

Supplement A1. Studies examined (89) mapped across which of Levesque’s five abilities and five access domains were explored – see footnote for list of domains

No	Studies	A1	A2	A3	A4	A5	D1	D2	D3	D4	D5	Total
1	Adiyoso, 2023 [30]	✓	X	✓	✓	X	X	✓	X	X	X	4
2	Agustarika, 2022 [69]	✓	X	X	X	X	X	✓	X	X	X	2
3	Akel, 2022 [94]	✓	X	X	X	✓	X	✓	X	X	X	3
4	Akhrani, 2022 [38]	✓	X	X	X	✓	X	✓	X	X	X	3
5	Anwar, 2021 [80]	X	X	X	X	X	X	✓	✓	X	X	2
6	Baroroh, 2021 [39]	✓	X	X	X	X	X	✓	X	X	X	2
7	Boekoesoe, 2023 [67]	✓	✓	X	X	X	X	✓	X	X	X	3
8	Chew, 2021 [72]	✓	✓	✓	✓	X	X	✓	X	✓	X	6
9	Cokro, 2022 [75]	✓	✓	✓	X	✓	X	✓	✓	✓	X	6
10	Damayanti, 2022 [35]	X	X	X	X	✓	✓	X	X	X	✓	3
11	Duong, 2022 [31]	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10
12	Efendi, 2022 [54]	✓	X	✓	✓	✓	X	✓	✓	X	X	6
13	Effendi, 2022 [92]	✓	✓	X	X	X	X	X	X	X	X	2
14	Fadlilah, 2022 [95]	✓	X	X	X	X	X	✓	X	X	X	2
15	Fakhriani, 2022 [76]	✓	✓	X	X	✓	X	X	X	X	X	3
16	Faturohman, 2021 [68]	✓	✓	X	✓	X	X	✓	X	X	X	4
17	Gunawan, 2023 [34]	✓	X	✓	✓	X	✓	✓	✓	X	✓	7
18	Hadning, 2022 [89]	✓	X	X	X	✓	X	X	X	X	X	2
19	Hafidz, 2023 [96]	✓	X	X	X	X	X	X	X	X	X	1
20	Halimatusa'diyah, 2023 [85]	✓	✓	X	✓	X	X	✓	✓	X	X	5
21	Handayani, 2022 [86]	✓	✓	X	X	✓	X	✓	X	X	X	4
22	Harapan, 2022 [48]	✓	✓	✓	✓	X	X	✓	X	✓	X	5
23	Harapan, 2022 [49]	✓	✓	X	✓	X	X	✓	X	X	X	4
24	Harapan, 2020 [17]	✓	X	X	✓	X	X	✓	✓	X	X	4
25	Harapan, 2020 [77]	✓	✓	X	✓	X	X	X	✓	X	X	4
26	Hidayana, 2022 [24]	✓	✓	✓	✓	X	X	✓	X	X	X	5
27	Husnul, 2023 [97]	X	X	X	X	X	X	✓	X	X	X	1
28	Jaelani, 2023 [64]	✓	X	✓	X	✓	X	✓	X	X	X	4
29	Kalanjati, 2022 [50]	✓	✓	X	X	✓	X	✓	X	X	X	4
30	Khadafi, 2022 [98]	X	X	X	X	✓	X	X	X	X	X	1
31	Khatiwada, 2023 [40]	✓	✓	✓	✓	✓	X	✓	X	X	X	6
32	Koesnoe, 2022 [27]	✓	✓	✓	✓	✓	X	✓	X	X	X	6
33	Kosim, 2022[53]	✓	X	X	X	X	X	✓	X	X	X	2
34	Kristina, 2022 [83]	X	X	✓	X	X	X	✓	✓	X	✓	4
35	Liberty, 2022 [70]	✓	X	X	X	X	X	✓	X	X	X	2
36	Limaye, 2022 [59]	X	X	✓	X	✓	X	✓	X	X	X	3
37	Listyarini, 2022 [99]	✓	X	X	X	✓	X	✓	X	X	X	3
38	Maria, 2022 [28]	✓	X	X	✓	X	X	✓	X	X	X	3
39	Marzo, 2022 [57]	✓	X	X	X	X	X	✓	X	✓	X	3

