

Electronic supplementary material 1

**Table E1.** Summary of the Studies in the Analysis

No	Author, Year	Domain	Type of control	Prior Knowledge	Authenticity (functional)	Physical resemblance	Salience	Outcome
1	Aksoy, 2019	medical	baseline	low	high	high	enhanced	technical performance
2	Al Najjar, 2020	nursing	instructed	low	high	high	low	general
3	Alhaj et al., 2020	nursing	instructed	high	high	high	low	general
4	Alhazmi et al. 2018	medical	instructed	low	high	low	low	diagnose
5	Amerjee et al., 2018	medical	baseline	low	high	high	low	communication
6	Argalious et al. 2019	medical	instructed	high	high	high	low	management
7	Azizi et al., 2020	medical	baseline	high	high	high	high	diagnose
8	Balachander et al., 2021	medical	baseline	high	low	low	high	technical performance
9	Baumann et al. 2019	medical	baseline	high	high	high	low	technical performance
10	Berger-Estilita et al., 2020	medical	instructed	low	high	high	high	diagnose
11	Bergeron et al., 2019	medical	instructed	low	multiple	low	low	multiple
12	Bintley et al., 2019	medical	baseline	high	high	high	low	diagnose
13	Cannone et al., 2019	medical	baseline	high	high	high	high	communication
14	Canóvas et al, 2020	medical	baseline	high	high	high	high	multiple
15	Chen et al, 2019	medical	instructed	low	high	high	low	general
16	Cheung et al., 2018	medical	instructed	low	high	high	high	multiple
17	Chon et al., 2018	medical	baseline	high	high	high	high	multiple
18	Clark et al. 2020	medical	baseline	multiple	high	high	low	technical performance
19	Colman et al., 2019	medical	baseline	low	high	high	high	multiple
20	Costa et al (2020)	nursing	instructed	low	high	low	enhanced	multiple
21	Du et al, 2020	medical	instructed	low	low	low	high	general
22	Foglia et al., (2020)	medical	waiting	low	low	NA	high	multiple
23	Fortune et al., (2019)	medical	baseline	mixed	high	high	high	multiple
24	Fouilloux et al., 2019	medical	baseline	high	high	high	high	technical performance
25	Frank et al., 2020	medical	baseline	high	multiple	multiple	multiple	diagnose

No	Author, Year	Domain	Type of control	Prior Knowledge	Authenticity (functional)	Physical resemblance	Salience	Outcome
26	Gaylle, 2019	nursing	baseline	high	high	NA	low	multiple
27	Geoffroy et al., 2020	medical	instructed	low	high	high	low	communication
28	Gillan et al. 2018	medical	baseline	multiple	multiple	multiple	multiple	multiple
29	Han et al., 2018	nursing	baseline	high	high	high	high	management
30	Hassan et al., 2018	medical	instructed	high	high	high	low	multiple
31	Havaladar et al., 2020	medical	baseline	high	high	high	low	multiple
32	Hayashi et al., 2020	medical	baseline	mixed	high	high	enhanced	multiple
33	Hooper et al., 2019	medical	waiting	low	NA	NA	low	technical performance
34	Jaberi & Momennasab, 2019	medical	waiting	low	high	high	low	multiple
35	Kahrman et al., 2018	nursing	instructed	high	high	high	enhanced	multiple
36	Kang et al., 2020	nursing	baseline	high	high	high	high	multiple
37	Kardada et al., 2019	nursing	instructed	low	NA	NA	NA	multiple
38	Kirkpatrick2020	nursing	instructed	low	high	low	high	management
39	Lai et al., 2020	medical	baseline	low	high	NA	high	communication
40	Lehmann et al., 2019	medical	instructed	high	low	low	high	management
41	Li et al., 2020	medical	instructed	low	high	high	low	multiple
42	Luckie et al., 2019	teacher	instructed	mixed	low	low	low	management
43	Marko et al., 2019	medical	baseline	mixed	high	high	NA	multiple
44	Mastroleo et al., 2020	other	instructed	low	high	high	enhanced	multiple
45	McConnaughey et al., 2018	medical	instructed	low	high	high	high	management
46	Mouli et al., 2020	medical	baseline	low	high	high	enhanced	technical performance
47	Mutlu et al., 2019	medical	baseline	low	high	high	low	general
48	Odongkara et al., 2020	medical	baseline	high	low	low	high	management
49	Okamoto et al., 2020	nursing	baseline	high	high	low	low	multiple
50	Paige et al., 2019	medical	baseline	mixed	high	NA	high	teamwork
51	Park et al., 2018	medical	instructed	low	high	high	low	multiple
52	Plackett et al., 2020	medical	instructed	low	high	high	low	diagnose
53	Ramey et al., 2018	medical	baseline	low	high	high	high	management

