

**Table S1.** Exploratory Factor Analysis across Individual Characteristics.

	<b>Factor 1</b> (risk aversion)	<b>t</b>	<b>df</b>	<b>p-value</b>	<b>Factor 2</b> (willingness to try new things)	<b>t</b>	<b>df</b>	<b>p-value</b>
Age, n=295	r=0.19			0.001	r=0.11			0.07
Gender		1.27	295	0.21		0.63	295	0.53
Female, n=264	.02±0.87				0.02±0.66			
Male, n=33	-.19±1.1				-0.07±1.3			
Race		1.56	3, 301	0.81		6.42	3, 301	0.40
Asian, n=22	-0.16±0.80				0.15±0.52			
Black, n=36	-0.08±1.0				-0.11±0.68			
Other, n=13	-0.03±0.95				-0.22±0.85			
White, n=234	0.01±0.89				0.03±0.78			
Hispanic		0.83	298	0.41		0.34	298	0.74
No, n=285	0.01±0.88				0.01±0.76			
Yes, n=15	-0.19±1.0				-0.06±0.77			
Highest Level of Education		3.09	3, 302	0.38		31.29	3, 302	<0.001*
Baccalaureate, n=52	0.07±0.91				-0.14±0.72			
Masters, n=122	-0.04±0.83				0.06±0.60			
DNP, n=45	0.11±0.93				0.07±0.63			
PhD, n=87	-0.10±0.98				0.01±1.0			
Licensure		0.06	304	0.95		-0.20	304	0.84
RN, n=254	-0.02±0.90				0.02±0.77			
Other, n=52	-0.01±0.93				-0.01±0.71			
From What Type of Program Did You Receive Your Initial Nursing Education		1.15	3, 297	0.92		42.12	3, 297	0.39
Associate, n=49	-0.01±0.95				-0.06±1.2			
Baccalaureate, n=202	-0.01±0.86				0.03±0.64			
Diploma, n=23	0.08±0.94				-0.02±0.71			
Graduate, n=27	-0.10±0.83				0.12±0.59			
Do you view self as an Innovator		-1.25	324	0.21		-3.20	324	0.002
Yes, n=285	0.02±0.87				0.05±0.76			
No, n=41	-0.17±1.05				-0.40±1.3			
Are you satisfied with your current position as a nurse		-0.21	301	0.83		-1.59	301	0.11
Yes, n=222	-0.01±0.92				0.06±0.64			
No, n=81	-0.03±0.87				-0.10±1.03			
Are you satisfied with your current institution		-0.05	301	0.96		-2.01	301	0.05
Yes, n=223	-0.02±0.89				0.07±0.64			
No, n=80	-0.02±0.93				-0.13±1.0			
Do you feel supported by your Nurse Colleagues		-0.97	294	0.34		-3.22	294	0.001
Yes, n=257	0.001±0.91				0.08±0.62			
No, n=39	-0.15±0.86				-0.34±1.3			

Do you feel supported by your Nurse Manager Yes, n=217 No, n=71	-0.03±0.87 -0.04±0.99	-0.13	286	0.89	0.08±0.64 -0.17±1.1	-2.33	286	0.02
Do you feel supported by your Executive Leadership Yes, n=190 No, n=108	-0.02±0.89 -0.02±0.93	-0.01	296	0.99	0.10±0.62 -0.12±0.95	-2.41	296	0.02
How Many Innovation Events Have you Participated in in the last year 1, n=111 2-3, n=119 4-5, n=46 6 or more, n=45	-0.08±0.98 -0.05±0.86 0.26±0.68 0.15±0.79	8.59	3, 317	0.04*	-0.08±0.74 -0.01±0.87 -0.05±1.3 .29±.42	54.41	3, 317	<0.001*
In the past 1 year, have you been exposed to human-centered design/design thinking Activities Yes, n=224 No, n=100	-0.01±0.86 0.01±0.98	-2.20	323	0.03	0.02±0.79 -0.04±0.98	-0.57	323	0.57
In the past 1 year, have you been exposed to human-centered design/design thinking Lectures Yes, n=209 No, n=116	0.08±0.80 -0.15±1.0	0.24	322	0.81	0.03±0.78 -0.08±1.0	-1.12	322	0.26
In the past 1 year, have you been exposed to human-centered design/design thinking Other Yes, n=81 No, n=227	0.12±0.79 -0.05±0.93	-1.44	306	0.15	0.06±0.60 0.01±0.83	-0.53	306	0.60
In the past 1 year, have you been exposed to human-centered design/design thinking Projects Yes, n=199 No, n=125	0.02±0.84 -0.04±1.0	-0.54	322	0.59	0.009±0.80 -0.02±0.96	-0.32	322	0.75
In the past 1 year, have you been exposed to human-centered design/design thinking Resources Yes, n=211 No, n=113	0.04±0.85 -0.09±1.0	-1.22	322	0.22	0.02±0.78 -0.04±0.99	-0.56	322	0.57
In the past 1 year, have you been exposed to human-centered design/design thinking Workshops		-0.73	321	0.47		-0.88	321	0.38

