

발 간 등 록 번 호

11-1352000-001151-01

어린이집의 질 제고를 위한 평가인증제도 중장기 개편방안

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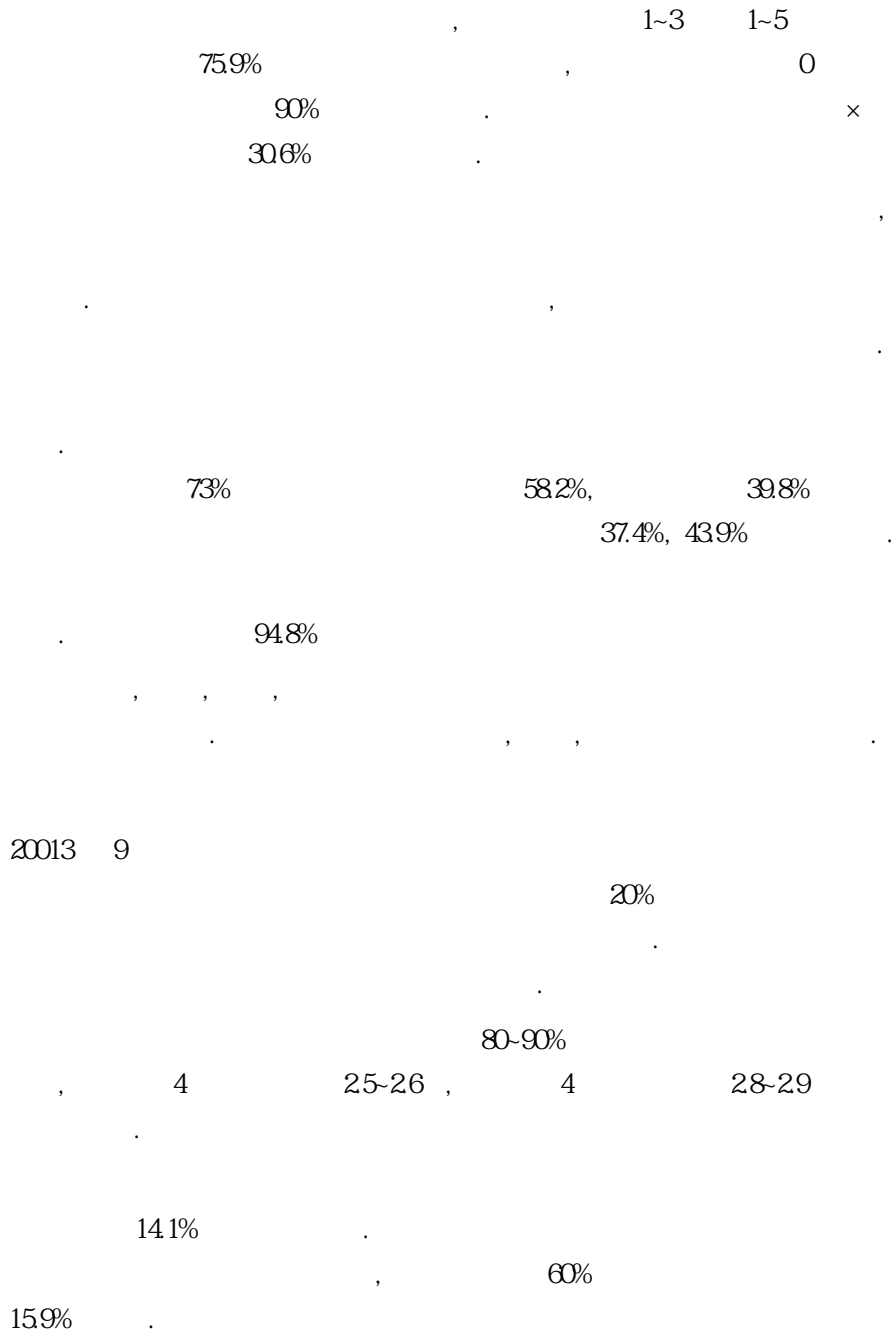
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5) National Quality Standard for Early Childhood Education and Care and School Age Care

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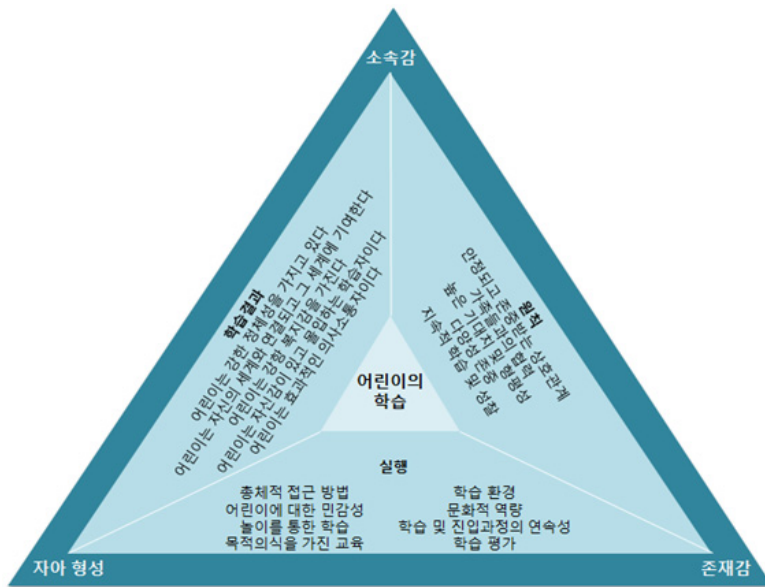
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: Australian Department for Education(2013). Early Years Learning Framework.

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: Australian Children's education & care quality authority(2013). Guide to the National Quality Standard.

7) (Belonging, Being and Becoming- The Early Years Framework; EYLF) (My Time, Our Place: Framework for School Age Care in Australia (Framework for School Age Care) .

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11) Standing Council on School Education and Early Childhood .

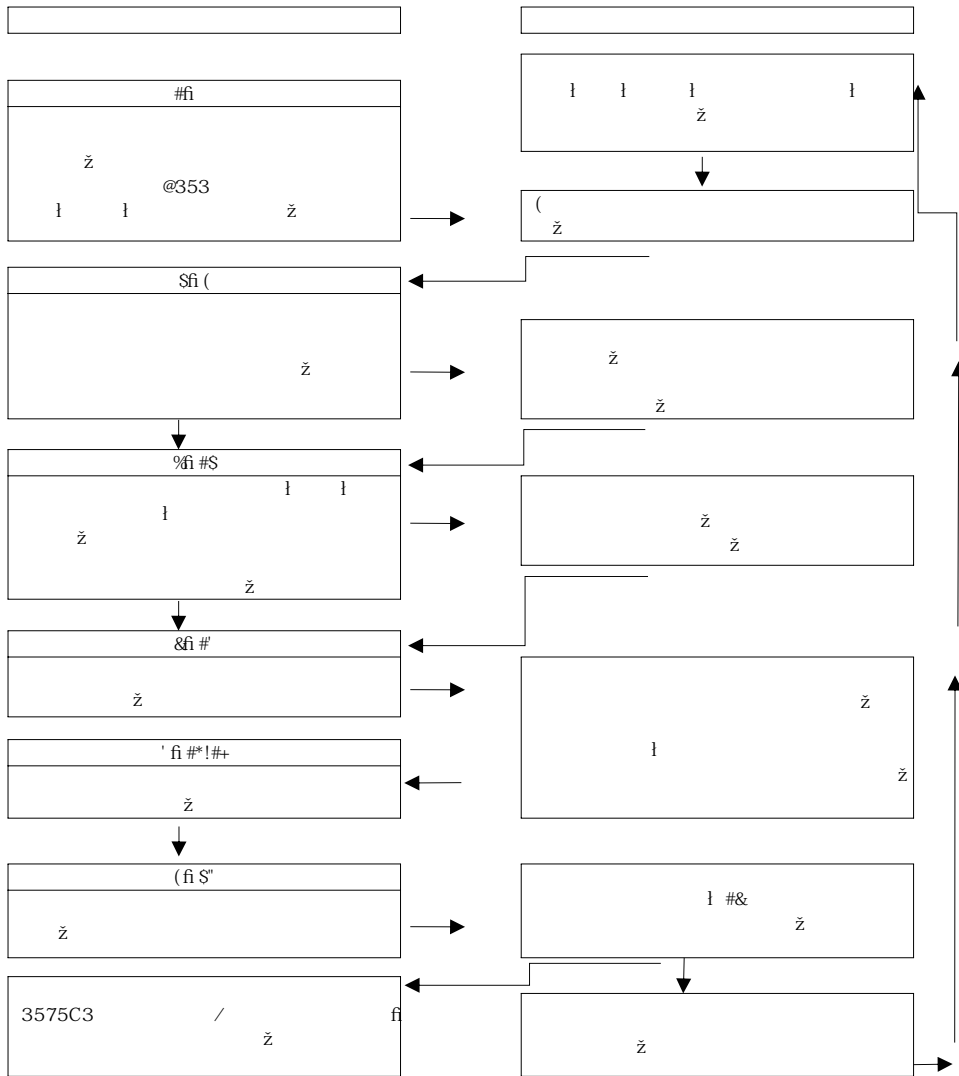
12) The Australian Education, Early Childhood Development and Youth Affairs Senior Officials Committee .

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: Australian Children's Education & Care Quality Authority(2013). Guide to Assessment and Rating for Services.

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: Australian Children's Education and Care Authority(2013). Guide to Assessment and Rating for Regulatory Authorities.
<http://acecqa.gov.au/national-quality-framework/assessment-and-ratings>

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: QA1- , QA2- , QA3- , QA4-
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: Australian Children's Education & Care Quality Authority(2013). The NQF Snapshot Q2 2013

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2	2002	(33,	(56,	(55)	144
	2003	(191),	(56,	(334)	581
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3	2005	(37,	(74,	(83,	249
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4	2007	(260),	(231)		491
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5	2011	(37),	(163),	(152),	411
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	14,446	1,698	1,196	188	5,776	16		5,572
(B)	27,357	2,094	1,226	331	15,525	44	678	9,943
(B/A)	(70.1)	(95.1)	(86.7)	(63.3)	(67.7)	(38.9)	(78.0)	(68.9)

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(2010-2013.11)	88.94	91.51	88.50	93.70	90.13	90.11	87.59	
2005	89.60	91.93	88.87	93.76	89.63	92.68	87.63	
2006	87.11	89.27	87.21	92.16	87.58	86.65	84.97	
2007	88.55	91.62	89.87	92.89	88.56	88.09	87.30	
2008	87.59	91.48	87.84	93.55	88.80	92.02	85.61	
2009	86.68	91.42	86.45	90.98	87.88	86.39	85.05	
2010	87.69	91.76	87.97	91.72	87.87	90.08	86.74	
2011	91.52	96.02	92.41	96.10	91.75	91.38	90.73	
2012	92.83	95.70	92.28	96.13	93.34	93.87	91.59	

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(2010-2013.11)	92.10	94.55	91.63	95.43	92.43	91.35	91.09	
2010	90.20	91.72	89.52	93.35	89.04	82.79	89.47	
2011	92.17	94.37	91.72	95.06	92.13	88.42	91.13	
2012	92.78	95.04	91.76	95.61	93.41	96.39	91.70	

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1.3	2.72	0.47	2.92	0.28	2.92	0.32	2.92	0.31	42.6***
3.5	2.05	0.77	2.74	0.52	2.75	0.56	2.72	0.57	161.8***
39									
2.4 ()	2.20	0.82	2.72	0.55	2.64	0.65	2.55	0.72	541.4***
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6.2	2.40	0.58	2.50	0.55	2.54	0.55	2.59	0.52	2.49	0.56	18.7**
6.3	2.87	0.31	2.90	0.27	2.91	0.21	2.92	0.20	2.89	0.26	5.5*
6.4	2.78	0.41	2.87	0.33	2.73	0.52	2.59	0.62	2.77	0.46	36.0***
6.8	2.21	0.70	2.38	0.65	2.46	0.62	2.50	0.58	2.36	0.63	38.9***
5.1	2.79	0.49	2.87	0.36	2.92	0.24	2.90	0.29	2.88	0.33	21.3***
6.1	2.37	0.64	2.51	0.59	2.58	0.54	2.55	0.57	2.53	0.58	15.6***
6.2	2.36	0.63	2.47	0.57	2.57	0.52	2.61	0.51	2.51	0.56	27.6***
6.3	2.88	0.28	2.90	0.25	2.89	0.24	2.89	0.23	2.90	0.25	2.1
6.4	2.82	0.40	2.86	0.33	2.77	0.46	2.52	0.65	2.80	0.43	123.3***
6.8	2.54	0.67	2.44	0.66	2.47	0.62	2.58	0.55	2.47	0.64	10.8**

*** $p < .001$

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	2010		2011		2012		2013		rX		
									F		
4.1	2.65	0.55	2.80	0.44	2.95	0.18	2.94	0.23	2.81	0.43	455.2***
5.1	2.40	0.69	2.69	0.54	2.81	0.39	2.78	0.42	2.64	0.58	527.7***
5.2	2.40	0.53	2.51	0.51	2.59	0.48	2.67	0.46	2.51	0.51	160.5***
5.4	2.76	0.41	2.88	0.30	2.84	0.38	2.76	0.47	2.82	0.38	103.4***
5.8	2.67	0.55	2.77	0.47	2.69	0.55	2.87	0.34	2.72	0.52	64.1**
4.1	2.72	0.53	2.80	0.45	2.95	0.19	2.95	0.18	2.90	0.31	152.3***
5.1	2.52	0.63	2.68	0.55	2.84	0.34	2.80	0.38	2.78	0.44	80.8**
5.2	2.40	0.52	2.54	0.50	2.67	0.45	2.68	0.44	2.63	0.47	53.9***
5.4	2.82	0.34	2.87	0.32	2.87	0.36	2.74	0.50	2.84	0.39	47.7**
5.8	2.62	0.59	2.74	0.49	2.71	0.52	2.88	0.33	2.76	0.48	53.2**