40	Marzo, 2022 [84]	✓	✓	X	X	X	X	✓	X	✓	X	4
41	Marzo, 2022 [100]	✓	X	X	X	X	X	✓	X	X	X	2
42	Megatsari, 2022 [79]	X	✓	X	✓	X	X	X	✓	X	✓	4
43	Nohe, 2022 [101]	X	X	X	✓	X	X	✓	X	X	X	2
44	Nugroho, 2022 [102]	X	X	X	X	X	✓	✓	X	X	✓	6
45	Nurmawiya, 2022 [103]	✓	X	X	X	X	X	X	X	X	X	1
46	Octavius, 2022 [82]	X	X	✓	X	X	X	✓	X	X	X	2
47	Okinarum, 2022 [73]	X	✓	X	X	X	X	X	X	X	X	1
48	Pamungkas, 2021 [41]	✓	X	X	X	✓	X	✓	X	X	X	3
49	Perdhana, 2022 [91]	X	X	X	X	X	X	✓	X	X	X	1
50	Permatasari, 2022 [78]	✓	X	X	✓	✓	X	✓	✓	X	X	5
51	Perwitasari, 2021 [87]	X	X	X	X	✓	X	✓	X	X	X	2
52	Pramukti, 2022 [71]	✓	✓	X	X	X	X	✓	X	X	X	3
53	Pratiwi, 2022 [56]	✓	X	X	X	X	X	✓	X	X	X	2
54	Pudjiadi, 2022 [104]	✓	X	X	X	✓	X	X	X	X	X	2
55	Purnama, 2023 [62]	✓	X	X	✓	✓	X	✓	X	X	X	4
56	Purwitasari, 2023 [105]	✓	X	X	X	X	X	X	X	X	X	1
57	Putra, 2022 [106]	✓	X	✓	X	X	X	✓	X	X	X	3
58	Putri, 2022 [42]	✓	X	X	X	X	X	✓	X	X	X	2
59	Rachmawati, 2022 [65]	X	X	X	✓	X	X	✓	✓	X	✓	4
60	Rahardi, 2022 [32]	✓	X	X	X	X	✓	X	X	X	X	2
61	Rahmanti, 2022 [107]	✓	X	X	X	✓	X	X	X	X	X	2
62	Raveinal, 2022 [88]	✓	X	X	X	✓	X	✓	X	X	X	3
63	Rudianto, 2021 [108]	✓	X	X	X	✓	X	X	X	X	X	2
64	Rumahorbo, 2022 [90]	✓	✓	X	X	✓	X	✓	✓	X	X	5
65	Saito, 2022 [60]	✓	✓	✓	✓	X	X	✓	✓	✓	X	7
66	Septianingrum, 2021 [43]	✓	X	X	X	X	X	✓	X	X	✓	3
67	Setiawan, 2023 [109]	✓	✓	✓	X	X	X	X	X	X	X	3
68	Sidarta, 2022 [66]	X	X	✓	✓	X	X	✓	X	X	X	3
69	Simanjorang, 2022 [44]	✓	X	X	X	✓	X	✓	X	✓	X	3
70	Sirait, 2022 [47]	✓	✓	X	X	X	X	✓	X	X	X	3
71	Sudarsono, 2023 [55]	✓	X	X	X	✓	X	✓	✓	X	X	4
72	Sugiri, 2022 [45]	✓	✓	✓	X	X	X	✓	X	✓	X	4
73	Suhariyati, 2022 [81]	X	X	✓	X	X	X	X	X	X	X	1
74	Suhud, 2021 [51]	✓	X	X	X	X	X	✓	X	X	X	2
75	Sujarwoto, 2022 [58]	✓	X	X	✓	X	X	✓	X	X	X	3
76	Susilawaty, 2021 [36]	✓	X	X	X	✓	✓	✓	X	✓	X	4
77	Syukur, 2023 [52]	✓	✓	X	X	✓	X	X	X	X	X	3
78	Theodorea, 2021 [33]	✓	X	X	X	✓	✓	✓	X	X	X	4
79	Tjahjadi, 2023 [74]	✓	✓	X	X	✓	X	✓	X	X	X	4
80	Utami, 2022 [46]	✓	X	✓	X	✓	X	✓	X	X	X	4
81	Wardani, 2022 [110]	✓	X	X	X	✓	X	✓	X	X	X	3

