

### Supplemental Results

Table S1  
Dependent variables by planning direction and gender (Study 1)

		Backward	Forward	Unspecified	Contrast 1 (2 -1 -1)	Contrast 2 (0 1 -1)
Females	<i>N</i>	63	54	62		
Completion time	<i>M</i>	32.08	39.70	44.03	-3.353*	-2.164
	<i>SD</i>	23.61	36.08	28.88	(1.547)	(2.757)
Start time	<i>M</i>	162.14	192.04	198.39	-11.023**	-3.175
	<i>SD</i>	68.82	80.41	75.19	(3.899)	(6.949)
Performance time	<i>M</i>	135.11	150.43	147.34	-4.590	1.544
	<i>SD</i>	80.84	72.40	64.53	(3.810)	(6.791)
Plan steps	<i>M</i>	13.32	12.48	11.44	.453*	.523
	<i>SD</i>	5.05	5.40	4.31	(.257)	(.458)
Insights	<i>M</i>	4.42	3.79	3.86	.201***	-.036
	<i>SD</i>	1.25	1.15	1.31	(.065)	(.115)
Obstacles	<i>M</i>	4.25	3.87	3.79	.143**	.044
	<i>SD</i>	1.19	1.20	1.11	(.061)	(.109)
Time motion	%	74	57	50		
Males	<i>N</i>	16	17	17		
Completion time	<i>M</i>	26.88	53.82	47.12	-7.865†	-3.35
	<i>SD</i>	20.65	56.14	71.22	(5.48)	(9.29)
Start time	<i>M</i>	141.25	150.29	126.18	1.005	12.059
	<i>SD</i>	95.16	89.59	85.03	(9.086)	(15.419)
Performance time	<i>M</i>	88.13	92.06	67.18	2.836	12.441
	<i>SD</i>	58.70	73.53	29.08	(5.742)	(9.744)
Plan steps	<i>M</i>	11.19	9.71	11.24	.239	-.765
	<i>SD</i>	5.97	4.07	6.05	(.549)	(.931)
Insights	<i>M</i>	4.45	3.91	3.56	.239*	.176
	<i>SD</i>	1.24	1.38	.87	(.119)	(.203)
Obstacles	<i>M</i>	4.63	3.78	3.87	.267*	-.044
	<i>SD</i>	.99	1.26	1.13	(.115)	(.109)
Time motion	%	75	47	59		

† $p < .10$ , \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ . The values for contrasts are unstandardized coefficients (SEs in parenthesis).

Table S2

Dependent variables by planning direction (Study 2 including participants who failed attention check)

		Backward	Forward	Unspecified	Contrast 1 (2 -1 -1)	Contrast 2 (0 1 -1)
	<i>N</i>	54	51	49		
Completion time	<i>M</i>	2.67	3.41	3.90	-.329*	-.243
	<i>SD</i>	2.66	2.89	3.18	(.164)	(.291)
Start time	<i>M</i>	11.24	12.10	12.84	-.409*	-.369
	<i>SD</i>	4.38	3.93	3.69	(.226)	(.402)
Performance time	<i>M</i>	19.23	15.13	23.11	.037	-3.992*
	<i>SD</i>	19.00	10.23	25.04	(1.069)	(1.900)
Plan steps	<i>M</i>	14.06	13.76	14.06	.048	-.148
	<i>SD</i>	5.66	4.47	5.22	(.291)	(.513)
Insights	<i>M</i>	5.31	4.42	4.91	.217***	-.248*
	<i>SD</i>	.89	1.00	1.03	(.055)	(.097)
Obstacles	<i>M</i>	3.72	3.53	3.27	.108†	.132
	<i>SD</i>	1.53	1.33	1.37	(.080)	(.142)
Time motion	%	76	33	37		

† $p < .10$ , \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ . The values for contrasts are unstandardized coefficients (SEs in parenthesis).

Table S3  
 Dependent variables by planning direction and project type (Study 3)

		Backward	Forward	Unspecified	Contrast 1 (2 -1 -1)	Contrast 2 (0 1 -1)
Academic projects	<i>N</i>	20	32	27		
Completion time	<i>M</i>	2.52	3.61	3.30	-.313†	.156
	<i>SD</i>	1.56	3.88	2.49	(.213)	(.409)
Start time	<i>M</i>	6.47	10.48	9.80	-1.225†	.341
	<i>SD</i>	5.02	11.76	14.45	(.828)	(1.562)
Performance time	<i>M</i>	12.59	12.48	7.10	.934	2.691
	<i>SD</i>	13.33	12.52	3.87	(.875)	(1.681)
Plan steps	<i>M</i>	7.34	5.15	6.95	.432*	-.901*
	<i>SD</i>	2.62	3.55	2.98	(.235)	(.451)
Insights	<i>M</i>	7.30	7.26	7.11	.038	.072
	<i>SD</i>	1.30	1.99	2.08	(.136)	(.261)
Obstacles	<i>M</i>	7.28	7.63	6.79	.024	.421
	<i>SD</i>	1.60	1.51	2.31	(.137)	(.262)
Time motion	%	83	33	55		
Personal projects	<i>N</i>	27	29	12		
Completion time	<i>M</i>	3.07	4.10	5.25	-.534*	-.573
	<i>SD</i>	2.76	3.24	2.73	(.256)	(.510)
Start time	<i>M</i>	15.52	14.03	20.42	-.569	-3.191†
	<i>SD</i>	9.96	8.79	9.64	(.809)	(1.616)
Performance time	<i>M</i>	14.83	15.45	15.50	-.215	-.026
	<i>SD</i>	14.45	15.92	21.37	(1.448)	(2.830)
Plan steps	<i>M</i>	6.15	6.28	5.42	.101	.430
	<i>SD</i>	3.06	2.49	1.88	(.228)	(.455)
Insights	<i>M</i>	7.56	7.87	7.83	-.096	.020
	<i>SD</i>	1.65	1.58	1.82	(.142)	(.283)
Obstacles	<i>M</i>	6.85	7.09	6.69	-.013	.204
	<i>SD</i>	1.62	2.03	2.20	(.164)	(.328)
Time motion	%	71	35	17		