*** $p < .001$

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	2010		2011		2012		2013		
									F
	269	0.11	279	0.10	280	0.10	281	0.10	1140.7***
	268	0.18	280	0.15	282	0.14	283	0.14	858.8***
	273	0.18	283	0.16	285	0.15	284	0.16	499.2***
	275	0.15	282	0.12	285	0.13	284	0.13	488.6***
	267	0.19	275	0.16	276	0.16	277	0.15	299.5***
	262	0.19	273	0.18	273	0.18	275	0.18	448.1***
()	(5,134)		(45,540)		(4,951)		(1,022)		(15,661)

: (2013).
 *** $p < .001$

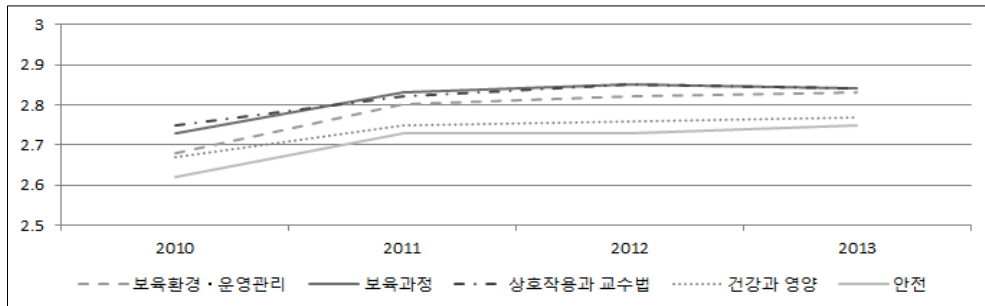
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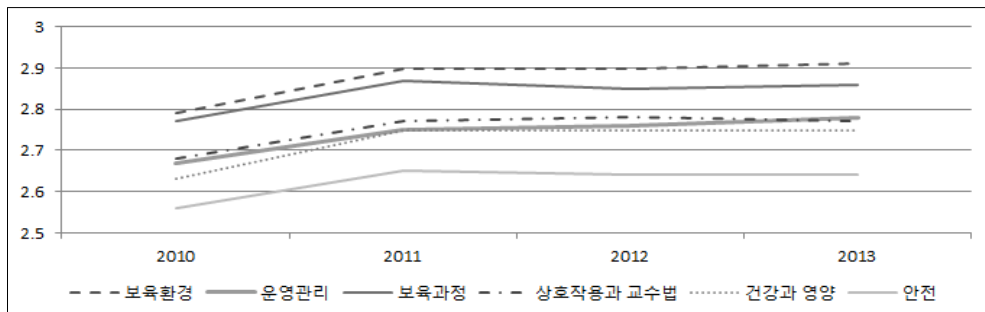
	2010		2011		2012		2013			F	
	269	0.11	279	0.09	279	0.10	279	0.09	275	0.11	225.3
	279	0.16	290	0.12	290	0.12	291	0.11	287	0.14	225.7
	267	0.17	275	0.16	276	0.15	278	0.16	273	0.17	81.2***
	277	0.16	287	0.14	285	0.16	286	0.14	283	0.16	95.8**
	268	0.16	277	0.13	278	0.14	277	0.13	274	0.15	135.6
	263	0.19	275	0.17	275	0.17	275	0.16	271	0.18	146.4***
()	256	0.19	265	0.19	264	0.19	264	0.20	262	0.19	61.8***
	(5134)		(4554)		(4951)		(1,022)		(15661)		

: (2013).

** $p < .01$, *** $p < .001$



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	2010	2011	2012	2013		
	269 011	279 010	280 010	281 010	276 012	1107.4 ^{***}
	268 018	280 015	282 014	283 014	277 017	858.8 ^{***}
1_1	275 054	284 044	286 042	286 040	282 047	536 ^{***}
1_2	292 020	294 015	295 013	296 010	294 016	46.5 ^{***}
1_3	296 019	296 018	297 016	297 016	297 017	36 [*]
1_4	287 034	295 021	295 022	295 021	292 -	90.1 ^{***}
1_5	243 051	267 046	278 041	281 041	263 048	552.8 ^{***}
1_6	266 046	264 046	258 047	274 042	263 046	48.7 ^{**}
1_7	283 047	289 038	289 039	290 038	287 042	26.4 ^{**}
1_8	223 076	250 068	262 063	270 057	246 071	324.4 ^{***}
1_9	287 034	295 018	295 016	295 020	292 025	135.9 ^{***}
1_10	244 067	271 053	270 048	264 048	262 057	240.5 ^{***}
1_11	249 048	271 042	279 037	269 042	266 045	448.0 ^{***}
	273 018	283 016	285 015	284 016	281 017	499.2 ^{***}
2_1	275 039	281 036	285 033	273 043	280 037	70.2 ^{***}
2_2	295 016	296 015	295 016	296 013	295 015	1.8 ^{***}
2_3	289 030	293 023	295 019	296 016	293 024	60.5 ^{***}
2_4	220 082	272 055	264 065	255 072	251 073	541.4 ^{***}
2_5	267 055	281 042	284 039	279 045	277 047	139.6 ^{***}
2_6	265 055	268 054	281 043	282 044	272 051	103.9 ^{***}
2_7	292 024	293 021	291 025	290 027	292 024	11.8 ^{***}
2_8	271 051	283 039	289 030	287 034	281 042	189.7 ^{***}
2_9	285 032	287 030	289 027	293 019	287 029	27.9 ^{***}
2_10	271 043	276 041	281 037	285 033	276 040	75.9 ^{***}
2_11	278 041	281 038	286 033	288 031	282 037	43.6 ^{***}
()	(5,134)	(4,554)	(4,951)	(1,022)	(15,661)	

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		2010	2011	2012	2013		F
3.1	()	275 015	282 012	285 013	284 013	281 014	4886***
3.2		290 026	292 024	291 025	290 026	291 025	51**
3.3		284 043	289 033	290 033	294 026	288 036	41.1***
3.4		297 013	298 009	298 009	298 010	298 010	101***
3.5		297 013	297 012	297 012	297 014	297 012	38**
3.6		291 021	293 017	292 019	292 019	292 019	85***
3.7		288 031	291 025	291 025	291 024	290 027	157***
3.8		1.86 063	204 066	224 068	216 068	205 067	2887***
3.9		293 023	297 014	296 017	296 017	295 018	359***
3.10		289 024	293 017	292 019	292 021	292 021	285***
3.11		291 022	294 012	294 013	295 013	293 016	451***
4.1		221 071	257 060	265 056	260 060	248 066	481.4***
4.1		267 019	275 016	276 016	277 015	273 017	299.5***
4.2	, , ,	265 055	280 044	295 018	294 023	281 043	455.2***
4.3		257 043	255 043	249 043	251 043	254 043	363***
4.4		296 017	297 013	294 020	292 024	295 018	31.0***
4.5		266 059	280 046	280 045	277 048	275 051	91.8**
4.6	,	292 023	294 -	294 020	296 016	293 021	21.3***
4.7		234 070	241 067	245 063	246 066	240 067	267**
4.8		278 039	279 038	276 040	278 039	278 039	51**
4.9		278 053	288 039	287 040	283 046	284 045	55.0***
4.10		233 077	258 067	270 058	275 054	255 069	293.1***
5.1		262 047	268 042	269 042	278 037	267 044	51.0***
5.1		262 019	273 018	273 018	275 018	270 019	448.1***
5.2		240 069	269 054	281 039	278 042	264 058	527.7***
5.3		240 053	251 051	259 048	267 046	251 051	160.5***
5.4		271 052	278 047	277 047	278 048	276 049	191***
5.5		276 041	288 030	284 038	276 047	282 038	103.4***
5.6		231 062	238 062	225 066	231 064	231 064	36.9***
5.7		286 037	290 030	291 030	288 036	289 033	21.2***
5.8		284 034	286 032	283 034	284 033	284 033	8.5***
5.9		267 055	277 047	269 055	287 034	272 052	64.1***
5.10		265 062	277 046	279 044	279 041	274 051	73.1***
()		261 057	276 046	284 038	284 037	274 048	226.3***
		(5134)	(45,540)	(4,951)	(1,022)	(15,661)	

: (2013).
 * $p < .05$ ** $p < .01$, *** $p < .001$

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	2010	2011	2012	2013		F
	269 011	279 009	279 010	279 009	275 011	2253 ^{***}
1_1	279 016	290 012	290 012	291 011	287 014	2257 ^{***}
1_2	281 034	294 020	295 016	296 015	290 025	852 ^{**}
1_3	290 033	293 027	294 024	294 027	292 028	40 ^{**}
1_4	247 056	287 039	289 038	289 037	275 048	2527 ^{***}
1_5	278 048	289 032	286 040	286 041	285 041	153 ^{**}
1_6	290 031	290 035	289 037	290 034	290 035	03 ^{***}
1_7	287 034	293 023	293 020	293 023	291 026	170 ^{***}
1_8	280 038	295 019	297 014	296 015	291 026	1167 ^{***}
1_9	292 024	296 017	296 016	298 010	295 019	131 ^{***}
1_10	288 030	294 019	293 024	294 017	292 025	182 ^{***}
1_11	242 077	265 065	264 065	264 065	257 070	31.6 ^{***}
	290 027	296 016	297 015	299 004	294 020	31.6 ^{***}
2_1	267 017	275 016	276 015	278 016	273 017	81.2 ^{***}
2_2	291 029	297 015	297 017	298 014	295 022	193 ^{***}
2_3	233 050	255 046	263 046	270 045	252 049	1101 ^{***}
2_4	228 041	225 040	221 036	233 044	225 040	101 ^{***}
2_5	277 057	289 041	290 040	289 041	285 047	209 ^{***}
2_6	296 018	297 020	297 017	294 027	297 019	22 ^{**}
2_7	224 078	249 070	251 071	265 061	243 073	450 ^{***}
2_8	267 045	262 043	265 046	272 042	265 045	51 ^{**}
2_9	278 047	286 037	281 038	269 043	280 041	169 ^{***}
2_10	280 037	290 027	291 026	287 030	287 031	330 ^{***}
2_11	257 058	262 056	274 045	278 041	266 053	320 ^{***}
2_12	291 029	294 021	293 023	292 027	293 025	45 ^{**}
	287 030	290 027	291 025	293 020	289 027	7.6 ^{***}

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		2010	2011	2012	2013		F
		277 016	287 014	285 016	286 014	283 016	958**
3.1		288 029	292 024	291 026	288 031	290 027	53**
3.2		295 018	297 014	295 017	296 015	296 016	38***
3.3		290 026	292 025	293 023	296 018	292 024	61***
3.4		274 043	285 036	286 032	289 030	282 037	348**
3.5		204 078	267 059	268 062	269 062	247 073	2658***
3.6		292 030	296 017	297 014	299 007	295 021	181***
3.7		273 044	280 038	273 041	277 040	275 041	85***
3.8		284 042	290 032	282 046	274 055	284 042	133***
3.9		276 049	282 040	284 036	287 033	281 042	95***
3.10		294 022	297 014	293 023	293 024	294 021	74***
3.11		277 049	289 033	287 036	278 045	283 041	237**
3.12		278 043	285 034	281 038	286 034	281 039	68**
3.13		279 039	282 037	281 038	290 026	282 037	69**
3.14		279 041	283 037	282 040	286 033	282 039	35***
		268 016	277 013	278 014	277 013	274 015	1356***
4.1	()	292 023	296 016	293 020	293 021	294 020	62***
4.2		238 078	267 063	266 063	274 057	258 069	536**
4.3		295 019	298 010	297 012	298 009	297 014	11.5***
4.4		298 009	297 013	298 010	296 015	298 011	37#
4.5		293 019	296 012	294 016	295 013	294 016	7.7***
4.6		290 029	292 026	290 028	288 032	290 028	24#
4.7		1.70 056	1.74 054	1.82 058	1.77 054	1.76 056	10.5
4.8		287 032	295 018	294 021	295 018	292 024	32.0
4.9		288 028	294 019	294 018	293 020	292 022	20.2
4.10		290 024	295 012	295 011	294 016	293 017	25.0
		263 019	275 017	275 017	275 016	271 018	1464***
5.1		278 046	288 036	293 022	290 029	287 036	41.4**
5.2	, , ,	263 043	266 043	258 044	260 044	262 044	69**
5.3		293 021	298 011	296 017	295 018	295 017	144***
5.4		273 053	286 038	285 038	285 038	281 044	25.2***
5.5		290 026	294 019	292 025	295 019	293 023	7.4***
5.6	,	237 071	250 067	248 064	243 069	245 068	88**
5.7		285 033	290 028	287 031	286 032	287 031	59***
5.8		242 078	267 063	267 061	255 069	258 069	369***
5.9		214 077	246 071	259 064	261 062	241 073	100.3***
5.10		235 042	254 044	255 044	267 042	250 045	74.8**
5.11		285 038	293 025	291 028	292 024	290 031	16.9
5.12		256 048	267 043	267 043	269 042	264 045	16.9