82	Wayan, 2022 [111]	✓	X	X	X	✓	X	X	X	X	X	2
83	Wibowo, 2022 [112]	X	✓	✓	X	X	X	X	X	X	X	2
84	Wicaksana, 2023 [61]	✓	✓	✓	X	✓	X	✓	✓	X	✓	7
85	Widhani, 2023 [37]	✓	✓	✓	X	✓	✓	✓	X	X	✓	7
86	Wirawan, 2022 [29]	✓	X	✓	✓	✓	X	✓	X	X	X	5
87	Wirawan, 2021 [113]	✓	X	X	X	X	X	✓	X	X	X	2
88	Yanto, 2021 [114]	✓	✓	X	X	X	X	✓	X	X	X	3
89	Zilhadia, 2022 [93]	✓	✓	✓	X	✓	X	✓	X	X	X	5
Total	89 studies	72	32	26	24	38	8	69	16	10	10	

Note: The table presents the analysis of 89 studies based on the Levesque Framework. The framework categorises access into five Abilities (A1: Ability to perceive, A2: Ability to seek, A3: Ability to reach, A4: Ability to pay, A5: Ability to engage) and five Access Domains (D1: Approachability, D2: Acceptability, D3: Availability and accommodation, D4: Affordability, D5: Appropriateness). A value of ✓ indicates that the study addressed the respective ability or domain, while X indicates it did not.

Supplement A2. General characteristics of the studies.

No	Author	Year of publication	Level of study	Site/ location	Participant	sample size	Study type	Data collection	Year of Data Collection
1	Adiyoso	2023	National (Indonesia)	Unspecified	General adult population	537	Quantitative	Online survey	2021
2	Agustarika	2022	Provincial (West Papua)	Unspecified	General adult population	314	Quantitative	Online survey	2020
3	Akel	2022	National (Indonesia)	Unspecified	General adult population	3099	Quantitative	Online survey	2021
4	Akhrani	2022	National (Indonesia)	Unspecified	General adult population	358	Quantitative	Online survey	2021
5	Anwar	2021	National (Indonesia)	Hospital	Adult Patients	367	Quantitative	Offline survey	2021
6	Baroroh	2021	National (Indonesia)	Unspecified	Non healthcare worker	862	Quantitative	Online survey	2021
7	Boekoesoe	2023	Provincial (Gorontalo)	Health centre	General adult population	297	Quantitative	Offline survey	2022
8	Chew	2021	Multi-country	Unspecified	Healthcare worker	430	Quantitative	Online survey	2020
9	Cokro	2022	Provincial (DKI Jakarta)	City	Elderly	15 elderly, 5 family members, 5 doctors	Qualitative	Online offline phone survey interview	2022
10	Damayanti	2022	Provincial (Central Java)	City	General adult population	100	Quantitative	Offline survey	NA
11	Duong	2022	Multi-country	Unspecified	General adult population	2500 in total 4 countries	Quantitative	Online survey	2021
12	Efendi	2022	National (Indonesia)	5 big islands	Adolescent	7299	Quantitative	Online survey	NA
13	Effendi	2022	National (Indonesia)	34 provinces	General adult population	5397	Quantitative	Online survey	2021
14	Fadlilah	2022	National (Indonesia)	Unspecified	General adult population	503	Quantitative	Online survey	2021

15	Fakhriani	2022	Provincial (DI Yogyakarta)	University	General adult population	762	Quantitative	Online survey	2021
16	Faturohman	2021	National (Indonesia)	Unspecified	General adult population	311	Quantitative	Online survey	2020
17	Gunawan	2023	Provincial (Bangka Belitung)	Health centre	Healthcare worker	4 health centres, 11 participants, 1 health department	Qualitative	Online interview	2022
18	Hadning	2022	National (Indonesia)	Unspecified	General adult population	1680	Quantitative	Online survey	2021
19	Hafidz	2023	National (Indonesia)	Unspecified	Non healthcare worker	1859	Quantitative	Online survey	2021
20	Halimatusa'diyah	2023	National (Indonesia)	Unspecified	General adult population	1202	Quantitative	Phone survey	2020
21	Handayani	2022	National (Indonesia)	18 provinces	General adult population	1423	Quantitative	Online survey	2021
22	Harapan	2022	National (Indonesia)	5 big islands	General adult population	3695 (2935)	Quantitative	Online survey	2022
23	Harapan	2022	National (Indonesia)	5 big islands	General adult population	3695 (2935)	Quantitative	Online survey	2022
24	Harapan	2020	National (Indonesia)	7 provinces	General adult population	1359	Quantitative	Online survey	2020
25	Harapan	2020	National (Indonesia)	7 provinces	General adult population	1359	Quantitative	Online survey	2020
26	Hidayana	2022	Provincial (DKI Jakarta)	5 districts	General adult population	11611	Quantitative	Online survey	2021
27	Husnul	2023	National (Indonesia)	Unspecified	General adult population	1220	Quantitative	Online survey	2021
28	Jaelani	2023	Provincial (Banten)	Health centre	Pregnant woman	102	Quantitative	Offline survey	2021
29	Kalanjati	2022	National (Indonesia)	5 big islands	General adult population	1143	Quantitative	Online survey	2021
30	Khadafi	2022	National (Indonesia)	Twitter hashtag	Social media	Not Applicable	Qualitative	Social media analysis	2020

