

Supplementary Materials

S1. Correct answer rate of the quantification theory type II

Table S1 shows the results of the cross-analyses of the actual selection (“yes” or “no”) and predicted selection (“yes” or “no”) for dairy farmers’ willingness to adopt BGPs. The y value in Eq. (1) was estimated for each farmer. If the number of both selections are same (i.e., “yes” and “yes”), the analyses is considered correct. Therefore, the correct answer was 212 (97 for “yes” and 115 for “no”) among 286 total answers, representing a correction rate of 74.1%.

Table S1. Cross-analyses between the actual selection and predicted selection. Total number of farmers was 286. “#” donates number of farmers.

# of farmers (actual selection)	# of farmers (predicted selection)	
	Yes	No
Yes	97	22
No	52	115

Table S2. Summary of farmer willingness (actual and predicted selection). The y value of each farmer was calculated by Eq (1).

Farmer	Actual selection	y value	Predicted selection
1	No	-0.483	No
2	No	0.609	Yes
3	Yes	1.256	Yes
4	Yes	1.806	Yes
5	No	-1.563	No
6	Yes	1.238	Yes
7	No	0.429	Yes
8	Yes	1.641	Yes
9	No	-1.415	No
10	Yes	1.806	Yes
11	Yes	1.313	Yes
12	No	0.303	Yes
13	No	0.639	Yes
14	Yes	0.314	Yes
15	Yes	1.489	Yes

16	No	-1.900	No
17	Yes	0.138	Yes
18	No	1.081	Yes
19	No	0.303	Yes
20	Yes	1.489	Yes
21	No	0.822	Yes
22	No	-0.255	No
23	No	-1.254	No
24	Yes	0.744	Yes
25	Yes	1.641	Yes
26	Yes	0.872	Yes
27	Yes	0.071	Yes
28	Yes	1.806	Yes
29	Yes	0.872	Yes
30	Yes	1.248	Yes
31	Yes	1.641	Yes
32	No	-1.157	No
33	No	0.542	Yes
34	No	0.707	Yes
35	No	-2.293	No
36	No	-1.157	No
37	No	-1.187	No
38	Yes	0.707	Yes
39	No	-1.254	No
40	No	-0.696	No
41	No	-0.838	No
42	No	-1.254	No
43	Yes	0.546	Yes
44	No	-1.430	No
45	No	-1.415	No
46	No	-0.924	No
47	Yes	-0.027	No
48	Yes	0.381	Yes
49	Yes	0.381	Yes
50	No	-1.254	No
51	No	0.872	Yes

52	No	-0.565	No
53	No	0.707	Yes
54	Yes	0.572	Yes
55	Yes	0.819	Yes
56	No	0.867	Yes
57	No	0.654	Yes
58	No	-1.678	No
59	No	0.572	Yes
60	No	-0.632	No
61	No	-0.292	No
62	Yes	0.411	Yes
63	Yes	0.572	Yes
64	No	0.912	Yes
65	Yes	0.118	Yes
66	No	-1.859	No
67	Yes	1.597	Yes
68	Yes	2.079	Yes
69	Yes	-0.981	No
70	Yes	0.018	No
71	No	-0.701	No
72	No	0.479	Yes
73	Yes	0.785	Yes
74	Yes	0.576	Yes
75	No	-0.929	No
76	Yes	1.762	Yes
77	No	0.118	Yes
78	Yes	1.597	Yes
79	Yes	1.047	Yes
80	No	0.587	Yes
81	Yes	0.246	Yes
82	No	-0.651	No
83	No	-0.981	No
84	Yes	0.804	Yes
85	Yes	0.819	Yes
86	Yes	2.079	Yes
87	Yes	0.819	Yes

88	Yes	1.260	Yes
89	Yes	1.095	Yes
90	Yes	0.018	No
91	No	0.070	Yes
92	Yes	-0.199	No
93	No	0.344	Yes
94	No	-0.884	No
95	No	-0.768	No
96	No	1.597	Yes
97	No	-1.142	No
98	Yes	1.278	Yes
99	Yes	1.145	Yes
100	Yes	1.754	Yes
101	Yes	0.882	Yes
102	Yes	1.373	Yes
103	No	0.639	Yes
104	No	-1.209	No
105	No	-0.651	No
106	Yes	0.639	Yes
107	Yes	0.411	Yes
108	No	0.576	Yes
109	Yes	0.882	Yes
110	Yes	0.018	No
111	No	-0.603	No
112	No	-0.011	No
113	No	-0.655	No
114	No	-0.816	No
115	No	-0.423	No
116	Yes	-0.655	No
117	Yes	0.018	No
118	No	-1.142	No
119	No	-1.859	No
120	No	0.576	Yes
121	No	-1.807	No
122	No	0.411	Yes
123	No	-0.981	No