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	2010	2011	2012	2013		F
6.1	2.56 0.19	2.65 0.19	2.64 0.19	2.64 0.20	2.62 0.19	61.8***
6.2	2.33 0.64	2.53 0.59	2.54 0.57	2.49 0.60	2.47 0.61	3.2B***
6.3	2.40 0.58	2.50 0.55	2.54 0.55	2.59 0.52	2.49 0.56	18.7**
6.4	2.87 0.31	2.90 0.27	2.91 0.21	2.92 0.20	2.89 0.26	5.5*
6.5	2.78 0.41	2.87 0.33	2.73 0.52	2.59 0.62	2.77 0.46	36.0***
6.6	1.84 0.64	1.99 0.66	1.93 0.65	2.05 0.67	1.92 0.65	15.0***
6.7	2.94 0.19	2.96 0.14	2.96 0.15	2.95 0.19	2.95 0.17	5.2*
6.8	2.80 0.39	2.80 0.39	2.81 0.36	2.80 0.36	2.80 0.38	0.2***
6.9	2.21 0.70	2.38 0.65	2.46 0.62	2.50 0.58	2.36 0.66	38.9***
6.10	2.63 0.59	2.66 0.50	2.65 0.49	2.65 0.48	2.65 0.52	0.8***
()	2.78 0.46	2.87 0.36	2.91 0.28	2.89 0.30	2.86 0.37	29.8***
()	(5.134)	(4.554)	(4.951)	(1.022)	(15.661)	

: (2013).
 * $p < .05$ ** $p < .001$, *** $p < .001$

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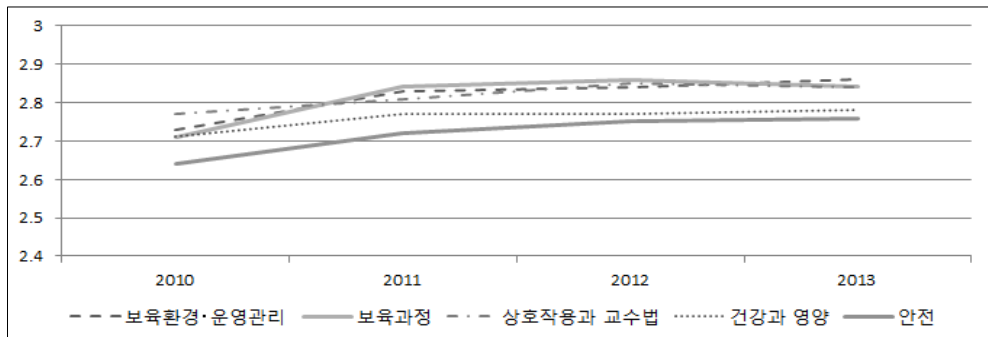
	2010		2011		2012		2013		F
.	271	012	279	011	281	010	282	010	606 ^{***}
	273	018	283	014	284	014	286	013	481 ^{***}
	271	019	284	017	286	015	284	016	438 ^{**}
	277	013	281	013	285	012	284	012	569 ^{***}
	271	019	277	017	277	016	278	016	89 ^{***}
	264	018	272	019	275	018	276	018	261 ^{***}
()	(130)		(2,217)		(3,255)		(1,781)		(7,383)

: (2013).
^{***} $p < .001$

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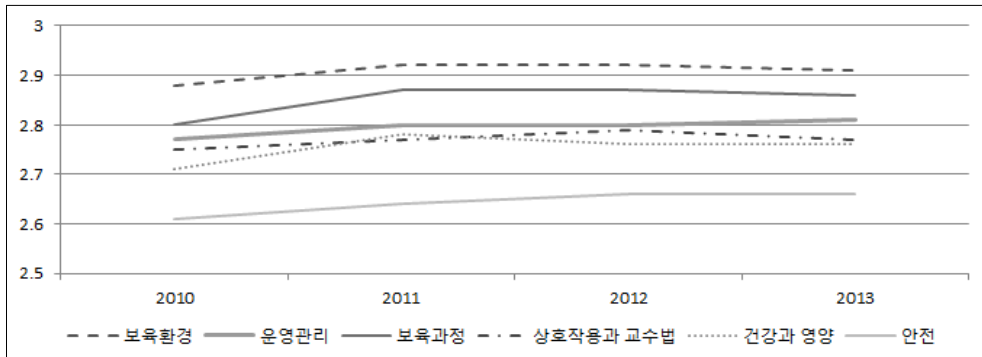
	2010		2011		2012		2013		F
.	276	011	280	010	280	010	280	010	208 ^{***}
	288	013	292	010	292	011	291	011	11.8 ^{***}
	277	016	280	015	280	015	281	015	46 ^{**}
	280	016	287	015	287	015	286	014	22.5 ^{***}
	275	014	277	014	279	013	277	014	13.5 ^{***}
	271	019	278	017	276	017	276	017	20.2 ^{***}
	261	019	264	019	266	019	266	020	10.7 ^{***}
()	(333)		(3,366)		(1,916)		(661)		(6,276)

: (2013).
^{**} $p < .001$, ^{***} $p < .001$



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	2010	2011	2012	2013		F
	271 012	279 011	281 010	282 010	281 010	606***
1.1	273 018	283 014	284 014	286 013	284 014	481***
1.2	273 053	285 042	287 039	286 042	286 041	52**
1.3	290 024	294 018	295 015	296 013	295 016	89***
1.4	293 031	297 016	297 017	298 015	297 017	42**
1.5	293 026	296 019	296 018	295 021	296 019	22
1.6	252 049	269 044	279 039	285 035	277 041	701***
1.7	263 047	265 045	255 048	272 043	262 046	546***
1.8	281 051	292 035	291 036	291 036	291 036	34*
1.9	244 067	261 063	273 054	274 054	269 057	305***
1.10	292 024	297 015	298 010	297 012	297 013	89***
1.11	254 065	273 051	271 050	275 046	273 050	90***
1.11	270 045	281 036	285 033	280 036	282 035	146***

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		2010	2011	2012	2013		F
		271 019	284 017	286 015	284 016	285 016	438***
2.1		270 043	286 032	288 029	270 045	283 036	111.6***
2.2		298 011	296 014	296 016	296 014	296 015	1.3
2.3		290 026	292 026	294 021	295 017	294 022	7.8***
2.4		216 081	279 049	273 057	272 058	273 056	55.3***
2.5		267 053	278 045	281 044	272 051	278 046	14.7***
2.6		260 060	272 050	279 046	282 043	277 047	23.0***
2.7		294 019	294 021	292 025	290 027	292 024	8.3***
2.8		270 054	282 041	291 027	288 032	287 034	43.7***
2.9		278 042	287 031	288 029	291 024	288 029	11.1***
2.10		268 046	275 041	282 036	285 035	280 038	30.6***
2.11		273 047	281 038	285 034	286 033	284 035	11.7***
		277 013	281 013	285 012	284 012	283 013	56.9***
3.1	()	287 029	289 028	290 026	289 027	289 027	1.7
3.2		295 023	289 036	290 034	292 029	290 034	4.1**
3.3		299 008	298 009	299 010	298 009	299 009	0.2
3.4		297 017	298 011	297 013	298 012	298 012	0.7
3.5		291 021	295 014	293 019	293 019	293 018	5.1**
3.6		290 026	292 025	292 026	292 027	292 026	0.2
3.7		1.86 062	1.93 064	2.18 068	2.14 068	2.09 068	73.5***
3.8		297 012	297 015	296 017	296 019	296 017	0.6
3.9		288 024	292 021	293 019	292 021	292 020	4.6**
3.10		292 014	294 014	295 010	295 011	295 012	5.6**
3.11		2.23 070	2.53 063	2.68 054	2.64 057	2.62 059	50.0**
		271 019	277 017	277 016	278 016	277 016	8.9***
4.1		272 053	280 045	295 019	295 018	290 031	152.3***
4.2	, , ,	268 041	258 043	251 043	250 043	253 043	21.5***
4.3		297 013	297 014	296 018	293 023	295 018	19.7***
4.4		271 053	279 047	283 042	281 045	281 044	5.0**
4.5		291 027	294 020	293 025	294 022	293 023	3.8**
4.6	,	2.33 073	2.45 068	2.43 066	2.44 066	2.44 067	1.5
4.7		275 040	283 034	282 036	278 039	281 036	9.4***
4.8		284 047	289 038	287 039	284 045	287 040	4.9**
4.9		2.43 075	2.58 067	2.65 062	2.73 054	2.64 063	26.4***
4.10		2.64 046	2.72 042	2.72 041	2.79 037	2.74 040	17.0***

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/ ŽSŽ# fi

	2010	2011	2012	2013		F
5.1	264 0.18	272 0.19	275 0.18	276 0.18	274 0.18	261***
5.2	252 0.63	268 0.55	284 0.34	280 0.38	278 0.44	808***
5.3	240 0.52	254 0.50	267 0.45	268 0.44	263 0.47	539**
5.4	271 0.56	278 0.46	276 0.48	277 0.48	277 0.48	1.4
5.5	282 0.34	287 0.32	287 0.36	274 0.50	284 0.39	477**
5.6	235 0.60	235 0.63	223 0.67	231 0.67	229 0.66	151***
5.7	285 0.42	290 0.31	291 0.30	289 0.34	290 0.31	31*
5.8	285 0.34	286 0.32	285 0.33	285 0.33	285 0.33	0.3
5.9	262 0.59	274 0.49	271 0.52	288 0.33	276 0.48	532**
5.10	260 0.66	272 0.54	277 0.46	276 0.45	275 0.49	96***
()	(130)	(2,217)	(3,255)	(1,781)	(7,383)	

: (2013).
 * $p < .05$ ** $p < .001$, *** $p < .001$

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	2010	2011	2012	2013		F
	276 011	280 010	280 010	280 010	280 010	208***
1_1.	288 013	292 010	292 011	291 011	292 011	11.8
1_2.	288 030	292 023	295 017	296 013	293 021	198***
1_3.	295 026	295 022	294 025	293 028	294 024	32*
1_4.	272 047	292 028	292 032	292 031	291 031	426***
1_5.	290 033	293 027	285 042	280 -	289 036	325***
1_6.	294 025	293 028	293 030	289 038	292 030	45*
1_7.	293 025	294 020	295 019	294 021	294 020	08
1_8.	285 034	290 027	297 013	297 013	293 023	57.5***
1_9.	297 016	297 016	297 015	298 011	297 015	1.2
1_10.	296 017	295 019	294 022	294 022	295 020	36*
1_11.	265 064	273 057	268 062	269 061	270 059	45*
2_1.	298 011	298 013	298 013	298 007	298 012	07
2_1.	277 016	280 015	280 015	281 015	280 015	46**
2_2.	296 017	298 014	296 019	296 018	297 017	63***
2_3.	242 053	258 049	264 046	274 043	261 048	420***
2_4.	230 042	235 045	227 041	235 044	232 043	140***
2_5.	286 045	288 043	292 036	291 037	289 040	39**
2_6.	299 010	298 015	297 019	296 021	297 017	29*
2_7.	263 062	261 064	264 063	263 062	262 064	1.0
2_8.	276 040	276 039	273 041	275 041	275 040	34*
2_9.	286 037	289 034	283 037	282 038	286 036	145***
2_10.	291 028	293 023	294 021	294 021	293 022	36*
2_11.	275 051	277 044	279 042	279 044	278 044	1.2
2_12.	291 029	289 033	293 028	290 029	290 031	7.0***
	292 026	295 018	295 018	296 015	295 019	32*

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/ ŽSŽ#(fi

	2010	2011	2012	2013		F
	280 016	287 015	287 015	286 014	287 015	225 ^{***}
3_1	288 030	293 024	292 025	285 033	291 026	192 ^{**}
3_2	298 012	297 014	296 017	297 013	297 015	39
3_3	293 024	294 021	294 021	296 018	294 021	1.6 ^{***}
3_4	283 040	287 033	288 030	292 024	288 032	7.7 ^{**}
3_5	205 077	274 052	275 056	272 057	270 057	161.8 ^{***}
3_6	295 024	295 023	297 019	298 014	296 021	38 [*]
3_7	285 035	286 033	275 041	278 038	282 036	364 ^{***}
3_8	280 049	284 042	286 040	276 052	283 043	9.5 ^{***}
3_9	279 049	284 038	284 037	289 031	284 038	51 ^{**}
3_10	297 013	297 014	294 020	293 023	296 017	150 ^{***}
3_11	281 040	285 038	290 031	275 049	286 038	299 ^{***}
3_12	280 043	282 037	282 039	284 035	282 038	1.0
3_13	281 039	281 037	282 037	288 029	282 036	5.5 ^{**}
3_14	277 046	280 039	284 037	286 034	282 038	7.5 ^{***}
	275 014	277 014	279 013	277 014	277 014	135 ^{***}
4_1 ()	294 019	294 020	294 020	294 019	294 020	06
4_2	251 076	262 068	265 065	270 060	263 067	64 ^{***}
4_3	299 003	298 011	298 013	298 012	298 011	1.6
4_4	298 008	298 009	298 010	298 010	298 009	05
4_5	295 016	295 012	295 016	294 018	295 014	1.9
4_6	295 017	293 023	293 024	290 030	293 024	32 [*]
4_7	1.77 060	1.75 056	1.83 058	1.77 057	1.78 057	7.7 ^{**}
4_8	297 013	296 016	296 016	295 019	296 016	1.4
4_9	296 016	294 018	295 018	294 019	294 018	2.2
4_10	296 009	296 010	296 012	296 010	296 011	0.9