31	Khatiwada	2023	National (Indonesia)	4 universities	General adult population	3985 (3433)	Quantitative	Online survey	2021
32	Koesnoe	2022	National (Indonesia)	34 provinces	Healthcare worker	3304 (3248)	mix method	Online survey	2021
33	Kosim	2022	Provincial (West Java)	Village	General adult population	160	Quantitative	Offline survey	2021
34	Kristina	2022	Provincial (DI Yogyakarta)	Community pharmacies	Healthcare worker	120	Quantitative	Online survey	2021
35	Liberty	2022	Provincial (North Sumatera)	Medan City	General adult population	260	Quantitative	Offline survey	2021
36	Limaye	2022	Multi-country	Unspecified	General adult population	232	Quantitative	Online survey	NA
37	Listyarini	2022	Provincial (Central Java)	Primary school-village	Children	58	pre and post design-quantitative	Offline survey	2022
38	Maria	2022	Provincial (DKI Jakarta)	Unspecified	Healthcare worker	1684	Quantitative	Online survey	2022
39	Marzo	2022	Multi-country	Unspecified	General adult population	522	Quantitative	Online survey	2021
40	Marzo	2022	Multi-country	Unspecified	General adult population	339	Quantitative	Online survey	2021
41	Marzo	2022	Multi-country	Unspecified	General adult population	321	Quantitative	Online survey	2021
42	Megatsari	2022	Provincial (West Papua)	Unspecified	General adult population	4416	Quantitative	Online survey	2022
43	Nohe	2022	Provincial (West Borneo)	City	General adult population	369	Quantitative	Offline survey	2021
44	Nugroho	2022	National (Indonesia)	MoH instagram	Social media	Not Applicable	Qualitative	Social media analysis	2021
45	Nurmawiya	2022	National (Indonesia)	Twitter	Social media	Not Applicable	Quantitative	Social media analysis	2021
46	Octavius	2022	Provincial (Jambi)	Health centre	General adult population	522	Quantitative	Offline survey	2021
47	Okinarum	2022	Provincial (DI Yogyakarta)	4 districts	Breastfeeding mother	9	Qualitative	Offline interview	2020

48	Pamungkas	2021	Provincial (East Java)	Health centre	General adult population	200	Quantitative	Offline survey	2021
49	Perdhana	2022	Provincial (Central Java)	Hospital	Adult and elderly Patients	92 (87)	Quantitative	Offline survey	2021
50	Permatasari	2022	Provincial (West Sumatera)	City	Non healthcare worker	390	Quantitative	Offline survey	2021
51	Perwitasari	2021	National (Indonesia)	3 pharmacy schools	Student	429	Quantitative	Online survey	NA
52	Pramukti	2022	Multi-country	Public university	Student	641	Quantitative	Online survey	2021
53	Pratiwi	2022	Provincial (Central Java)	Health centre	Healthcare worker	137	Quantitative	Offline survey	2021
54	Pudjiadi	2022	National (Indonesia)	Unspecified	General adult population	17562	Quantitative	Online survey	2021
55	Purnama	2023	Provincial (North Sumatera)	Medan City	Student	866 (632)	Quantitative	Online survey	NA
56	Purwitasari	2023	National (Indonesia)	Twitter	Social media	Not Applicable	Quantitative	Social media analysis	2021
57	Putra	2022	Provincial (Central Sulawesi)	Molowagu Health centre	Teen and adult	153	Quantitative	Offline survey	NA
58	Putri	2022	National (Indonesia)	Unspecified	General adult population	299	Quantitative	Online survey	2021
59	Rachmawati	2022	National (Indonesia)	Unspecified	Religious figures	16	Qualitative	Online interview	2021
60	Rahardi	2022	National (Indonesia)	Twitter	Social media	Not Applicable	Quantitative	Social media analysis	2021
61	Rahmanti	2022	National (Indonesia)	Twitter	Social media	Not Applicable	Quantitative	Social media analysis	2021
62	Raveinal	2022	Provincial (West Sumatera)	Hospital	Healthcare worker	645	Quantitative	Online survey	2021