Yes, n=174	0.03±0.81				0.04±0.62			
No, n=149	-0.05±1.0				-0.05±1.1			
How many years have you worked in Nursing? n=297	r=0.13			0.02	r=0.14			0.02
How many years have you worked as a clinician? n=294	r=0.15			0.01	r=0.06			0.30
How many years have you been working at your current institution? n=296	r=0.06			0.32	r=0.06			0.05
Employment Status		2.77	291	0.006		0.89	291	0.38
Employed in healthcare, n=260								
Employed but not in healthcare, n=33	.03±0.84 -0.41±1.0				0.04±0.78 -0.09±0.64			

\*Overall, there is a difference in the means but no difference in pairwise analysis.

	<b>Factor 3</b> (creativity and originality)	<b>t</b>	<b>df</b>	<b>p-value</b>	<b>Factor 4</b> (being challenged)	<b>t</b>	<b>df</b>	<b>p-value</b>
Age, n=295	.r=0.10			0.07	r=0.07			0.27
Gender		-1.77	295	p=0.08		1.11	295	0.27
Female, n=264	-0.03±0.78				0.01±0.88			
Male, n=33	0.24±1.0				-0.17±1.0			
Race		1.67	3, 301	0.64		4.85	3, 301	0.18
Asian, n=22	-0.12±0.95				-0.23±0.90			
Black, n=36	-0.03±0.85				-0.06±0.70			
Other, n=13	0.32±0.77				-0.14±1.1			
White, n=234	0.004±0.7				0.04±0.91			
Hispanic		-1.42	298	0.16		-0.59	298	0.56
Yes, n=15	0.29±0.70				0.14±0.60			
No, n=285	-0.01±0.82				-0.002±0.91			
Highest Level of Education		4.35	3, 302	0.23		9.04	3, 203	0.03*
Baccalaureate, n=52	-0.024±0.83				0.01±0.96			
Masters, n=122	0.02±0.85				0.03±0.78			
DNP, n=45	0.09±0.65				-0.11±0.99			
PhD, n=87	-0.04±0.84				-0.02±1.0			
Licensure		0.75	304	0.45		-0.69	304	0.49
RN, n=254	-0.01±0.80				0.006±0.91			
Other, n=52	0.09±0.86				-0.09±0.93			
From What Type of Program Did You Receive Your Initial Nursing Education		0.35	3, 297	0.95		4.93	3, 297	0.18
Associate, n=49	0.05±0.81				0.05±0.81			
Baccalaureate, n=202	-0.06±0.81				-0.06±0.81			
Diploma, n=23	0.22±0.75				0.22±0.75			
Graduate, n=27	0.19±0.84				0.19±0.84			
Do you view self as an Innovator		-6.13	324	<0.001		-1.25	324	0.21