No	Author, Year	Domain	Type of control	Prior Knowledge	Authenticity (functional)	Physical resemblance	Salience	Outcome
54	Rao et al., 2018	medical	instructed	low	high	high	low	teamwork
55	Rehman et al, 2020	medical	baseline	high	high	high	high	diagnose
56	Sacouto et al., 2018	medical	baseline	low	high	low	high	technical performance
57	Servotte et al., 2019	medical	instructed	mixed	high	NA	enhanced	multiple
58	Sharour, 2019	medical	instructed	low	high	high	high	diagnose
59	Smink et al., 2018	medical	instructed	low	high	NA	low	multiple
60	Sultan et al., 2019	medical	instructed	low	low	low	low	multiple
61	Sussel et al., 2019	medical	instructed	low	high	high	high	technical performance
62	Tamaki et al., 2019	nursing	instructed	high	low	high	low	multiple
63	Tawalbeh, 2020	nursing	instructed	high	high	high	high	general
64	Torkshavand et al., 2019	medical	instructed	high	high	high	high	multiple
65	Urwin et al., 2020	medical	waiting	low	high	high	high	technical performance
66	Uslu-Sahan&Terzioglu, 2020	medical	baseline	mixed	high	high	high	diagnose
67	Walsh et al., 2020	medical	baseline	low	high	low	high	multiple
68	Wang et al. 2020	medical	baseline	mixed	high	low	high	management
69	Wenzel et al. 2020	medical	multiple	low	high	high	multiple	multiple
70	Wong et al., 2019	medical	baseline	high	high	high	high	technical performance
71	Xiangdong & Li, 2019	other	instructed	low	high	high	high	technical performance
72	Yang et al, 2018	medical	baseline	high	high	high	low	diagnose
73	Yeo et al., 2020	medical	waiting	high	high	NA	low	technical performance
74	Yilmazer et al., 2019	nursing	baseline	low	high	high	enhanced	multiple
<b>Studies retrieved from the meta-analysis by Chernikova, Heitzmann, Stadler et al., 2020</b>								
1	Abrahamson et al., 2004	medical	instructed	high	high	high	high	technical performance
2	Adcock et al., 2010	other	baseline	low	high	high	low	communication
3	Ahad et al., 2013	medical	baseline	high	high	high	low	technical performance
4	Ahad et al., 2013	medical	baseline	high	low	low	low	technical performance
5	Ahlberg et al, 2007	medical	waiting	high	low	high	high	technical performance
6	Ahqvist et al., 2013	medical	baseline	low	high	low	low	diagnose