63	Rudianto	2021	Provincial (North Sumatera)	Medan city	Healthcare worker	20	Qualitative	Offline interview	2021
64	Rumahorbo	2022	Provincial (North Sumatera)	District in Medan city	General adult population	100	Quantitative	Online survey	2021
65	Saito	2022	Multi-country	Unspecified	General adult population	246	Quantitative	Online survey	2021
66	Septianingrum	2021	Provincial (East Java)	Unspecified	Healthcare worker	150	Quantitative	Online survey	2021
67	Setiawan	2023	Provincial (Central Java)	Bojong Purbalingga health centre	Elderly	90	Quantitative	Offline survey	NA
68	Sidarta	2022	Regional (Sumatera)	10 provinces	Teen and adult	368	Quantitative	Online survey	2021
69	Simanjorang	2022	Provincial (North Sulawesi)	Border island Sangihe	General adult population	557	mix method	Offline survey interview	2021
70	Sirait	2022	Regional (Java)	3 provinces	Student	640	Quantitative	Online survey	2021
71	Sudarsono	2023	National (Indonesia)	32 provinces	General adult population	725-27	mix method	Online offline phone survey interview	2021
72	Sugiri	2022	Provincial (Riau)	Village in Dumai city	General adult population	149	Quantitative	Offline survey	2021
73	Suhariyati	2022	Provincial (East Java)	Lamongan regency	Teen and adult	1024	Quantitative	Offline survey	2021
74	Suhud	2021	National (Indonesia)	Capital of 2 provinces	General adult population	538	Quantitative	Online survey	2021
75	Sujarwoto	2022	Provincial (East Java)	Malang district	General adult population	3014	Quantitative	Offline survey	2021
76	Susilawaty	2021	National (Indonesia)	Unspecified	General adult population	225	Quantitative	Online survey	2021
77	Syukur	2023	Provincial (South Sulawesi)	Makassar city	General adult population	Not Available	Qualitative	Offline interview	NA

78	Theodorea	2021	National (Indonesia)	General	Healthcare worker	779	Quantitative	Online survey	2021
79	Tjahjadi	2023	National (Indonesia)	4 provinces and general	General adult population	845/71	mix method	Offline survey	NA
80	Utami	2022	Provincial (Central Java)	10 villages	General adult population	500	Quantitative	Offline survey	2021
81	Wardani	2022	National (Indonesia)	Unspecified	Student	5400	Quantitative	Online survey	NA
82	Wayan	2022	Provincial (Bali)	1 city and 2 regencies	Student	14	Qualitative	Offline FGD	2021
83	Wibowo	2022	National (Indonesia)	Unspecified	General adult population	33 provinces	Quantitative	online survey	2021
84	Wicaksana	2023	Provincial (DKI Jakarta)	3 HIV clinics	Adult HIV patients	9/ 470 (775)	Quantitative	online offline survey	2021
85	Widhani	2023	National (Indonesia)	General	Adult autoimmune patients	10 / 404 (433)	mix method	online offline survey	2022
86	Wirawan	2022	National (Indonesia)	Jakarta and Bali provinces	General adult population	2674 (3088)	Quantitative	online survey	2022
87	Wirawan	2021	Provincial (Bali)	General	General adult population	779 (842)	Quantitative	online survey	2020
88	Yanto	2021	Provincial (Jambi)	Putri Ayu Jambi city health centre	General adult population	190	Quantitative	offline survey	2021
89	Zilhadia	2022	Provincial (DKI Jakarta)	Jakarta Metropolitan area (Jabodetabek)	Student	440	Quantitative	online survey	2021