/ ŽSŽ#(fi

	2010	2011	2012	2013		F
5_1	271 019	278 017	276 017	276 017	277 017	202***
5_2	279 049	287 036	292 024	290 029	288 033	21.3***
5_3	278 037	274 039	261 044	260 044	269 042	57.9***
5_4	294 022	297 014	296 017	295 017	296 016	5.4**
5_5	281 045	285 040	286 037	282 043	284 040	2.8*
5_6	292 024	295 019	290 031	293 026	293 024	15.5***
5_7	257 067	259 065	249 066	244 068	254 066	15.6***
5_8	291 025	292 024	288 029	288 030	290 026	10.9***
5_9	256 073	273 058	268 060	258 068	269 061	17.7***
5_10	228 080	247 073	253 067	266 059	250 071	24.8***
5_11	240 045	262 047	261 044	268 043	261 046	29.0***
5_12	290 031	293 025	294 023	294 023	293 025	2.7*
	266 046	268 043	269 043	272 040	268 043	3.0*
6_1	261 019	264 019	266 019	266 020	265 019	10.7***
6_2	237 064	251 059	258 054	255 057	253 058	15.6***
6_3	236 063	247 057	257 052	261 051	251 056	27.6***
6_4	288 028	290 025	289 024	289 023	290 025	2.1
6_5	282 040	286 033	277 046	252 065	280 043	123.3***
6_6	1.81 063	1.95 067	1.99 067	2.10 070	1.97 067	15.7***
6_7	296 018	296 016	295 019	294 023	295 018	3.4*
6_8	285 033	281 037	285 033	280 037	283 036	5.9***
6_9	254 067	244 066	247 062	258 055	247 064	10.8***
6_10	267 055	262 053	263 050	266 049	263 052	2.1
()	279 048	287 034	290 031	292 027	288 034	13.0***
	(333)	(336)	(1,916)	(661)	(6,276)	

: (2013).
 * $p < .05$ ** $p < .001$, *** $p < .001$

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		91.1	95.3	90.4	89.9	91.6	87.7	97.1
		5.4	3.7	5.2	5.6	5.6	0.0	2.7
1		96.9	98.4	96.6	97.1	97.7	96.5	99.2
		3.9	2.4	3.8	6.2	3.4	0.0	1.7
2		92.4	95.9	91.7	92.7	94.6	81.2	98.1
		5.8	3.3	5.8	5.8	3.8	0.0	2.8
3		95.0	97.1	94.7	93.5	94.7	96.0	98.7
		7.0	5.8	7.1	7.9	8.0	0.0	2.6
4		92.6	94.6	92.3	92.2	93.4	94.9	95.9
		4.8	4.3	4.8	4.6	3.9	0.0	3.6
5		91.4	95.8	90.6	92.0	90.7	83.5	96.5
		6.0	3.9	6.0	5.5	6.3	0.0	3.9
6		87.3	93.0	86.5	84.6	88.9	82.1	94.6
		8.3	6.1	8.1	8.6	7.3	0.0	6.3

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	1	2	3	4	5
	95	95 90	90 85	85 80	80
	269	367	234	92	39

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	1	2	3	4	5	6	()
	91.1	97.2	91.5	94.6	92.0	90.2	85.7 (1,716)
	5.4	4.3	6.7	8.2	5.6	7.1	9.7
1	97.1	99.2	96.5	98.8	95.5	96.1	94.5 (461)
	1.3	2.0	2.9	2.0	3.6	3.5	4.9
2	92.3	97.6	92.4	96.3	92.5	90.7	86.6 (629)
	1.4	3.5	4.6	4.1	4.6	5.1	6.8
3	87.7	95.9	88.9	92.7	90.0	86.9	80.2 (401)
	1.4	4.8	6.2	7.3	5.9	6.1	8.0
4	83.0	94.7	85.4	87.7	88.1	83.4	76.1 (158)
	1.3	6.7	7.8	12.3	5.8	7.2	9.8
5	76.8	93.5	79.6	76.6	86.2	79.1	72.2 (67)
	2.8	6.1	9.0	16.9	5.8	8.1	9.5

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	1	2	3	4	5
	965	965 91.1	91.1 85.7	85.7 75	75
(%)	17.7	37.1	29.7	14.9	0.7

X ejej i X X X X X X X X X

		rX ` a							
		1	2	3	4	5	6	()	
1		91.1	97.2	91.5	946	920	902	85.7	(1,710)
		54	43	67	82	56	7.1	97	
2		97.9	99.4	97.1	991	962	96.9	95.7	(303)
		09	1.6	24	1.7	33	31	43	
3		93.6	97.9	93.3	970	93.2	92.2	88.4	(637)
		1.6	3.3	4.4	3.4	4.3	4.9	6.5	
4		88.7	96.4	89.7	93.6	90.5	87.6	81.5	(509)
		1.6	4.4	5.8	6.6	5.6	5.7	8.0	
5		82.3	94.5	85.0	86.4	87.7	82.7	76.0	(255)
		2.8	6.3	8.1	13.1	5.8	7.3	9.8	
5		72.0	92.7	70.8	63.1	85.6	74.8	69.7	(12)
		2.3	7.7	8.2	17.7	8.4	8.7	7.7	

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	()	1	2	3	4	5
	91.1 (54)	965	965 91.1	91.1 857	857 75	75
1	97.2 (43)	97.2	97.2 929	929 886	886 75	75
2	91.5 (67)	982	982 91.5	91.5 848	848 75	75
3	946 (82)	946	946 864	864 782	782 75	75
4	920 (56)	97.6	97.6 920	920 864	864 75	75
5	902 (7.1)	97.3	97.3 902	902 831	831 75	75
6	85.7 (9.7)	95.4	95.4 85.7	85.7 760	760 75	75

X X ejjk K X X X X X

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		1	2	3	4	5	6	()
		91.1	97.2	91.5	946	920	902	85.7 (1,716)
		54	43	67	82	56	7.1	97
1		99.1	1000	1000	99.4	1000	1000	98.3 (12)
		09	00	00	1.5	00	00	1.7
2		96.9	98.9	96.5	98.5	96.6	96.2	94.3 (361)
		1.8	2.2	2.5	2.4	2.3	3.0	4.4
3		92.6	98.2	93.2	96.4	93.0	91.4	87.6 (639)
		2.7	2.8	4.0	4.3	3.6	4.8	6.9
4		88.5	95.6	88.7	94.2	89.3	87.5	84.9 (388)
		3.8	5.1	6.5	5.8	5.7	6.7	6.5
5		84.2	95.1	85.7	86.7	88.0	83.6	72.5 (316)
		4.7	6.0	8.6	14.1	6.5	7.8	8.2

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	1	2	3	4	5
	07	22.2	37.8	21.0	184

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	802 (1,056)	0.5	60	55.0	38.5	100(846)	3.3
X ² (df)/F	77.1 (258)	1.0	66	44.9	47.5	100(198)	3.4
	76.7 (215)	-	67	56.4	37.0	100(165)	3.3
	78.8 (217)	-	53	57.3	37.4	100(171)	3.3
	86.6 (179)	-	65	62.6	31.0	100(155)	3.2
	84.0 (187)	1.3	5.1	56.1	37.6	100(157)	3.3
	97(4)*			-			1.3
X ² (df)/F	80.6 (973)	0.5	60	54.5	39.0	100(783)	3.3
	75.0 (56)	-	48	57.1	38.1	100(42)	3.3
	76.0 (25)	-	10.5	63.2	26.3	100(19)	3.2
	1.3(2)			-			0.7

* p < .05

X ei ej X X X X

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	124	57	62	330	17.2	239	1.4 100(209)
	11.9	34	68	32.2	85	33.9	34 100(59)
	80	20	80	36.0	24.0	22.0	- 100(50)
	65	10.9	22	45.7	17.4	17.4	- 100(46)
	25.0	8.3	12.5	20.8	12.5	20.8	- 100(24)
	20.0	6.7	3.3	20.0	26.7	20.0	3.3 100(30)

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	X	X	X	X	X	X	X	X	X
	75.9	76.5	76.5	74.0	75.7	77.3	72.3	85.5	(1,113)
	80.7	81.5	81.9	80.3	79.5	81.1	78.0	91.5	(259)
	71.6	73.4	71.1	68.3	71.1	75.2	70.6	83.5	(218)
	76.2	76.7	76.7	74.4	74.4	76.2	72.2	85.9	(227)
	77.9	77.9	77.9	74.4	77.4	76.9	71.3	84.6	(195)
	72.4	72.0	74.3	71.5	75.2	76.2	68.2	80.8	(214)
$X^2(df)$	7.4(4)	7.4(4)	8.5(4) [#]	9.7(4) [*]	5.1(4)	3.0(4)	6.4(4)	12.2(4) [*]	
	79.7	80.3	80.7	78.1	79.1	81.2	76.1	90.4	(973)
	78.9	78.9	75.4	71.9	82.5	77.2	73.7	82.5	(57)
	28.4	28.4	27.2	25.9	28.4	29.6	25.9	28.4	(81)
$X^2(df)$	107.6(2) ^{***}	111.9(2) ^{***}	119.2(2) ^{***}	105.9(2) ^{***}	105.9(2) ^{***}	113.0(2) ^{***}	93.8(2) ^{***}	232.7(2) ^{***}	
	76.6	65.1	81.1	79.3	72.3	77.4	57.7	79.9	(1,117)
	82.6	74.8	86.0	87.6	77.9	81.8	62.8	82.2	(258)
	79.1	70.5	83.2	84.1	75.9	80.5	63.6	83.6	(220)
	80.8	69.2	85.1	81.7	77.4	82.2	64.4	82.7	(208)
	78.7	62.5	81.5	74.5	71.3	76.4	56.0	78.7	(215)
	60.9	47.0	68.8	67.0	58.1	65.6	40.9	72.1	(215)
$X^2(df)$	37.9(4) ^{***}	46.8(4) ^{***}	28.0(4) ^{***}	37.5(4) ^{***}	29.8(4) ^{***}	24.1(4) ^{***}	34.8(4) ^{***}	12.1(4) [*]	
	82.9	70.5	87.6	85.7	78.2	83.6	62.5	86.5	(1,026)
	5.5	5.5	7.7	7.7	6.6	7.7	4.4	5.5	(91)
$X^2(df)$	280.0(1) ^{***}	155.5(1) ^{***}	348.5(1) ^{***}	309.9(1) ^{***}	214.0(1) ^{***}	275.9(1) ^{***}	115.6(1) ^{***}	342.5(1) ^{***}	

* $p < .05$ *** $p < .001$

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02	15	543	440	100(1,047)	34
03	27	61.9	35.1	100(1,027)	33

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X ei en X X X X rX X

					rX` adK
		()			()
	34	(1,047)		33	(1,027)
	35	(256)		33	(247)
	34	(212)		33	(206)
	34	(212)		33	(193)
	34	(179)		34	(196)
	34	(188)		32	(185)
F	06		F	27	
	34	(961)		33	(1,018)
	34	(55)		32	(9)
	32	(29)	t	05	
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* p < .05

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	ei	eo	X	X	X	X	X	X	X	X	
	24	430	545	01	100(1,060)	09	506	485	100(1,049)	35	
	08	302	690	-	100(259)	08	418	574	100(256)	36	
	23	400	577	-	100(215)	1.0	565	426	100(209)	34	
	23	440	532	05	100(218)	05	468	528	100(216)	35	
	39	51.7	444	-	100(180)	1.7	61.1	37.2	100(180)	34	
	32	545	423	-	100(189)	05	505	489	100(188)	35	
X ² (df)/F	-					-					57**
	25	423	551	01	100(972)	07	497	495	100(961)	35	
	1.8	51.8	464	-	100(56)	-	57.1	42.9	100(56)	34	
	-	533	467	-	100(30)	67	667	267	100(30)	32	
X ² (df)/F	-					-					48**

** p < .01, *** p < .001

fz	%			%			%		
	ei	ep	X	X	X	X	X	X	
	05	288	707	02	1.7	61.2	37.0	33	
	08	198	794	04	20	560	41.5	34	
	-	199	801	-	1.0	563	427	34	
	05	286	709	-	20	597	38.3	34	
	05	330	665	-	0.5	61.5	37.9	34	
	06	47.2	522	06	28	746	22.1	32	
X ² (df)/F	-			281(12)**			59***		

** p < .01, *** p < .001

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1	121	11.6	40	52	155	08	58	426	25	1000(1,052)
2	86	136	7.3	66	237	32	103	251	1.6	1000(980)
1+2	207	252	11.3	11.8	392	40	161	67.7	41	
1	68	237	1.3	50	138	03	46	435	1.0	1000(1,042)
2	56	17.2	41	7.1	292	1.2	63	27.3	21	1000(1,036)
1+2	124	409	5.4	12.1	430	1.5	109	70.8	31	

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	30	30	390	550	1000 (200)	35
	38	77	500	385	1000 (52)	32
	36	36	345	582	1000 (55)	35
	22	-	355	624	1000 (99)	36
X ² (df)/F		-				43
	32	153	67.3	142	1000(1,112)	29

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 * p < .05

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	X	ej	ej	X	X	X	X	X	X	X	rX` aX
	32	153		67.3		142		100(1,112)		29	()
	1.5	108		65.3		224		100(259)		31	
	46	197		63.3		124		100(218)		28	
	44	123		70.0		132		100(227)		29	
	46	21.0		63.1		11.3		100(195)		28	
	1.4	141		74.6		99		100(213)		29	
X ² (df)/F			39.8(12) ^{***}								67 ^{***}
	30	150		67.5		145		100(973)		29	
	7.0	263		57.9		88		100(57)		27	
	3.8	11.3		70.0		150		100(80)		30	
X ² (df)/F			103(6)								42 ²

* p < .05 *** p < .001

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	X	ej	ek	X	X	X	X	X	X	X	rX` a
	67.7	63	188	68	0.3	100(1,057)	85.5	10.1	40	0.5	100(1,053)
	68.2	62	19.0	66	-	100(258)	86.0	9.3	47	-	100(258)
	66.8	47	21.5	65	0.5	100(214)	85.9	11.3	23	0.5	100(213)
	69.7	106	12.4	7.3	-	100(218)	85.3	9.2	46	0.9	100(217)
	68.9	56	17.2	7.8	0.6	100(180)	84.4	12.3	34	-	100(179)
	64.7	43	24.6	5.9	0.5	100(187)	85.5	8.6	48	1.1	100(186)

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	20	7.5	57.0	335	100(20)	32
	1.9	1.9	71.2	250	100(52)	32
	1.8	7.3	60.0	309	100(55)	32
	2.2	10.8	47.3	39.8	100(93)	32
X ² (df)/F		-				0.1
	20	11.2	79.1	7.7	100(1,113)	29
	1.2	7.5	85.6	5.7	100(1,117)	30