Yes, n=285 No, n=41	0.11±0.74 -0.69±1.0				0.02±0.90 -0.17±1.1			
Are you satisfied with your current position as a nurse Yes, n=222 No, n=81	-0.02±0.79 0.08±0.86	0.93	301	0.36	-0.02±0.94 -0.02±0.86	0.003	301	0.99
Are you satisfied with your current institution No, n=80 Yes, n=223	0.12±0.81 -0.03±0.81	1.44	301	0.15	-0.004±0.84 -0.02±0.95	0.14	301	0.89
Do you feel supported by your Nurse Colleagues Yes, n=257 No, n=39	-0.03±0.78 0.22±0.99	1.78	294	0.08	0.01±0.88 -0.09±0.90	-0.64	294	0.52
Do you feel supported by your Nurse Manager Yes, n=217 No, n=71	-0.07±.81 .18±.83	2.18	286	0.03	-.02±.89 .04±.80	0.49	286	0.63
Do you feel supported by your Executive Leadership Yes, n=190 No, n=108	-0.03±0.80 0.03±0.85	0.56	296	0.58	-0.03±0.93 0.03±0.82	0.51	296	0.61
How Many Innovation Events Have you Participated in in the last year, n=45 1, n=111 2-3, n=119 4-5, n=46 6 or more <sup>a</sup>	-0.18±0.91 0.08±0.76 0.04±0.88 0.25±0.59	12.04	3, 317	0.01	0.08±0.73 -0.16±1.1 0.04±0.86 0.18±0.80	18.10	3, 317	<0.001*
In the past 1 year, have you been exposed to human-centered design/design thinking Activities Yes, n=224 No, n=100	0.08±0.72 -0.10±0.98	-1.84	323	0.07	0.04±0.91 -0.07±0.93	-1.00	323	0.32
In the past 1 year, have you been exposed to human-centered design/design thinking Lectures Yes, n=209 No, n=116	-0.002±0.82 0.05±0.86	0.41	322	0.68	0.07±0.85 -0.17±1.1	-2.16	322	0.03
In the past 1 year, have you been exposed to human-centered design/design thinking Other Yes, n=81 No, n=227	0.21±0.80 -0.04±0.80	-2.41	306	0.02	0.02±0.98 -0.001±0.90	-0.16	306	0.87

In the past 1 year, have you been exposed to human-centered design/design thinking Projects Yes, n=199 No, n=125	0.05±0.79 -0.06±0.88	-1.16	322	0.25	-0.01±0.92 0.02±0.92	0.29	322	0.78
In the past 1 year, have you been exposed to human-centered design/design thinking Resources Yes, n=211 No, n=113	0.06±0.78 -0.09±0.90	-1.58	322	0.12	-0.003±0.93 -0.001±0.90	0.02	322	0.99
In the past 1 year, have you been exposed to human-centered design/design thinking Workshops Yes, n=174 No, n=149	0.10±0.68 -0.09±0.96	-2.07	321	0.04	0.08±0.86 -0.10±0.98	-1.80	321	0.07
How many years have you worked in Nursing?, n=297	r=0.01			0.93	r=0.09			0.15
How many years have you worked as a clinician?, n=294	r=0.06			0.28	r=0.12			0.05
How many years have you been working at your current institution? n=296	r=0.06			0.47	r=0.12			0.07
Employment Status Employed in healthcare, n=260 Employed but not in healthcare, n=33	0.02±0.80 -0.28±0.88	2.01	291	0.05	0.001±0.91 0.09±0.73	-0.52	291	0.60

\*Overall, there is a difference in the means but no difference in pairwise analysis; a, Tukey Test found differences in “How Many Innovation Events Have you Participated in in the last year” 6+ vs. 1 (p=0.02).