No	Author, Year	Domain	Type of control	Prior Knowledge	Authenticity (functional)	Physical resemblance	Salience	Outcome
7	Ahmad et al., 2015	medical	baseline	high	high	high	NA	technical performance
8	Ahn et al., 2015	medical	instructed	low	high	high	low	management skills
9	Ainsworth et al., 2012 I	medical	instructed	low	low	low	high	general
10	Ainsworth et al., 2012 II	medical	instructed	low	low	low	high	general
11	Alfred et al., 2012	other	instructed	low	high	low	enhanced	general
12	Alinier et al., 2006	medical	instructed	low	high	high	NA	general
13	Alyousef et al., 2017	medical	baseline	high	high	high	high	management skills
14	Andreatta et al., 2011	medical	instructed	low	high	high	high	technical performance
15	Andreatta et al., 2015a	medical	baseline	mix	high	high	high	multiple
16	Andreatta et al., 2015b	medical	baseline	mix	high	high	high	multiple
17	Aper et al., 2012	medical	baseline	high	high	multiple	multiple	communication
18	Araujo et al., 2014	medical	waiting	low	high	NA	NA	technical performance
19	Atayee et al., 2016	medical	baseline	low	high	high	enhanced	general
20	Auten et al., 2015	medical	baseline	high	high	low	low	diagnose
21	Bachmann et al., 2013	medical	waiting	low	high	high	low	communication
22	Banks et al., 2007	medical	instructed	high	middle	low	high	technical performance
23	Bender et al., 2014	medical	instructed	low	high	high	low	multiple
24	Bentley et al., 2015	medical	baseline	high	multiple	high	low	technical performance
25	Berney et al., 2017	medical	baseline	high	high	high	low	communication
26	Biese et al., 2009	medical	baseline	mix	high	low	low	technical performance
27	Bjerrum et al., 2013	medical	baseline	low	high	low	low	technical performance
28	Blackwood et al., 2014	medical	instructed	high	high	high	low	management skills
29	Bonczyk et al., 2016	medical	mixed	low	middle	low	high	technical performance
30	Bongers et al., 2015	medical	baseline	low	high	high	high	technical performance
31	Bonnetain et al., 2010	medical	instructed	high	NA	high	enhanced	technical performance
32	Broadbent et al., 1971	teacher	waiting	high	high	low	high	diagnose
33	Brown et al., 2010	medical	baseline	high	high	high	high	technical performance
34	Brubacher et al., 2015	teacher	baseline	high	high	NA	low	communication

No	Author, Year	Domain	Type of control	Prior Knowledge	Authenticity (functional)	Physical resemblance	Saliency	Outcome
35	Brunckhorst et al., 2014	medical	instructed	low	high	high	NA	general
36	Brydges et al., 2012 I	medical	baseline	high	high	high	high	technical performance
37	Brydges et al., 2012 II	medical	baseline	high	high	high	high	technical performance
38	Burton et al., 2011	medical	baseline	high	high	high	low	multiple
39	Cannon et al., 2014	medical	instructed	high	high	high	NA	multiple
40	Carvalho et al., 2011	medical	baseline	high	NA	NA	high	communication
41	Chao et al., 2015	medical	instructed	high	high	high	high	technical performance
42	Chen et al., 2017	medical	instructed	low	NA	NA	NA	general
43	Cheng et al., 2018	medical	baseline	mix	NA	high	NA	general
44	Chiu et al., 2012	medical	instructed	high	high	high	high	technical performance
45	Chung et al., 2011 I	medical	baseline	low	high	high	enhanced	technical performance
46	Chung et al., 2011 II	medical	baseline	low	high	high	enhanced	technical performance
47	Chung et al., 2018	medical	baseline	high	high	low	low	management skills
48	Clayton et al., 2013	medical	baseline	high	high	high	high	communication
49	Cuisinier et al., 2015	medical	baseline	high	high	high	enhanced	multiple
50	Damle et al., 2015	medical	mixed	high	high	high	NA	multiple
51	Dankbaar et al., 2016	medical	instructed	high	multiple	low	multiple	communication
52	DeWaay et al., 2014	medical	mixed	low	high	NA	NA	multiple
53	Ditton-Phare et al., 2016	medical	baseline	high	high	NA	high	communication
54	Djukic et al., 2015 I	medical	baseline	low	high	low	high	multiple
55	Djukic et al., 2015 II	medical	baseline	low	high	low	high	multiple
56	Djukic et al., 2015 III	medical	baseline	low	high	low	high	multiple
57	Djukic et al., 2015 IV	medical	baseline	low	high	low	high	multiple
58	Douglas et al., 2016	medical	waiting	high	high	low	low	communication
59	Dubovi et al., 2017	medical	instructed	low	middle	low	enhanced	technical performance
60	Dumont et al., 2016	medical	baseline	high	high	NA	low	diagnose
61	Durmaz et al., 2012	medical	baseline	low	high	low	enhanced	general
62	Eghbalibabadi&Ashouri, 2014	medical	baseline	low	high	high	NA	technical performance