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		rX ` a	
		()	
	29	(1,047)	(1,117)
	29	(256)	29 (258)
	28	(212)	30 (220)
	30	(212)	29 (208)
	29	(179)	30 (216)
F	29	(188)	30 (215)
F	22 [#]		08
	29	(961)	30 (1,026)
	29	(55)	29 (91)
F	29	(29)	08
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		rX ` a	
		()	
	41.5	140	21.5 230 100(20)
	500	11.5	135 25.0 100(52)
	527	145	25.5 7.3 100(55)
	301	151	237 31.2 100(93)
X ² (df)		167(2)*	
	240	723	17 21 100(1,110)
	336	61.7	25 22 100(1,116)

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* $p < .05$

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240	723	17	21	100(1,110)
17.1	798	1.2	1.9	100(258)
28.4	67.4	1.4	28	100(218)
30.4	66.5	1.3	1.8	100(227)
21.1	72.7	31	31	100(194)
23.5	73.7	1.9	09	100(213)
33.6	61.7	25	22	100(1,116)
27.5	68.6	1.6	23	100(258)
30.6	61.6	37	41	100(219)
34.1	63.9	1.4	05	100(208)
35.2	58.3	42	23	100(216)
41.9	54.9	1.9	1.4	100(215)

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3	4	5	6	7-8	()
7.0	72.1	2.3	14.0	4.7	100(43)
-	57.1	-	28.6	14.3	100(7)
14.3	78.6	7.1	-	-	100(14)
4.5	72.7	-	18.2	4.5	100(22)

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					()
24.5	22.5	47.5	5.5	100(200)	
11.0	5.0	66.0	18.0	100(200)	
7.0	13.5	39.0	40.5	100(200)	
8.5	34.5	47.0	10.0	100(200)	
9.7	1.6	63.0	25.6	100(1,104)	
6.1	1.3	65.5	27.1	100(1,107)	
4.8	32.8	58.2	4.2	100(1,104)	
5.6	28.1	61.9	4.3	100(1,106)	

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	245	225	475	55	11.0	5.0	66.0	18.0	100(20)
	154	346	462	38	15.4	7.7	63.5	13.5	100(52)
	200	145	564	9.1	7.3	3.6	63.6	25.5	100(55)
	323	204	430	4.3	10.8	4.3	68.8	16.1	100(93)
X ² (df)	127(6)*				-				

* p < .05

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	()				()				
	70	135	390	405	85	345	470	100	(200)
	11.5	192	385	308	154	250	500	96	(52)
	55	255	41.8	27.3	7.3	27.3	509	145	(55)
	54	32	37.6	53.8	54	441	430	7.5	(93)
X ² (df)	242(6) ^{***}				11.0(6) [#]				

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p < .1, *** p < .001

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	()					()				
	97	1.6	630	25.6	100(1,104)	61	1.3	65.5	27.1	100(1,107)
	101	1.9	591	28.8	100(257)	69	0.8	62.9	29.3	100(259)
	133	0.9	61.0	24.8	100(218)	83	0.5	61.5	29.8	100(218)
	7.1	1.8	62.7	28.4	100(225)	31	1.8	68.0	27.1	100(225)
	57	1.6	63.2	29.5	100(193)	62	2.1	66.8	24.9	100(193)
	11.8	1.9	70.1	16.1	100(211)	61	1.4	68.9	23.6	100(212)

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	()					()				
	48	32.8	58.2	4.2	100(1,104)	56	28.1	61.9	4.3	100(1,106)
	58	37.1	52.9	4.2	100(259)	62	31.4	57.8	4.7	100(259)
	65	34.1	56.7	2.8	100(217)	69	29.8	58.7	4.6	100(218)
	22	34.7	60.9	2.2	100(225)	31	28.8	64.6	3.5	100(226)
	47	34.7	54.9	5.7	100(193)	52	28.5	61.7	4.7	100(193)
X ² (df)	246(3) [*]					11.5(12)				

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* p < .05

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345	120	370	115	20	30	100(20)
404	154	365	58	19	-	100(52)
345	109	455	36	55	-	100(55)
31.2	108	323	194	-	65	100(93)
17.5	337	170	04	31.1	03	100(1,112)
249	239	238	06	262	05	100(1,115)

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93	846	61	1000(1,109)	84	87.4	41	1000(1,113)
50	85.7	93	1000(259)	78	85.6	66	1000(257)
161	80.7	32	1000(218)	11.4	85.9	27	1000(220)
93	85.8	49	1000(226)	6.7	90.4	29	1000(208)
11.0	84.3	47	1000(191)	8.9	86.0	51	1000(214)
61	86.3	7.5	1000(212)	7.5	89.7	28	1000(214)
X ² (df)	284(8)**			X ² (df)	11.0(8)		
87	85.3	60	1000(967)	80	87.7	43	1000(1,023)
123	84.2	35	1000(57)	133	84.4	22	1000(90)
150	76.3	88	1000(80)	X ² (df)	3.7(2)		
X ² (df)	-			X ² (df)	-		

*** p < .001

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	(40 1)	(39 1)	1	70%	(39)	(40)		()
	50%	40%						
1	61	51	51	162	460	17.7	40	100(198)
2	51	107	81	142	254	25.9	107	100(197)
1+2	11.2	15.8	132	304	71.4	43.6	147	
1	164	58	165	41	453	43	7.6	100(1,107)
2	132	7.1	21.4	6.9	209	13.3	17.3	100(1,019)
1+2	296	129	37.9	11.0	662	17.6	24.9	

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	X e j e i p X X X X rX X			X X X X rX X				rX` a
	(40 1)	(39 1)	1	70%	(39)	(40)		()
	50%	40%						
	61	51	51	162	460	17.7	40	100(198)
	11.5	11.5	5.8	30.8	25.0	5.8	9.6	100(52)
	11.3	5.7	11.3	20.8	43.4	3.8	3.8	100(53)
	-	1.1	1.1	5.4	59.1	32.3	1.1	100(93)

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	X	ej	ei	q	X	X	rX	rX`	a
	40	39	1	1				/	()
	50%	40%	70%						
	164	58	165	41	45.3	43	76	1000(1,107)	
	17.5	31	17.5	58	44.7	23	89	1000(257)	
	202	46	11.9	41	50.9	28	55	1000(218)	
	17.6	1.8	17.6	31	47.6	35	88	1000(227)	
	21.9	5.7	18.2	31	39.1	42	7.8	1000(192)	
	5.2	14.6	17.4	3.8	43.2	9.4	6.6	1000(213)	
X ² (df)					89.9(24) ^{***}				

*** p < .001

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	28	30	27	25	(1,101)		28	29	29	27	(1,102)	
	27	30	27	26	(256)		28	29	29	28	(257)	
	28	29	27	24	(216)		29	29	29	26	(217)	
	28	30	28	25	(226)		29	29	30	27	(206)	
	27	29	27	23	(194)		28	29	29	25	(211)	
	28	30	28	25	(209)		28	29	29	27	(211)	
F						F	04	08	1.1	39 ^{**}		
	28	30	27	25	(964)		28	29	29	27	(1,013)	
	28	30	27	22	(57)		28	28	29	27	(89)	
F	26	28	28	24	(78)	t	02	06	03	02		

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	735	220	1.5	30	795	155	1.5	35	535	440	2.5	(200)
	788	154	1.9	38	692	21.2	3.8	5.8	596	365	3.8	(52)
	709	255	-	36	81.8	12.7	-	5.5	455	52.7	1.8	(55)
	720	237	2.2	22	83.9	14.0	1.1	1.1	54.8	43.0	2.2	(93)

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	428	489	1.7	66	41.3	41.3	5.7	11.6	27.6	62.0	10.5	1000(1,103)
	525	420	1.6	39	490	401	3.9	7.0	306	64.3	5.2	1000(257)
	429	521	1.8	32	41.2	42.6	6.5	9.7	25.8	65.9	8.3	1000(217)
	438	491	1.8	53	46.4	38.4	5.8	9.4	31.5	59.9	8.6	1000(226)
	32.6	55.3	2.6	9.5	32.4	46.3	7.4	13.8	22.5	62.1	15.4	1000(190)
	390	47.9	0.9	12.2	34.5	40.3	5.3	19.9	26.0	57.2	16.8	1000(213)
X ² (df)	-				34.9(12) ^{***}				26.7(8) ^{**}			
	45.2	48.2	1.8	4.8	43.6	41.4	5.3	9.7	28.6	63.2	8.1	1000(966)
	26.3	63.2	1.8	8.8	29.1	49.1	5.5	16.4	21.8	63.6	14.5	1000(57)
	25.6	44.9	1.3	28.2	23.4	33.8	10.4	32.5	19.2	44.9	35.9	1000(78)
X ² (df)	-				47.0(6) ^{***}				60.9(4) ^{***}			

** p < .01, *** p < .001

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	20	85	620	275	32	45	355	520	80	26	100(20)
	38	154	615	192	30	58	404	442	96	26	100(52)
	1.8	7.3	67.3	236	31	9.1	40.0	47.3	36	25	100(55)
	1.1	5.4	59.1	344	33	1.1	30.1	59.1	97	28	100(93)
X ² (df)/F	-				39 [*]	-				40 [*]	
	7.5	233	563	129	27	16.4	53.2	28.6	1.8	2.2	100(1,108)
	46	150	600	204	30	9.1	47.8	38.3	49	2.4	100(1,116)

* p < .05

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146	41.5	421	1.8	1000(1,107)	23
80	388	51.1	22	1000(1,114)	25

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X ejej p X X X				rX` a
		()		
		()		
	23	(1,107)		25 (1,114)
	23	(259)		25 (257)
	24	(215)		25 (220)
	23	(226)		24 (208)
	23	(194)		25 (214)
	23	(213)		26 (215)
F	03		F	1.7
	23	(988)		25 (1,023)
	22	(57)		25 (91)
	23	(80)	t	-06
F	09			

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$\frac{S_z}{\sqrt{S^2/n}}$ $\frac{\bar{Z} - \mu_0}{\sigma/\sqrt{n}}$ $\frac{\bar{Z} - \mu_0}{S/\sqrt{n}}$
 $\frac{X - \mu_0}{\sigma/\sqrt{n}}$ $\frac{X - \mu_0}{S/\sqrt{n}}$

	()						()					
	1.5	256	638	90	100(199)	28	41.5	32.1	264	100(53)		
	1.9	21.2	65.4	11.5	100(52)	29	58.3	8.3	33.3	100(12)		
	1.9	18.5	72.2	7.4	100(54)	29	36.4	36.4	27.3	100(11)		
	1.1	32.3	58.1	8.6	100(93)	27	36.7	40.0	23.3	100(30)		
$X^2(df)/F$			-			0.9			-			
	26	19.5	69.6	8.3	100(1,113)	28	50.0	48.0	2.0	100(244)		
	1.3	16.3	75.0	7.3	100(1,117)	29	52.3	42.6	5.1	100(197)		

$\frac{\bar{Z} - \mu_0}{\sigma/\sqrt{n}}$ $\frac{\bar{Z} - \mu_0}{S/\sqrt{n}}$
 $\frac{X - \mu_0}{\sigma/\sqrt{n}}$ $\frac{X - \mu_0}{S/\sqrt{n}}$

$\frac{S_z}{\sqrt{S^2/n}}$ $\frac{\bar{Z} - \mu_0}{\sigma/\sqrt{n}}$ $\frac{\bar{Z} - \mu_0}{S/\sqrt{n}}$
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	X ekej X		X X X X		X X X X		X				
	()						()				
	26	195	696	83	1000	(1,113)	28	500	480	20	1000(244)
X ² (df)/F	42	170	722	66	1000	(259)	28	509	473	1.8	1000(55)
	32	248	674	46	1000	(218)	27	339	661	-	1000(59)
	26	225	700	48	1000	(227)	28	421	544	35	1000(57)
	05	21.0	708	7.7	1000	(195)	29	57.1	429	-	1000(42)
	1.9	126	67.3	182	1000	(214)	30	83.9	9.7	65	1000(31)
			51.2(12) ^{**}					7.7 ^{**}			
X ² (df)/F	24	190	700	86	1000	(973)	28	500	490	1.0	1000(206)
	1.8	298	596	88	1000	(57)	28	556	333	11.1	1000(18)
	62	185	71.6	37	1000	(81)	27	450	500	50	1000(20)
		107(6) [#]					21				
	1.3	163	750	73	1000	(1,117)	29	523	426	51	1000(197)
X ² (df)/F	04	194	71.3	89	1000	(258)	29	451	471	7.8	1000(51)
	1.8	145	782	55	1000	(220)	29	444	528	28	1000(36)
	1.9	163	745	7.2	1000	(208)	29	57.9	39.5	26	1000(38)
	09	176	727	88	1000	(216)	29	400	525	7.5	1000(40)
	1.9	130	791	60	1000	(215)	29	81.3	156	31	1000(320)
			-					01		-	
X ² (df)/F	1.4	158	750	7.8	1000	(1,026)	29	500	443	57	1000(176)
	1.1	220	747	22	1000	(91)	28	71.4	286	-	1000(21)
		56(3)					20		39(2)		

$p < .1$, *** $p < .001$

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(11)	81.8	11.6	66	100(197)	789	88	124	100(194)
(12)	86.3	5.6	81	100(197)	763	88	149	100(194)
(14)	81.7	9.6	86	100(197)	71.1	108	180	100(194)
(11)	76.6	9.1	142	100(197)	61.5	144	241	100(195)
(12)	81.2	10.2	86	100(197)	72.7	134	139	100(195)
(10)	77.8	8.1	141	100(197)	67.2	9.7	23.1	100(195)