**Table S2.** Exploratory Factory Analysis across Organizational Characteristics.

	<b>Factor 1</b> (risk aversion)	<b>t</b>	<b>df</b>	<b>p-value</b>	<b>Factor 2</b> (willingness to try new things)	<b>t</b>	<b>df</b>	<b>p-value</b>
In what type of setting is your institution located Rural, n=20 Suburban, n=61 Urban, n=193 Other, n=24	0.06±0.93 -0.11±1.1 -0.007±0.81 0.19±0.80	8.07	3, 294	0.05*	0.07±0.60 0.05±1.1 -0.01±0.67 0.21±0.52	31.29	3, 294	<0.001*
Do you work in a hospital Yes, n=129 No, n=171	-0.01±0.88 -0.01±0.87	-0.02	298	0.98	-0.03±0.94 0.06±0.58	0.94	298	0.35
Magnet Status, if working in a hospital Yes, n=126 No, n=56	-0.12±0.91 0.01±0.89	1.53	180	0.13	0.01±0.68 -0.07±1.1	-0.63	180	0.53
Do you consider your institution to be innovative Yes, n=212 No, n=85	0.03±0.83 -0.10±0.99	-1.16	295	0.25	0.07±0.62 -0.07±1.0	-1.43	296	0.15
Does your institution support innovative thinking by its nurses? Yes, n=219 No, n=77	0.04±0.84 -0.15±0.96	-1.60	294	0.11	0.08±0.63 -0.16±1.0	-2.47	294	0.01
Do you get protected time away from the bedside to work on other projects? Yes, n=56 No, n=79	-0.06±0.88 -0.07±0.97	-0.09	133	0.93	0.11±0.61 -0.10±1.0	-1.39	133	0.17
How willing are you to implement innovative methodologies in your day-to-day work Very, n=176 Mostly, n=108 Somewhat, n=35 Rarely, n=3 Not at all, n=1	r=0.29			0.0001	r=0.17			0.002*
How often are you able to implement innovative methodologies in your day-to-day work Always, n=28 Often, n=121 Sometimes, n=137 Rarely, n=32	r=0.11			0.06	r=0.19			0.0006*

Never, n=6								
How often do you encounter obstacles that impede you from being innovative in your day-to-day work? Always, n=29 Often, n=140 Sometimes, n=128 Rarely, n=25 Never, n=1	r=-0.06			0.25	r=-0.05			0.38
How satisfied are you with your Independence at work Very Satisfied, n=197 Moderately Satisfied, n=70 A little Dissatisfied, n=20 Very Dissatisfied, n=11	r=0.07			0.24	r=0.02			0.78
How satisfied are you with your Opportunities for advancement Very Satisfied, n=104 Moderately Satisfied, n=101 A little Dissatisfied, n=52 Very Dissatisfied, n=39	r=0.06			0.33	r=0.99			0.09
How satisfied are you with your Opportunities to be creative Very Satisfied, n=122 Moderately Satisfied, n=93 A little Dissatisfied, n=43 Very Dissatisfied, n=30	r=0.03			0.67	r=0.17			0.004
How satisfied are you with your Opportunities to be innovative Very Satisfied, n=121 Moderately Satisfied, n=89 A little Dissatisfied, n=50 Very Dissatisfied, n=40	r=0.02			0.69	r=0.17			0.004
How satisfied are you with your Opportunities to lead Very Satisfied, n=133 Moderately Satisfied, n=98 A little Dissatisfied, n=39 Very Dissatisfied, n=28	r=0.02			0.78	r=0.20			0.0005
How satisfied are you with your Time away from clinical responsibilities Very Satisfied, n=106 Moderately Satisfied, n=76 A little Dissatisfied, n=45	r=-0.01			0.90	r=0.11			0.08

Very Dissatisfied, n=58								
How satisfied are you with your Work schedule Very Satisfied, n=168 Moderately Satisfied, n=90 A little Dissatisfied, n=29 Very Dissatisfied, n=12	r=0.03			0.57	r=0.14			0.02
How would you rate the Relationship with co-workers Excellent, n=147 Good, n=124 Fair, n=19 Poor, n=8	r=0.01			0.93	r=0.15			0.01
How would you rate the Adequacy of resources Excellent, n=95 Good, n=135 Fair, n=53 Poor, n=15	r=0.01			0.93	r=0.15			0.01
How would you rate the Overall work environment Excellent, n=116 Good, n=123 Fair, n=54 Poor, n=5	r=0.02			0.75	r=0.18			0.002
How would you rate Support from supervisors Excellent, n=128 Good, n=96 Fair, n=46 Poor, n=26	r=-0.02			0.75	r=0.17			0.004
Has your institution offered any of the following innovation resources Yes, n=174 No, n=108	-0.01±0.81 -0.04±0.99	-0.31	280	0.76	0.12±0.61 -0.12±0.94	-2.57	280	0.01
Has your institution offered any of the following innovation education Yes, n=166 No, n=118	0.06±0.79 -0.12±0.97	-1.77	282	0.08	0.10±0.64 -0.08±0.91	-1.98	282	0.05
Has your institution offered any of the following innovation workshops Yes, n=139 No, n=144	0.03±0.79 -0.06±0.95	-0.87	281	0.39	0.12±0.60 -0.08±0.89	-2.18	281	0.03
Has your institution offered any of the following Innovation lectures		-2.22	282	0.03		-2.64	282	0.01



