	App	OtoCalc	Smartphone	diagnostic		Facilitated	TB clinic	Clinic		Adults	Design and usability	Validation	22	Proprietary	South Africa	African	Upper Middle
136.	2020	PubMed	App	hearScreen	Smartphone	screening		Facilitated	School	School		Children	Feasibility		122	Proprietary	Haiti	Americas	Lower middle
137.	2019	PubMed	Internet	_	Tablet	diagnostic		Self	Home environments	Home		Adults	Feasibility		9	Research	uk	European	High
138.	2018	PubMed	App	EasyHear™ Grand	Smartphone	Treatment		Self	Home environments	Daily life		Adults	Validation		43	Proprietary	China	Western Pacific	Upper Middle
139.	2021	PubMed	App	Train2Hear	Tablet	Support		Self	Home environments	Home		Adults	Feasibility		20	Research	Germany	European	High
140.	2021	Scopus	App	.	Smartphone	Awareness		Self	Daily life	.		Children	Validation		311	Commercial	Netherlands	European	High
141.	2021	Scopus	App	hearTest	Smartphone	Diagnostic		Self	Clinic	.		Adults	Validation		39	Proprietary	America	Americas	High

142.	2021	Scopus	App	Apollo SignSound	Smartphone	Support	.	Self	Daily life	.		Adults	Design and usability		5	Research	Brazil	Americas	Upper Middle
143.	2021	Scopus	App	Kids Hearing Game	Tablet	Screening	.	Self	Clinic	.		Children	Validation		18	Commercial	America	Americas	High
144.	2021	Scopus	App	.	Smartphone	Awareness	.	Self	Daily life	.		Children	Validation		314	Commercial	Netherlands	European	High
145.	2021	Scopus	App	oMEGA	Smartphone	Support	.	Self	Daily life	.		Adults	Validation		24	Commercial	Germany	European	High
146.	2021	PubMed	App	dBTrack	Smartphone	Awareness	.	Self	Daily life	.		Adults	Validation		19	Commercial	South Africa	African	Upper Middle