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	81.8	11.6	66	863	56	81	81.7	96	86	100(197)
	863	78	59	843	78	78	824	137	39	100(51)
	800	127	73	836	109	55	764	109	127	100(55)
	804	130	65	890	1.1	99	846	66	88	100(91)

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										()
	766	91	142	81.2	102	86	77.8	81	141	100(197)
	843	11.8	39	843	78	78	784	98	11.8	100(51)
	655	127	21.8	727	21.8	55	727	200	7.3	100(55)
	791	5.5	154	846	44	11.0	804	-	196	100(91)
X ² (df)/F		1.0(4)*			-			-		

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* p < .05

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										()
	789	88	124	763	88	149	71.1	108	180	100(194)
	81.6	102	82	735	163	102	75.5	204	41	100(49)
	81.5	130	56	77.8	148	7.4	667	93	241	100(54)
	75.8	5.5	187	769	1.1	220	71.4	66	220	100(91)
X ² (df)/F		-			-			132(4)*		

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* p < .05

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	61.5	144	241	727	134	139	67.2	97	231	100(195)
	694	245	61	735	184	82	71.4	143	143	100(49)
	537	11.1	35.2	648	259	9.3	685	204	11.1	100(54)
	620	109	27.2	769	33	198	641	1.1	348	100(92)
X ² (df)/F	154(4)**			191(4)**			251(4)***			

** p < .01, *** p < .001

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	101	141	51.3	246	29	25	7.5	385	51.5	34	367	327	231	7.5	20	(200)
	-	231	51.9	250	30	-	135	51.9	346	32	21.2	346	346	96	23	(52)
	145	36	56.4	255	29	55	7.3	491	38.2	32	291	27.3	309	127	23	(55)
	130	152	47.8	239	28	22	4.3	247	68.8	36	500	34.8	120	33	1.7	(93)
X ² (df)/F	150(6)				0.8	-				7.7*	233(6)**				11.5***	

* p < .05 ** p < .01, *** p < .001

	X ekeq X					X X X X X					X X X X X					rX \` aX ()								
	()																							
0	96	25.3	55.3	9.7	100(1,108)	27	63	26.2	59.9	7.6	100(1,113)	27	16.7	40.5	37.1	5.6	100(1,108)	23	11.2	40.1	41.5	7.2	100(1,113)	24
, x	238	40.3	31.8	4.2	100(1,108)	22	18.4	39.4	38.3	3.9	100(1,113)	23												

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100	345	425	130	1000(200)	26
125	290	455	130	1000(200)	26
135	470	335	60	1000(200)	23
70	370	445	11.5	1000(200)	26
10	80	620	290	1000(200)	32
22	146	583	249	1000(1,113)	31
7.2	339	476	11.3	1000(1,111)	26
38	251	549	162	1000(1,109)	28
1.7	74	480	42.9	1000(1,109)	33
28	158	729	85	1000(1,109)	29
23	155	554	267	1000(1,111)	31
65	379	464	92	1000(1,115)	26
87	380	449	84	1000(1,115)	25
07	98	496	39.9	1000(1,115)	33
1.2	133	766	90	1000(1,115)	29

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	100	345	425	130	26	125	290	455	130	26	(200)	
	7.7	250	51.9	154	28	7.7	154	65.4	11.5	28	(52)	
	-	273	47.3	255	30	36	236	50.9	21.8	29	(55)	
	17.2	441	344	43	23	204	398	31.2	86	23	(93)	
X ² (df)/F	303(6) ^{***}				163 ^{***}	305(6) ^{***}				126 ^{***}		

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*** $p < .001$

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	135	470	335	60	23	70	370	445	11.5	26	1.0	80	620	290	32	(200)
	38	481	404	7.7	25	-	7.7	750	17.3	31	-	154	769	7.7	29	(52)
	1.8	47.3	45.5	5.5	25	-	200	600	200	30	1.8	109	85.5	1.8	29	(55)
	25.8	46.2	22.6	5.4	21	15.1	63.4	18.3	3.2	21	1.1	2.2	39.8	57.0	35	(93)
X ² (df)/F	26.3(6) ^{***}				9.2 ^{***}	88.8(6) ^{***}				5.80 ^{***}	-					35.5 ^{***}

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*** p < .001

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	31	26	28	33	29	(1,109)		31	26	25	33	29	(1,115)
	31	28	29	34	29	(259)		31	26	25	34	29	(258)
	32	26	29	33	28	(217)		31	26	25	33	29	(219)
	31	27	28	33	29	(225)		30	26	25	32	30	(208)
	30	26	29	33	29	(194)		31	26	25	32	29	(215)
	30	24	27	33	29	(214)		30	26	26	32	30	(215)
F	30 [†]	54 ^{**}	29 [†]	27 [†]	12		F	19	01	03	39 ^{**}	12	
	31	26	28	33	29	(970)		31	26	25	33	29	(1,024)
	32	26	28	33	28	(57)		30	27	27	31	29	(91)
	30	26	29	34	27	(80)	t	03	-1.4	-30 ^{**}	27 ^{**}	08	
F	1.5	03	1.0	03	29 [#]								

p < .1, * p < .05, ** p < .01, *** p < .001

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	535	390	7.5	100(20)	226	698	7.5	100(199)
	731	250	1.9	100(52)	423	442	13.5	100(52)
	582	345	7.3	100(55)	364	545	9.1	100(55)
	398	495	10.8	100(93)	33	935	3.3	100(92)
	37.4	495	13.1	100(1,111)	150	743	10.7	100(1,107)
	439	427	13.4	100(1,116)	17.2	693	13.5	100(1,117)

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	423	525	5.0	0.2	100(1,039)	423	525	5.0	0.2	100(1,039)
0	405	524	7.1	-	100(84)	381	57.7	4.1	-	100(97)
1	433	521	4.7	-	100(215)	39.3	54.8	6.0	-	100(84)
2	435	51.2	5.3	-	100(285)	33.3	51.5	15.2	-	100(33)
3	428	521	4.6	0.5	100(194)	44.0	51.4	4.3	0.4	100(539)
4	41.6	540	4.4	-	100(137)	42.3	52.1	5.6	-	100(267)
5	39.5	548	4.8	0.8	100(124)	56.3	43.8	-	-	100(16)
						-	100.0	-	-	100(3)

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1	170	60	235	40	120	27.5	05	95	1000(200)
2	130	70	170	70	195	24.5	05	11.5	1000(200)
1+2	300	130	405	110	31.5	52.0	1.0	21.0	

1	229	74	182	40	128	24.2	05	99	1000(1,113)
2	127	64	147	107	164	23.5	21	135	1000(1,100)
1+2	356	138	329	147	29.2	47.7	26	234	

1	309	53	131	35	86	21.5	1.0	162	1000(1,117)
2	17.5	50	141	101	136	22.4	27	146	1000(1,110)
1+2	484	103	27.2	136	22.2	43.9	37	308	

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	170	60	235	40	120	27.5	.5	95	1000(200)
	21.2	11.5	135	11.5	7.7	26.9	-	7.7	1000(52)
	5.5	7.3	145	-	25.5	34.5	-	12.7	1000(55)
	21.5	22	34.4	22	65	23.7	1.1	86	1000(93)

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229	74	182	40	128	242	05	99	1000(1,113)	
21.2	46	201	39	158	27.8	-	66	1000(259)	
229	83	21.1	41	138	22.5	05	69	1000(218)	
21.1	5.7	18.5	0.9	17.2	26.4	-	101	1000(227)	
29.2	10.8	16.4	4.6	10.3	19.0	1.0	87	1000(195)	
21.0	8.4	14.5	7.0	6.1	23.8	1.4	17.8	1000(214)	
X ² (df)		68.6(28)***							
309	5.3	13.1	3.5	8.6	21.5	1.0	16.2	1000(1,117)	
31.0	3.1	15.5	4.3	12.8	20.5	1.2	11.6	1000(258)	
309	3.6	12.7	4.1	11.4	21.8	-	15.5	1000(220)	
31.3	4.3	16.8	1.4	10.6	19.7	1.0	14.9	1000(208)	
30.6	7.9	10.6	2.8	5.1	20.4	0.9	21.8	1000(216)	
30.7	7.9	9.3	4.7	2.3	25.1	1.9	18.1	1000(215)	
X ² (df)		55.6(28)**							

** p < .01, *** p < .001

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		() X ² (df)													
1		144	106	03	38	432	26	60	191	1000(1,039)					
		139	108	-	1.9	445	24	6.2	204	1000(584)	19.6(7)**				
		152	103	07	64	41.5	29	5.7	174	1000(455)					
2		162	11.8	04	63	253	64	11.8	21.8	1000(1,039)					
		137	11.0	07	55	262	7.2	11.5	243	1000(584)					
		193	130	-	7.3	242	5.3	12.3	187	1000(455)	16.1(7)*				

* $p < .05$ ** $p < .01$

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770	145	7.5	1.0	1000(200)
630	245	105	20	1000(200)
668	221	80	30	1000(200)
940	50	0.5	0.5	1000(200)
426	282	206	86	1000(1,110)
281	295	335	89	1000(1,111)
350	290	263	97	1000(1,108)
687	165	7.9	7.0	1000(1,108)
498	298	135	7.0	1000(1,115)
343	31.4	265	7.8	1000(1,115)
41.7	31.3	187	84	1000(1,113)
694	184	60	62	1000(1,115)

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									rX` a
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77.0	145	7.5	1.0	630	245	105	20	(200)	
865	7.7	58	-	615	231	96	58	(52)	
709	164	127	-	636	27.3	91	-	(55)	
75.3	17.2	54	22	634	237	11.8	1.1	(93)	

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									rX` a
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668	221	80	30	940	50	05	05	(200)	
731	135	96	38	962	38	-	-	(52)	
691	255	36	1.8	909	7.3	1.8	-	(55)	
620	250	98	33	946	43	-	1.1	(93)	

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	()				()				
	72.7	13.2	14.1	100(103)	30.7	50.1	18.3	0.9	100(75)
X ² (df)	70.9	15.2	13.9	100(58)	30.4	52.2	16.7	0.7	100(41)
	74.9	10.5	14.5	100(45)	31.1	47.5	20.2	2.2	100(34)
	49(2) [#]						-		
0	65.5	20.2	14.3	100(8)	21.8	63.6	14.5	-	100(5)
1	68.4	15.3	16.3	100(21)	29.3	56.5	14.3	-	100(14)
2	74.4	13.7	11.9	100(28)	33.5	46.2	18.9	1.4	100(21)
3	74.2	11.3	14.4	100(19)	29.9	49.3	20.1	0.7	100(14)
4	73.0	11.7	15.3	100(13)	32.0	47.0	20.0	1.0	100(10)
5	78.2	8.1	13.7	100(12)	32.0	45.4	20.6	2.1	100(9)
X ² (df)	109(10)						-		
X ² (df)	74.2	12.9	12.9	100(48)	33.1	49.0	17.4	0.6	100(36)
	67.3	10.9	21.8	100(5)	35.1	43.2	18.9	2.7	100(3)
	71.5	13.8	14.6	100(4)	27.6	52.0	19.3	1.1	100(35)
	38(4)						-		
X ² (df)	86.6	8.2	5.2	100(9)	34.5	44.0	19.0	2.4	100(8)
	75.0	4.8	20.2	100(8)	19.0	44.4	36.5	-	100(6)
	81.8	12.1	6.1	100(3)	37.0	48.1	14.8	-	100(2)
	71.8	13.2	15.0	100(5)	30.5	52.2	16.3	1.0	100(38)
	68.9	17.6	13.5	100(2)	31.5	52.7	15.2	0.5	100(18)
	50.0	18.8	31.3	100(1)	50.0	12.5	37.5	-	100(8)
	66.7	-	33.3	100(3)	50.0	-	50.0	-	100(2)

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	X	elen	X	X	X	X	X	X	rX` a
	20%	21-30%	31-40%	41-50%	51-60%	60%	()	X ² (df)	
	245	21.8	11.9	17.6	8.4	15.9	100(523)		
	288	23.3	12.2	15.3	6.9	13.5	100(288)	11.4(5)*	
	191	20.0	11.5	20.4	10.2	18.7	100(235)		
0	39.5	32.6	4.7	11.6	2.3	9.3	100(43)		
1	27.9	26.0	7.7	17.3	4.8	16.3	100(104)		
2	26.2	18.4	17.7	14.9	9.9	12.8	100(141)	32.2(25)	
3	17.8	21.8	13.9	18.8	9.9	17.8	100(101)		
4	20.6	16.2	8.8	23.5	10.3	20.6	100(68)		
5	19.7	21.2	10.6	19.7	10.6	18.2	100(66)		
	28.0	20.6	14.8	12.8	9.1	14.8	100(243)		
	20.8	25.0	4.2	20.8	4.2	25.0	100(24)	-	
	21.6	22.7	9.8	22.0	7.8	16.1	100(255)		
	29.1	25.5	12.7	7.3	5.5	20.0	100(55)		
	11.8	11.8	21.6	23.5	11.8	19.6	100(51)		
	35.3	17.6	5.9	23.5	5.9	11.8	100(17)	-	
	21.9	22.3	11.5	18.6	10.0	15.6	100(269)		
	31.7	24.6	9.5	15.9	4.8	13.5	100(126)		
	25.0	-	-	25.0	25.0	25.0	100(4)		
	-	-	-	100.0	-	-	100(1)		