Yes, n=156	0.08±0.78				0.13±0.61			
No, n=128	-0.15±0.97				-0.11±0.91			
Has your institution offered any of the following HCD/DT education		-1.99	291	0.05		-3.02	281	0.003
Yes, n=107	0.11±0.74				0.20±0.55			
No, n=176	-0.10±0.95				-0.08±0.86			
Has your institution offered any of the following HCD/DT lectures		-1.79	281	0.08		-2.68	281	0.01
Yes, n=156	0.11±0.73				0.18±0.56			
No, n=199	-0.09±0.94				-0.07±0.85			
Has your institution offered any of the following HCD/DT resources		-1.46	280	0.15		-3.49	280	0.001
Yes, n=119	0.06±0.72				0.20±0.56			
No, n=163	-0.09±0.96				-0.07±0.69			
Has your institution offered any of the following HCD/DT workshops		-1.29	281	0.20		-1.86	281	0.06
Yes, n=100	0.07±0.75				0.14±0.62			
No, n=183	-0.07±0.94				-0.04±0.83			
Has your institution offered any of the following HCD/DT Other		-1.37	253	0.17		-1.77	253	0.08
Yes, n=56	0.13±0.77				0.19±0.55			
No, n=199	-0.06±0.93				-0.01±0.81			

	<b>Factor 3</b> (creativity and originality )	<b>t</b>	<b>df</b>	<b>p-value</b>	<b>Factor 4</b> (being challenged)	<b>t</b>	<b>df</b>	<b>p-value</b>
In what type of setting is your institution located		10.58	3, 294	0.01		1.23	3, 294	0.75
Rural, n=20	0.049±0.86				-0.08±1.0			
Suburban, n=61	-0.25±0.97				0.01±0.85			
Urban, n=193	0.03±0.76				-0.01±0.91			
Other, n=24	0.38±0.56				0.19±0.97			
Do you work in a hospital		1.21	298	0.23		1.84	298	0.07
Yes, n=129	-0.06±0.84				-0.10±0.99			
No, n=171	0.05±0.79				0.09±0.83			
Magnet Status, if working in a hospital		-0.46	180	0.65		-0.20	180	0.84
Yes, n=126	-0.06±0.77				-0.04±0.92			
No, n=56	-0.13±1.1				-0.08±0.88			
Do you consider your institution to be innovative		-0.09	295	0.93		0.44	295	0.66
Yes, n=212	0.01±0.76				-0.01±0.93			

No, n=85	-0.002±0.94				0.04±0.85			
Does your institution support innovative thinking by its nurses? Yes, n=219 No, n=77	0.003±0.77 0.01±0.95	0.09	294	0.93	0.02±0.89 -0.07±0.96	-0.77	294	0.44
Do you get protected time away from the bedside to work on other projects? Yes, n=56 No, n=79	-0.01±0.80 -0.01±0.93	0.01	133	0.99	0.01±0.84 -0.17±1.0	-1.06	133	0.29
How willing are you to implement innovative methodologies in your day-to-day work Very, n=176 Mostly, n=108 Somewhat, n=35 Rarely, n=3 Not at all, n=1	r=0.21			0.0002	r=-0.03			0.57
How often are you able to implement innovative methodologies in your day-to-day work Always, n=28 Often, n=121 Sometimes, n=137 Rarely, n=32 Never, n=6	r=0.15			0.005	r=-0.05			=0.42
How often do you encounter obstacles that impede you from being innovative in your day-to-day work? Always, n=29 Often, n=140 Sometimes, n=128 Rarely, n=25 Never, n=1	r=0.01			0.83	r=-0.05			0.36
How satisfied are you with your Independence at work Very Satisfied, n=197 Moderately Satisfied, n=70 A little Dissatisfied, n=20 Very Dissatisfied, n=11	r=-0.11			0.06	r=0.07			0.26
How satisfied are you with your Opportunities for advancement Very Satisfied, n=104 Moderately Satisfied, n=101	r=-0.05			0.35	r=0.0767			0.19