No	Author, Year	Domain	Type of control	Prior Knowledge	Authenticity (functional)	Physical resemblance	Salience	Outcome
63	Errek & Randolph, 1982	other	mixed	mix	NA	NA	NA	communication
64	Etezadi et al., 2016	medical	baseline	low	NA	NA	NA	general
65	Evans et al., 2015	medical	baseline	low	high	low	high	management skills
66	Fallucco et al., 2012	medical	baseline	high	high	high	NA	diagnose
67	Fischer et al., 2011	medical	baseline	high	high	NA	enhanced	multiple
68	Fleming et al., 2009	medical	waiting	low	high	low	low	multiple
69	Foster et al., 2015	medical	instructed	low	high	low	low	communication
70	Fransen et al., 2012	medical	waiting	mix	high	high	enhanced	general
71	Gable et al., 2014	medical	baseline	high	high	high	high	multiple
72	Girod&Girod, 2006	teacher	instructed	high	high	low	low	multiple
73	Grover et al., 2015	medical	baseline	high	high	NA	NA	multiple
74	Grunetti et al., 2014	medical	baseline	high	high	high	enhanced	general
75	Haak et al., 2008	medical	instructed	low	high	low	NA	communication
76	Hamilton et al., 2001	medical	instructed	high	high	low	NA	technical performance
77	Harris et al., 2014	medical	instructed	low	NA	NA	NA	general
78	Hebbar et al., 2015	medical	instructed	high	high	low	NA	technical performance
79	Hecimovich et al., 2014	medical	baseline	high	high	high	low	general
80	Helder et al., 2016 I	medical	baseline	low	low	low	enhanced	technical performance
81	Henney & Boysen, 1979	teacher	instructed	low	high	low	low	diagnose
82	Heskin et al., 2015	medical	baseline	low	high	high	NA	general
83	Hobgood et al., 2005	medical	baseline	high	high	high	high	communication
84	Johnson et al, 2014	medical	baseline	low	high	low	high	diagnose
85	Johnson et al., 2012	medical	mixed	low	high	high	enhanced	general
86	Jones et al., 2014	medical	baseline	high	high	high	low	general
87	Kash et al., 2009	medical	baseline	high	high	low	high	multiple
88	Keleekai et al., 2016	medical	waiting	high	high	high	high	technical performance
89	Khatib et al., 2014	medical	instructed	low	high	low	high	multiple
90	Kiersma et al., 2009	medical	baseline	low	low	low	low	management skills