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	X	eleo	X	X	X	X	X
	647	162	106		86	1000(1,039)	
	654	140	11.1		94	1000(584)	5.3(3)
	637	189	9.9		7.5	1000(455)	
0	583	190	14.3		83	1000(84)	
1	647	121	12.1		11.2	1000(215)	19.4(15)
2	681	140	9.5		84	1000(285)	
3	691	149	9.3		67	1000(194)	
4	61.3	226	10.9		51	1000(137)	
5	581	21.0	9.7		11.3	1000(124)	
	638	17.2	9.4		9.6	1000(489)	17.4(6)**
	47.3	14.5	21.8		16.4	1000(55)	
	67.3	15.4	10.6		6.7	1000(492)	
	63.9	14.4	14.4		7.2	1000(97)	
	60.7	25.0	8.3		6.0	1000(84)	
	48.5	27.3	9.1		15.2	1000(33)	-
	64.6	16.3	10.4		8.7	1000(539)	
	69.3	11.6	10.5		8.6	1000(267)	
	56.3	25.0	12.5		6.3	1000(16)	
	33.3	33.3	-		33.3	1000(3)	

** $p < .01$

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483	11.2	191	21.3	100(89)		
473	9.1	200	23.6	100(55)	1.0(3)	
500	14.7	17.6	17.6	100(34)		

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	1.0		60		635	295	100(200) 32
	05		100		535	360	100(200) 33
	20		135		560	285	100(200) 31
	20		165		47.5	340	100(200) 31
	53		350		546	51	100(1,112) 26
	58		374		499	69	100(1,113) 26
	7.0		399		47.8	5.3	100(1,111) 25
	82		361		487	7.1	100(1,112) 26
	23		225		636	11.6	100(1,116) 28
	1.9		222		594	165	100(1,115) 29
	30		272		584	11.4	100(1,114) 28
	34		282		539	145	100(1,116) 28

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						()	
	32		33		31	31	(200)
	32		33		30	30	(52)
	34		34		33	32	(55)
	31		31		31	32	(93)
F	31*		37		29#	1.5	

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	31	06	33	07	30	07	(1,039)
t	31	06	33	07	29	08	(584)
	31	07	32	07	31	07	(455)
	-1.0		03		-40**		
0	30	06	33	07	28	07	(84)
1	31	07	33	07	29	08	(215)
2	30	06	32	07	29	08	(285)
3	31	07	32	07	30	07	(194)
4	31	06	33	06	32	06	(137)
5	31	07	33	06	31	07	(124)
F	05		03		37		
	31	06	33	07	30	07	(489)
	30	06	30	08	29	09	(55)
F	31	07	33	07	29	08	(492)
	09		51**		24		
	33	06	33	07	31	07	(97)
	31	07	33	06	32	07	(84)
	29	07	30	08	29	08	(33)
	31	06	32	07	30	07	(539)
	30	06	33	07	29	07	(267)
	33	06	34	06	31	06	(16)
	27	06	30	1.0	27	06	(3)
F	32*		1.3		28		

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* $p < .05$ ** $p < .01$, *** $p < .001$

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1	490	67	250	58	86	28	20	1000(1,054)
2	180	11.5	302	127	143	7.2	61	1000(1,033)
1+2	670	182	552	185	229	100	81	
1	489	65	239	56	11.0	23	17	1000(1,042)
2	218	103	234	156	154	88	47	1000(1,038)
1+2	707	168	473	212	264	111	64	

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	490	67	250	58	86	28	20	1000(1,054)
	486	35	265	70	93	27	23	1000(257)
	512	56	228	47	84	51	23	1000(215)
	491	73	234	41	101	37	23	1000(218)
	511	101	230	67	56	1.1	22	1000(178)
	446	86	296	65	91	1.1	05	1000(186)
X ² (df)				233(24)				
	492	68	250	59	85	28	1.8	1000(973)
	439	53	246	35	123	53	53	1000(57)
	500	83	292	83	42	-	-	1000(24)
	489	65	239	56	110	23	1.7	1000(1,042)
	492	72	232	68	100	20	1.6	1000(250)
	500	62	238	52	100	29	1.9	1000(210)
	487	76	264	46	86	20	20	1000(197)
	508	45	221	7.5	101	35	1.5	1000(199)
	457	70	242	32	172	1.1	1.6	1000(186)
	490	64	242	55	110	21	1.8	1000(1,025)
	471	11.8	59	11.8	11.8	11.8	-	1000(17)

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45.8	31.3	1.9	189	07	1.4	1000(1,045)
42.4	36.9	2.4	176	04	0.4	1000(255)
46.9	30.5	0.5	197	05	1.9	1000(213)
48.8	30.9	0.9	157	09	2.8	1000(217)
47.7	29.5	2.8	176	06	1.7	1000(176)
43.5	26.6	3.3	250	1.1	0.5	1000(184)
46.3	31.1	2.0	184	07	1.4	1000(967)
35.7	35.7	1.8	250	-	1.8	1000(56)
45.5	27.3	-	27.3	-	-	1000(22)

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	28	10	29	09	30	09	30	10	(1,039)
t	27	09	30	09	29	09	29	10	(584)
	28	10	30	09	31	09	31	10	(455)
	-23*		-1.7		-20*		-33**		
0	28	09	28	09	30	08	30	10	(84)
1	27	10	30	09	30	09	30	10	(215)
2	27	09	29	09	29	09	30	10	(285)
3	28	10	29	09	29	09	30	10	(194)
4	30	10	30	09	31	09	32	09	(137)
5	29	09	31	08	32	08	33	09	(124)
F	23*		1.7		26*		40**		
	28	10	30	09	30	08	31	09	(489)
	28	10	29	08	28	10	29	11	(55)
F	28	09	29	09	30	09	30	10	(492)
	01		09		33*		1.1		
	29	10	31	08	30	09	32	09	(97)
	29	10	30	09	32	09	32	09	(84)
	32	09	32	07	30	09	33	10	(33)
	28	10	29	09	30	09	30	10	(539)
	27	09	29	09	29	09	29	10	(267)
	32	05	33	08	32	07	31	09	(16)
F	23	1.2	23	1.2	27	1.5	30	1.7	(3)
	24*		25*		09		26*		

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930	50	20	1000(200)	634	340
91.5	7.0	1.5	1000(200)	645	325
940	45	1.5	1000(200)	61.7	360
835	150	1.5	1000(200)	625	31.3
860	130	1.0	1000(200)	61.3	333
840	145	1.5	1000(200)	67.4	27.4
77.5	21.0	1.5	1000(200)	66.8	25.7
77.0	22.0	1.0	1000(200)	64.7	27.2
70.5	28.5	1.0	1000(200)	63.1	26.0

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	930	91.5	940	835	860	840	77.5	77.0	70.5	(200)
	827	827	885	596	692	71.2	65.4	55.8	40.4	(52)
	945	945	927	85.5	891	90.9	80.0	83.6	69.1	(55)
	97.8	946	97.8	95.7	93.5	87.1	82.8	84.9	88.2	(93)
	634	645	61.7	62.5	61.3	67.4	66.8	64.7	63.1	
	747	738	76.1	75.3	73.2	74.7	74.2	75.1	72.0	
	67.6	68.1	64.9	71.1	63.9	71.4	70.8	68.8	75.0	
	55.8	57.8	52.8	53.6	55.1	61.7	61.3	58.7	55.3	
F	248**	168**	331***	27.7**	141***	11.7**	11.0**	12.2**	21.5**	
()	(185)	(182)	(187)	(166)	(170)	(167)	(154)	(153)	(141)	

*** $p < .001$

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	95.0	3.5	1.5	100(199)	62.0	36.1
.	94.5	4.0	1.5	100(199)	61.0	36.9
	87.4	10.6	2.0	100(199)	62.2	33.0
	88.4	9.5	2.0	100(199)	60.4	35.0
	92.5	5.5	2.0	100(199)	56.6	40.1
	86.4	11.1	2.5	100(199)	61.0	33.7
	76.9	21.1	2.0	100(199)	67.0	25.4

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	95.0	94.5	87.4	88.4	92.5	86.4	76.9	(199)
	92.3	88.5	67.3	67.3	86.5	69.2	59.6	(52)
	96.3	96.3	94.4	96.3	94.4	90.7	81.5	(54)
	95.7	96.8	94.6	95.7	94.6	93.5	83.9	(93)
	62.0	61.0	62.2	60.4	56.6	61.0	67.0	
	75.8	75.7	76.7	75.3	75.6	74.6	77.6	
	67.0	64.4	65.1	62.2	60.3	65.3	74.1	
	51.8	51.6	54.8	53.5	45.0	53.0	58.9	
F	365***	400***	239***	207***	45.6***	21.5***	26.3***	
()	(188)	(187)	(174)	(176)	(183)	(171)	(152)	

*** p < .001

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	+	()	(2013)
2006	2,560,564	1,586,658	2,232,587
2007	4,492,062	3,530,856	4,731,685
2008	5,948,561	5,204,925	6,642,950
2009	6,405,786	6,210,718	7,549,167
2010	6,651,362	6,558,613	7,592,414
2011	9,473,932	9,164,061	10,103,377
2012	9,839,182	9,829,129	10,320,585
2013	10,213,515	9,956,726	9,956,618
	55,584,964	51,376,618	59,129,383

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	262,488	47,908	8,586	318,982	203,498	522,480 (14,718)
	278,356	48,778	11,682	338,816	203,087	541,903 (29,051)
	278,673	50,248	8,706	337,627	198,508	536,135 (2,027)
	317,860	52,907	14,299	385,036	223,759	608,825 (4,706)
	259,044	46,349	7,282	312,675	188,521	501,196 (2,887)
	269,766	46,925	11,186	327,877	194,968	522,845 (6,189)
	262,173	48,613	8,248	319,034	210,263	529,297 (6,989)
	273,650	49,145	10,168	332,963	200,457	533,420 (12,605)
	255,605	46,154	10,694	312,453	205,310	517,763 (2,810)
	270,536	47,462	13,725	331,723	194,351	526,074 (5,440)
(-)	15,868	870	3,096	19,834	-411	19,423
	39,187	2,659	5,593	47,439	25,251	72,690
	10,722	576	3,904	15,202	6,447	21,649
	11,477	532	1,920	13,929	-9,806	4,123
	14,931	1,308	3,031	19,270	-10,959	8,311
(/)	1.060	1.018	1.361	1.062		1.037
	1.141	1.053	1.642	1.141		1.136
	1.041	1.012	1.536	1.049		1.043
	1.044	1.011	1.233	1.044		1.008
	1.058	1.028	1.283	1.062		1.016
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20	291,499	50,309	7,642	349,450	536,970	187,520
	367,902	54,974	12,446	435,322	640,702	206,380
21-49	279,402	50,358	8,880	338,640	546,558	207,918
	318,052	52,614	12,524	383,190	621,308	238,118
50-79	219,918	48,962	12,902	281,782	492,318	210,536
	246,963	48,879	18,246	314,088	559,832	245,744
80	216,312	50,599	13,511	280,422	527,140	246,718
	232,090	50,935	19,150	302,175	537,333	235,158

(-)
 20 76,403 4,665 4,804 103,732 85,872 -
 21-49 38,650 2,256 3,644 74,750 44,550 -
 50-79 27,045 -83 5,344 67,514 32,306 -
 80 15,778 336 5,639 10,193 21,753 -

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	X	ej el X	X	X X
	3		$\frac{A(B)}{33 \times 80\%}$	$C(D)$
		A()	=	D=A×B×C×12
20		103,732	16	2,157
21-49		74,750	28	1,170
50-79		67,514	48	680
80		10,193	64	699
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	X	ej em X	X	X X	X X	X	X
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						3	
20		277,126	48,706	4,742	330,574	523,987	
		297,328	49,434	8,579	355,341	549,839	
21-49		252,630	43,995	8,098	304,723	493,331	
		275,469	46,372	11,191	333,032	530,614	
50-79		227,445	43,538	11,093	282,076	457,282	
		242,150	44,120	14,676	300,946	502,717	
80		204,384	42,277	15,580	262,241	436,813	
		195,751	41,780	16,971	254,502	443,842	
(-)							
20		20,202	728	3,837	24,767	25,852	
21-49		22,839	2,377	3,093	28,309	37,283	
50-79		14,705	582	3,583	18,870	45,435	
80		-8,633	-497	1,391	-7,739	7,029	
:		(2013).	.	(2013	4).	

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	3	=	$\frac{34X}{B}$	$\frac{80\%}{C}$	$D=A \times B \times C \times 12$
20	24767		16	3135	1490
21-49	28309		28	1,407	1338
50-79	18870		48	592	643
80	-7,739		64	1,055	-627
					2845

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	3								
20	280,230	50,784	6,040	337,054	554,334				
	298,386	51,220	6,812	356,418	560,290				
21-49	241,060	44,893	10,709	296,662	492,288				
	258,238	46,957	12,555	317,750	515,634				
50-79	215,281	44,218	15,071	274,570	479,316				
	225,704	45,273	17,506	288,483	482,998				
80	182,944	40,702	17,635	241,281	434,439				
	196,116	44,090	19,683	259,889	451,116				
(-)									
20	18,156	436	772	19,364	5,956				
21-49	17,178	2,064	1,846	21,088	23,346				
50-79	10,423	1,055	2,435	13,913	3,682				
80	13,172	3,388	2,048	18,608	16,677				
:	(2013).				(2013 4).				

	X	ej	ep	X	X	X
	3					
	A()	=	$\frac{35}{B()} \times 80\%$	C()	D=A×B×C×12	()
20	19,364		16	7,785	289.4	
21-49	21,088		28	2,504	177.4	
50-79	13,913		48	865	69.3	
80	18,608		64	1,451	207.3	
					743.5	

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20	283,819	50,410	7,516	341,745	554,339
	307,351	52,494	8,732	368,577	570,382
21-49	260,930	43,605	10,777	315,312	513,736
	291,233	46,517	13,625	351,375	542,783
50-79	228,538	40,785	12,526	281,849	476,782
	262,974	44,934	17,880	325,788	514,131
80	187,157	41,707	17,943	246,807	450,322
	205,087	42,624	18,496	266,207	455,997
(-)					
20	23,532	2,084	1,216	26,832	16,043
21-49	30,303	2,912	2,848	36,063	29,047
50-79	34,436	4,149	5,354	43,939	37,349
80	17,930	917	553	19,400	5,675
:	(2013).	.	(2013	4).