A little Dissatisfied, n=52 Very Dissatisfied, n=39							
How satisfied are you with your Opportunities to be creative Very Satisfied, n=122 Moderately Satisfied, n=93 A little Dissatisfied, n=43 Very Dissatisfied, n=30	r=-0.02			0.72	r=0.032		0.58
How satisfied are you with your Opportunities to be innovative Very Satisfied, n=121 Moderately Satisfied, n=89 A little Dissatisfied, n=50 Very Dissatisfied, n=40	r=0.02			0.80	r=-0.01		0.86
How satisfied are you with your Opportunities to lead Very Satisfied, n=133 Moderately Satisfied, n=98 A little Dissatisfied, n=39 Very Dissatisfied, n=28	r=-0.10			0.08	r=0.002		0.98
How satisfied are you with your Time away from clinical responsibilities Very Satisfied, n=106 Moderately Satisfied, n=76 A little Dissatisfied, n=45 Very Dissatisfied, n=58	r=-0.08			0.18	r=-0.01		0.88
How satisfied are you with your Work schedule Very Satisfied, n=168 Moderately Satisfied, n=90 A little Dissatisfied, n=29 Very Dissatisfied, n=12	r=0.03			0.60	r=0.14		0.02
How would you rate the Relationship with co-workers Excellent, n=147 Good, n=124 Fair, n=19 Poor, n=8	r=-0.06			0.29	r=0.02		0.76
How would you rate the Adequacy of resources Excellent, n=95 Good, n=135 Fair, n=53 Poor, n=15	r=-0.06			0.29	r=0.02		0.76
How would you rate the Overall work environment				0.60			0.07

Excellent, n=116 Good, n=123 Fair, n=54 Poor, n=5	r=-0.03				r=0.11			
How would you rate Support from supervisors Excellent, n=128 Good, n=96 Fair, n=46 Poor, n=26	r=-0.12			0.04	r=0.07			0.21
Has your institution offered any of the following innovation resources Yes, n=174 No, n=108	-0.03±0.77 0.01±0.89	0.38	280	0.70	0.04±0.88 0.0002±0.87	-0.38	280	0.70
Has your institution offered any of the following innovation education Yes, n=166 No, n=118	0.06±0.72 -0.11±0.93	-1.74	282	0.08	0.003±0.89 0.06±0.85	0.49	282	0.62
Has your institution offered any of the following innovation workshops Yes, n=139 No, n=144	0.06±0.72 -0.09±0.90	-1.45	281	0.15	0.03±0.88 0.02±0.87	-0.11	281	0.91
Has your institution offered any of the following Innovation lectures Yes, n=156 No, n=128	0.04±0.72 -0.08±0.92	-1.28	282	0.20	0.02±0.92 0.03±0.81	0.09	282	0.93
Has your institution offered any of the following HCD/DT education Yes, n=107 No, n=176	0.05±0.76 -0.05±0.85	-0.91	281	0.37	-0.01±0.92 0.05±0.85	0.51	281	0.61
Has your institution offered any of the following HCD/DT lectures Yes, n=156 No, n=199	0.08±0.72 -0.06±0.86	-1.45	281	0.15	0.02±0.88 0.03±0.87	0.02	281	0.98
Has your institution offered any of the following HCD/DT resources Yes, n=119 No, n=163	0.04±0.75 -0.03±0.82	-0.74	280	0.46	0.03±0.92 0.04±0.82	0.13	280	0.90
Has your institution offered any of the following HCD/DT workshops Yes, n=100	0.08±0.74	-1.38	281	0.17	-0.004±0.90	0.40	281	0.69

No, n=183	-0.06±0.85				0.04±0.86			
Has your institution offered any of the following HCD/DT Other		-0.07	253	0.95		1.35	253	0.18
Yes, n=56	-0.01±0.71				-0.14±1.0			
No, n=199	-0.03±0.84				0.04±0.85			

\*Overall, there is a difference in the means but no difference in pairwise analysis; a Tukey Test found differences in “In what type of setting is your institution located” Other versus Suburban (p=0.007).