No	Author, Year	Domain	Type of control	Prior Knowledge	Authenticity (functional)	Physical resemblance	Salience	Outcome
91	Koparan & Yilmaz, 2015	teacher	instructed	low	high	low	NA	general
92	Kwon et al., 2015	medical	waiting	low	high	low	high	technical performance
93	Kumar & Sherwood, 2007	teacher	baseline	low	high	low	enhanced	general
94	Lavelle et al., 2017	medical	baseline	high	high	high	NA	general
95	Lee Chin et al., 2014	medical	instructed	low	low	high	low	multiple
96	Lehmann et al., 2015	medical	instructed	low	high	high	enhanced	technical performance
97	Liao et al., 2013 I	medical	instructed	high	high	high	enhanced	technical performance
98	Liao et al., 2013 II	medical	instructed	high	high	high	enhanced	technical performance
99	Liaw et al., 2011	medical	waiting	low	high	high	high	diagnose
100	Liaw et al., 2014 I	medical	baseline	low	high	low	enhanced	diagnose
101	Liaw et al., 2014 II	medical	baseline	low	high	high	low	diagnose
102	Liaw et al., 2015	medical	waiting	low	high	low	high	diagnose
103	Madan et al., 1998	medical	instructed	high	high	high	NA	multiple
104	Maertens et al., 2017	medical	instructed	mix	NA	NA	NA	technical performance
105	Martin et al., 2015	medical	instructed	high	high	low	enhanced	general
106	Matsuda et al., 2013	teacher	baseline	low	high	multiple	multiple	general
107	McIntosh et al., 2014	medical	waiting	high	high	NA	NA	general
108	Nelissen et al., 2015 I	medical	baseline	high	low	NA	NA	multiple
109	Nelissen et al., 2015 II	other	baseline	high	low	NA	NA	multiple
110	Newell & Newell, 2018	other	baseline	low	high	NA	NA	general
111	Ogan et al., 2004	medical	waiting	low	NA	NA	NA	technical performance
112	Ortner et al., 2014	medical	baseline	mix	high	high	low	technical performance
113	O'Sullivan et al., 2014	medical	waiting	low	NA	NA	NA	technical performance
114	Overbaugh et al., 1995	teacher	baseline	low	high	low	high	management skills
115	Pantziaras et al., 2015	other	baseline	high	high	high	low	general
116	Passman et al., 2006	medical	baseline	mix	high	NA	NA	technical performance
117	Popadiuk et al., 2002	medical	instructed	low	NA	NA	NA	technical performance
118	Pucher et al., 2014	medical	instructed	high	high	NA	NA	general

No	Author, Year	Domain	Type of control	Prior Knowledge	Authenticity (functional)	Physical resemblance	Salience	Outcome
119	Rajan et al., 2015	medical	baseline	low	high	low	low	general
120	Overbaugh et al., 1995	teacher	baseline	low	high	low	high	management skills
121	Randell et al., 2007 I	other	instructed	low	high	low	high	technical performance
122	Randell et al., 2007 II	other	instructed	low	high	low	high	technical performance
123	Reis et al., 2013	medical	instructed	mix	high	NA	NA	multiple
124	Ross et al., 2001	other	baseline	mix	NA	NA	high	multiple
125	Saraf et al., 2014	medical	baseline	low	high	low	NA	multiple
126	Sauter et al., 2016	medical	baseline	mix	high	NA	high	general
127	Scott et al., 2013	medical	baseline	high	high	high	low	technical performance
128	Sheakley et al., 2016	medical	instructed	low	high	high	low	general
129	Sibbald et al., 2013	medical	instructed	high	low	NA	NA	diagnose
130	Skinner et al., 2016	medical	baseline	low	NA	NA	NA	diagnose
131	Solomon et al., 2004	medical	waiting	mix	NA	NA	NA	general
132	Sorensen et al., 2015	medical	baseline	high	high	multiple	high	technical performance
133	Sperl-Hillen et al., 2014	medical	instructed	mix	NA	NA	NA	management skills
134	Roter et al., 2012	medical	mixed	high	NA	NA	NA	communication
135	Stegmann et al., 2012	medical	instructed	low	high	high	low	diagnose
136	Ten Eyck et al., 2010	medical	instructed	high	high	high	high	multiple
137	Tobin et al., 2013	medical	baseline	low	high	low	enhanced	general
138	Wenk et al., 2009	medical	instructed	low	high	NA	NA	multiple
139	Wheatley et al., 1988	other	instructed	mix	NA	NA	NA	general
140	Yeh & Chen, 2005	medical	baseline	mix	NA	NA	NA	general



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