† $p < .10$ , \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ . The values for contrasts are unstandardized coefficients (SEs in parenthesis).

Table S4  
 Dependent variables by planning direction and project type (Study 4)

		Backward	Forward	Unspecified	Contrast 1 (2 -1 -1)	Contrast 2 (0 1 -1)
Academic/Work Projects	<i>N</i>	13	19	22		
Completion time	<i>M</i>	2.38	3.58	3.05	-.309	.267
	<i>SD</i>	2.30	2.89	3.06	(.301)	(.444)
Start time	<i>M</i>	6.38	7.95	11.32	-1.083**	-1.685**
	<i>SD</i>	3.40	3.96	3.26	(.378)	(.557)
Performance time	<i>M</i>	15.77	10.53	39.05	-3.006	-14.260***
	<i>SD</i>	20.89	10.37	31.40	(2.482)	(3.661)
Plan steps	<i>M</i>	6.08	6.26	7.32	-.238	-.528
	<i>SD</i>	4.17	2.83	2.32	(.321)	(.473)
Insights	<i>M</i>	4.35	4.28	4.78	-.061	-.254
	<i>SD</i>	1.15	1.29	.81	(.115)	(.170)
Obstacles	<i>M</i>	3.81	3.67	3.72	.038	-.022
	<i>SD</i>	1.08	.82	1.14	(.109)	(.160)
Time motion	%	62	58	64		
Personal projects	<i>N</i>	48	43	42		
Completion time	<i>M</i>	2.63	4.35	3.48	-.429*	.436
	<i>SD</i>	2.65	3.76	3.73	(.204)	(.368)
Start time	<i>M</i>	9.10	9.21	8.43	.095	.390
	<i>SD</i>	3.86	3.74	4.46	(.242)	(.436)
Performance time	<i>M</i>	14.60	16.00	16.52	-.553	-.262
	<i>SD</i>	17.65	21.48	21.99	(1.225)	(2.208)
Plan steps	<i>M</i>	7.13	6.26	7.29	.118	-.515
	<i>SD</i>	4.33	3.12	3.72	(.227)	(.410)
Insights	<i>M</i>	5.18	4.73	4.66	.161*	.033
	<i>SD</i>	1.28	.86	1.19	(.068)	(.122)
Obstacles	<i>M</i>	4.18	3.91	4.09	.060	-.091
	<i>SD</i>	.90	1.05	1.42	(.068)	(.123)
Time motion	%	55	62	61		

† $p < .10$ , \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ . The values for contrasts are unstandardized coefficients (SEs in parenthesis).

Table S5  
Supplemental dependent measures by planning direction.

		Backward	Forward	Unspecified	Contrast 1 (2 -1 -1)	Contrast 2 (0 1 -1)
<b>STUDY 1</b>						
Planning difficulty	<i>M</i>	3.94	3.32	2.31	.365***	.515***
	<i>SD</i>	1.77	1.63	1.65	(.078)	(.138)
Closeness	<i>M</i>	6.39	6.18	6.69	-.005	-.299
	<i>SD</i>	2.66	2.24	2.68	(.118)	(.208)
Control	<i>M</i>	5.88	5.89	6.10	-.040	-.110
	<i>SD</i>	.94	.97	1.00	(.045)	(.080)
Time pressure	<i>M</i>	1.87	1.90	1.78	.013	.073
	<i>SD</i>	1.03	1.03	.99	(.047)	(.083)
<b>STUDY 2</b>						
Planning difficulty	<i>M</i>	3.11	2.96	3.43	-.027	-.234
	<i>SD</i>	1.40	1.23	1.50	(.084)	(.144)
Control	<i>M</i>	5.54	5.53	5.69	-.024	-.082
	<i>SD</i>	1.11	.89	.75	(.057)	(.097)
<b>STUDY 3</b>						
Planning difficulty	<i>M</i>	5.19	4.61	4.25	.254	.211
	<i>SD</i>	2.54	2.61	2.68	(.148)	(.289)
Closeness	<i>M</i>	4.54	4.03	4.28	.147	-.251
	<i>SD</i>	2.65	2.66	2.67	(.170)	(.320)
Control	<i>M</i>	8.44	8.19	9.09	-.068	-.447
	<i>SD</i>	1.70	1.93	1.43	(.114)	(.215)
<b>STUDY 4</b>						
Control	<i>M</i>	5.83	5.84	5.84	-.003	.005
	<i>SD</i>	.98	.95	.90	(.050)	(.085)
Time pressure	<i>M</i>	2.89	2.93	3.21	-.057	-.135
	<i>SD</i>	1.52	1.34	1.57	(.078)	(.132)

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ . The values for contrasts are unstandardized coefficients (SEs in parenthesis).