124	No	-1.142	No
125	No	-1.142	No
126	No	-0.011	No
127	No	-1.859	No
128	Yes	0.980	Yes
129	No	0.411	Yes
130	No	-0.655	No
131	Yes	1.017	Yes
132	No	0.344	Yes
133	Yes	0.692	Yes
134	Yes	0.639	Yes
135	No	-0.651	No
136	No	-1.611	No
137	Yes	1.511	Yes
138	No	-0.853	No
139	No	-0.023	No
140	Yes	0.822	Yes
141	No	-1.511	No
142	No	-0.255	No
143	Yes	-0.657	No
144	No	-0.924	No
145	No	-0.336	No
146	Yes	1.313	Yes
147	No	-1.157	No
148	Yes	-0.928	No
149	Yes	0.546	Yes
150	No	-2.132	No
151	No	-0.672	No
152	Yes	0.419	Yes
153	No	1.316	Yes
154	No	0.512	Yes
155	No	-0.497	No
156	No	-1.022	No
157	No	-0.901	No
158	Yes	0.920	Yes
159	No	0.466	Yes

160	No	-1.430	No
161	No	-0.255	No
162	No	0.381	Yes
163	No	0.303	Yes
164	No	-0.809	No
165	No	-2.128	No
166	No	-1.022	No
167	No	-0.384	No
168	No	-1.482	No
169	No	0.303	Yes
170	No	-1.250	No
171	No	-0.648	No
172	No	1.589	Yes
173	Yes	0.086	Yes
174	No	0.086	Yes
175	Yes	0.587	Yes
176	Yes	-0.063	No
177	Yes	0.587	Yes
178	Yes	0.654	Yes
179	Yes	-0.816	No
180	Yes	1.421	Yes
181	Yes	0.411	Yes
182	No	-0.111	No
183	Yes	1.373	Yes
184	Yes	0.383	Yes
185	Yes	0.587	Yes
186	Yes	-0.210	No
187	No	0.018	No
188	Yes	0.804	Yes
189	No	-0.981	No
190	Yes	-0.816	No
191	No	-0.199	No
192	Yes	1.145	Yes
193	Yes	0.246	Yes
194	Yes	0.344	Yes
195	Yes	1.141	Yes

196	Yes	1.028	Yes
197	Yes	0.819	Yes
198	Yes	-0.063	No
199	Yes	-0.423	No
200	Yes	0.654	Yes
201	Yes	0.314	Yes
202	Yes	0.912	Yes
203	Yes	0.980	Yes
204	Yes	1.145	Yes
205	Yes	0.654	Yes
206	Yes	1.141	Yes
207	Yes	-0.914	No
208	Yes	-0.628	No
209	No	-0.981	No
210	No	-0.384	No
211	No	-0.884	No
212	No	-1.674	No
213	No	-0.655	No
214	No	-0.749	No
215	No	1.141	Yes
216	No	-1.142	No
217	No	-0.981	No
218	No	-0.063	No
219	No	0.251	Yes
220	No	1.586	Yes
221	No	0.018	No
222	No	-0.651	No
223	No	1.586	Yes
224	No	0.587	Yes
225	No	0.344	Yes
226	No	0.654	Yes
227	No	0.246	Yes
228	No	0.246	Yes
229	No	-1.209	No
230	No	-1.142	No
231	No	-0.447	No

232	No	-1.807	No
233	No	0.576	Yes
234	No	-1.142	No
235	No	-0.749	No
236	No	-0.651	No
237	No	0.815	Yes
238	No	-0.423	No
239	No	-0.981	No
240	No	0.018	No
241	No	0.314	Yes
242	No	0.479	Yes
243	No	-0.655	No
244	No	-0.651	No
245	Yes	1.238	Yes
246	No	-2.132	No
247	No	0.299	Yes
248	Yes	1.806	Yes
249	Yes	1.100	Yes
250	Yes	-0.027	No
251	Yes	0.707	Yes
252	No	-1.104	No
253	Yes	-0.284	No
254	Yes	1.641	Yes
255	Yes	0.987	Yes
256	No	-1.482	No
257	No	-0.853	No
258	Yes	0.071	Yes
259	Yes	0.688	Yes
260	No	0.366	Yes
261	No	0.542	Yes
262	No	-1.157	No
263	No	-0.928	No
264	No	-2.080	No
265	Yes	0.314	Yes
266	No	0.542	Yes
267	No	-2.132	No

268	Yes	0.546	Yes
269	No	-0.512	No
270	Yes	0.609	Yes
271	No	-2.080	No
272	No	-0.565	No
273	No	-0.861	No
274	Yes	0.071	Yes
275	Yes	0.071	Yes
276	Yes	0.546	Yes
277	Yes	-1.104	No
278	No	-2.080	No
279	No	-1.041	No
280	No	-0.809	No
281	No	-0.720	No
282	No	-0.336	No
283	No	-0.269	No
284	No	-1.951	No
285	Yes	1.641	Yes
286	Yes	-0.027	No