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	3			
A()	= $\frac{36}{B()} \times 80\%$	C()	D=A×B×C×12	()
20	26,832	16	1,996	102.8
21-49	36,063	28	1,226	148.5
50-79	43,939	48	800	202.4
80	19,400	64	1,418	211.2
				665.1

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		/	ŽŠŽ#%	ř					
	X	ej	ej	j	X	X	X	X	X
	2006	2007	2008	2009	2010	2011	2012	2013	rX
	2,804	4,181	5,464	7,303	6,426	5,667	2,794	2,652	37,291
	(008)	(011)	(015)	(020)	(017)	(015)	(007)	(007)	(1.00)
		(019)	(033)	(053)	(070)	(085)	(093)	(1.00)	

	X	ej	ej	k	X	X	X	`	a	rX	`] a
					2008	2009	2010	2011	2012	2013	
	(A)				(33)	(53)	(70)	(85)	(93)	(100)	
	=2735.59(2013))×A			913	1,448	1,919	2,335	2,540	2735.5	11,892.7

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										rX	l a
2005	2006	2007	2008	2009	2010	2011	2012	2013	2009		
177	722	1,604	2,602	3,625	3,999	3,653	1,810	1,318	(740)		
177	902	1,676	2,289	3,318	2,074	1,828	894	996	(640)		
:											
(2012)											

X e j e i n X X

					2009	2010	2011	2012	2013
					0,252	0,529	0,783	0,909	1
					0,364	0,592	0,793	0,891	1
:					2013	2013	2013	2013	2013
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	20	21-39	40-49	50-80	81-99	100-160	161-200	201-240	241-300	300
	4256	191.0	1099	1821	146	11.4	1.7	08	02	00
	131.0	77.3	47.6	55.8	-141	-21.7	-65	-20	-1.2	00
8	3829	1946	868	1107	1082	131.7	309	138	94	00
	9394	4629	2444	3485	1087	121.3	261	125	84	00

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										rX
	20	21-39	40-49	50-80	81-99	100-160	161-200	201-240	241-300	300
	2742	141.3	81.3	1348	108	8.4	1.3	06	02	00
	988	57.2	35.3	41.3	-104	-161	-48	-1.5	-09	00
9	2467	1380	61.5	785	765	93.5	223	97	67	00
	6197	3364	1781	2545	769	85.8	187	88	60	00

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	2013	2012	2011	2010	2009	
	1,4106	1,2897	1,1243	7892	4191	
					5,0329	

39)= 2013 + [2013 × (0.909 , 0.891:) +
 2013 × (0.783 , 0.793) + 2013 × (0.529 , 0.592) +
 2013 × (0.252 , 0.364)]

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		(A)	(B)	(B-A)	(B/A)
2008		591.2	11,892.7	11,302	(20.1)
2009	/	591.2	5,032.9	4,442	(8.5)

X ej ej i X

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	2006	2007	2008	2009	2010	2011	2012	2013
(A)	223	696	1361	211.6	287.5	388.5	491.7	591.3
2008 (B)	-	-	913	2361	4280	6615	9155	11800.5
2009 (C)	/	-	-	419.1	1208.3	2332.6	3622.3	5032.9
(B/A)	-	-	67	11.2	14.9	17.0	18.6	20.1
(C/A)	-	-	-	20	42	60	7.4	8.5

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					<i>paired-t</i>		()
1_1.	221	0.15	201	0.22	197 ^{***}	0.2	(409)
1_2	284	0.46	270	0.59	43 ^{***}	0.14	(409)
1_3	296	0.22	261	0.72	101 ^{***}	0.35	(409)
1_4	293	0.33	264	0.74	7.6 ^{***}	0.29	(409)
1_5	291	0.36	278	0.53	45 ^{***}	0.13	(409)
1_6	270	0.51	209	0.82	132 ^{***}	0.61	(409)
1_7	274	0.44	261	0.61	39 ^{***}	0.13	(409)
1_8	288	0.44	256	0.78	7.3 ^{***}	0.32	(409)
1_9	264	0.70	247	0.75	37 ^{***}	0.17	(409)
1_10	297	0.19	291	0.32	37 ^{***}	0.06	(409)
1_11	260	0.67	215	0.86	9.3 ^{***}	0.45	(409)
1_12	279	0.42	258	0.54	8.2 ^{***}	0.21	(409)
2_1.	243	0.20	205	0.44	185 ^{***}	0.38	(409)
2_2	286	0.36	254	0.64	9.2 ^{***}	0.32	(409)
2_3	283	0.41	228	0.76	145 ^{***}	0.55	(409)
2_4	270	0.48	227	0.71	11.5 ^{***}	0.43	(409)
2_5	269	0.68	210	0.98	109 ^{***}	0.59	(409)
2_6	283	0.47	233	0.79	11.3 ^{***}	0.5	(409)
2_7	260	0.69	1.86	0.90	14.2 ^{***}	0.74	(409)
2_8	284	0.38	267	0.52	6.2 ^{***}	0.17	(409)
2_9	279	0.51	238	0.75	9.8 ^{***}	0.41	(409)
2_10	287	0.38	250	0.69	100 ^{***}	0.37	(409)
2_11	269	0.54	224	0.80	100 ^{***}	0.45	(409)
2_12	282	0.41	247	0.71	9.8 ^{***}	0.35	(409)
2_13	284	0.56	288	0.34	-0.9	0.04	(144)
3_1.	226	0.32	211	0.34	7.7 ^{***}	0.15	(409)
3_2	289	0.33	278	0.43	4.4 ^{***}	0.11	(409)
3_3	289	0.36	258	0.76	7.9 ^{***}	0.31	(409)
3_4	296	0.20	279	0.54	5.9 ^{***}	0.17	(409)
3_5	294	0.25	271	0.63	7.3 ^{***}	0.23	(409)
3_6	287	0.44	260	0.76	6.8 ^{***}	0.27	(409)
3_7	294	0.27	282	0.51	4.2 ^{***}	0.12	(409)
3_8	217	0.82	205	0.78	2.3 ^{***}	0.12	(409)
3_9	291	0.35	271	0.66	5.5 ^{***}	0.2	(409)
3_10	289	0.35	276	0.58	4.1 ^{***}	0.13	(409)
3_11	298	0.16	297	0.18	0.9	0.01	(409)
3_12	253	0.73	234	0.81	3.5 ^{***}	0.19	(409)
3_13	276	0.61	238	0.83	4.3 ^{***}	0.38	(144)
3_14	274	0.63	240	0.80	4.0 ^{***}	0.34	(144)
3_15	273	0.64	228	0.82	5.1 ^{***}	0.45	(144)

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				<i>paired-t</i>		()		
4.1	()	2.25	0.18	2.35	0.25	-6.8***	0.1	(409)
4.2		2.82	0.48	2.86	0.41	-1.2	0.04	(409)
4.3		2.49	0.62	2.07	0.70	10.4***	0.42	(409)
4.4		2.98	0.13	2.89	0.35	5.3***	0.09	(409)
4.5		2.78	0.52	2.27	0.89	10.8***	0.51	(409)
4.6		2.96	0.21	2.85	0.42	4.5***	0.11	(409)
4.7		2.47	0.75	2.01	0.90	9.4***	0.46	(409)
4.8		2.39	0.78	2.16	0.77	5.7***	0.23	(409)
4.9		2.88	0.41	2.58	0.77	7.2***	0.3	(409)
4.10		2.66	0.68	2.22	0.90	9.3***	0.44	(409)
4.11		2.75	0.46	2.45	0.62	9.1***	0.3	(409)
		2.69	0.62	2.38	0.78	7.6***	0.31	(408)
5.1		2.05	0.26	1.92	0.29	10.9***	0.13	(409)
5.2		2.68	0.62	2.28	0.76	8.4***	0.4	(409)
5.3		2.47	0.60	2.36	0.61	2.9*	0.11	(409)
5.4		2.82	0.49			11.8***	2.82	(409)
5.5		2.82	0.46	2.40	0.78	9.5***	0.42	(409)
5.6		2.49	0.71	1.99	0.89	11.1***	0.5	(409)
5.7		2.75	0.59	2.36	0.88	8.6***	0.39	(409)
5.8		2.86	0.35	2.56	0.51	10.0***	0.3	(409)
5.9		2.78	0.56	2.36	0.85	8.8***	0.42	(409)
5.10		2.57	0.73	2.10	0.79	10.8***	0.47	(409)
5.11		2.61	0.60	2.33	0.66	7.1***	0.28	(409)
5.12		2.83	0.57	2.91	0.31	-1.4	0.08	(144)
		2.57	0.65	2.35	0.52	3.4**	0.22	(144)
6.1		2.55	0.49	2.23	0.30	7.1***	0.32	(144)
6.2		2.35	0.79	1.59	0.76	9.0***	0.76	(144)
6.3		2.47	0.75	1.98	0.72	5.9***	0.49	(144)
6.4		2.85	0.54	2.88	0.33	-0.4	0.03	(144)
6.5		2.78	0.60	2.13	0.88	7.3***	0.65	(144)
6.6		1.83	0.88	1.14	0.44	8.9***	0.69	(144)
6.7		2.88	0.52	2.97	0.18	-1.8#	0.09	(144)
6.8		2.67	0.63	2.49	0.53	2.8*	0.18	(144)
6.9		2.24	0.87	2.15	0.86	1.0	0.09	(144)
6.10		2.58	0.73	2.28	0.70	3.9***	0.3	(144)
		2.80	0.61	2.68	0.58	1.7#	0.12	(144)

$p < .1$, * $p < .05$, ** $p < .01$, *** $p < .001$

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						rX` a	
						paired-t	()
	2.21	0.15	2.01	0.22	19.7***	(409)	
	2.43	0.20	2.05	0.44	18.5***	(409)	
	2.26	0.32	2.11	0.34	7.7***	(409)	
	2.25	0.18	2.35	0.25	-6.8***	(409)	
	2.05	0.26	1.92	0.29	10.9***	(409)	
	2.55	0.49	2.23	0.30	7.1***	(144)	

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*** $p < .001$

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							()
	20	11.8	62.1	24.2	100(153)	%#	
	32	16.1	64.5	16.1	100(153)	%	
	-	18.2	65.9	15.9	100(153)	%#	
	26	6.4	59.0	32.1	100(153)	%S	
F						Sž%	
	41	44.2	46.5	5.2	100(1,110)	Sž	
	38	38.9	51.3	6.0	100(1,113)	Sž	

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				rX ` a			
4		()		4		()	
	25	(1,110)		26	(1,113)		
	25	(258)		25	(258)		
	26	(218)		26	(219)		
	25	(227)		26	(207)		
	26	(194)		26	(215)		
	25	(213)		26	(214)		
F	1.1		F	1.8			
	25	(971)		26	(1,023)		
	27	(57)		28	(90)		
	28	(80)	t	-26	(1,113)		
F	10.7***						

* p < .05 *** p < .001

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	X	ekem	X	X	X	X	X	χ^2 (df)	a
1	365	180	188	100	59	101	08	1000(1,052)	
2	31.2	131	231	11.8	94	105	09	1000(1,042)	
1+2	67.7	31.1	41.9	21.8	15.3	206	1.7		
1	154	167	206	154	97	196	25	1000(1,037)	
2	195	124	204	17.5	11.5	158	29	1000(1,037)	
1+2	349	291	41.0	329	21.2	354	54		

	X	eken	X	X	X	X	X	χ^2 (df)	a
	365	180	188	100	59	101	08	1000(1,052)	
	307	268	144	105	62	105	08	1000(257)	
	433	17.7	149	93	37	98	1.4	1000(215)	
	341	21.7	147	11.5	65	101	1.4	1000(217)	
	41.8	107	220	130	40	85	-	1000(177)	
χ^2 (df)	344	86	31.2	54	91	11.3	-	1000(186)	749(24)***
	360	17.9	188	103	63	99	08	1000(972)	
	375	21.4	21.4	36	1.8	143	-	1000(56)	
	542	125	125	125	-	83	-	1000(24)	
	31.2	131	231	11.8	94	105	09	1000(1,042)	
	27.2	17.2	21.2	168	68	96	1.2	1000(250)	
	338	129	186	124	7.1	148	05	1000(210)	
	325	122	249	102	96	102	05	1000(197)	
	31.7	166	21.1	11.1	101	85	1.0	1000(199)	
χ^2 (df)	31.7	54	31.2	70	145	91	1.1	1000(186)	47.4(24)**
	308	131	234	11.8	95	105	09	1000(1,025)	
	529	17.6	59	11.8	59	59	-	1000(17)	

** $p < .01$, *** $p < .001$

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fž								/ ž/ž)	
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								rX` a	
						2		()	
		154	167	206	154	97	196	25	1000(1,037)
		170	182	202	174	79	166	28	1000(253)
		137	132	222	208	75	193	33	1000(212)
		157	171	194	143	97	212	28	1000(217)
		170	187	193	140	135	146	29	1000(171)
		136	163	223	92	114	266	05	1000(184)
		157	167	207	152	94	196	27	1000(963)
		132	132	189	170	151	226	-	1000(53)
		95	238	238	238	95	95	-	1000(21)
		170	121	345	246	08	69	42	1000(1,042)
		208	124	300	200	08	108	52	1000(250)
		248	105	333	252	1.0	33	1.9	1000(210)
		208	137	284	244	05	61	61	1000(197)
		11.1	106	387	27.1	1.0	65	50	1000(199)
		54	134	435	27.4	05	70	27	1000(186)
X2(df)/F				60.5(24)***					
		172	120	345	243	08	70	42	1000(1,025)
		59	176	294	41.2	-	-	59	1000(17)
X2(df)/t				-					

*** p < .001

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										() X ² (df)	
295	27.1	342	84	09	1000(1,039)						
255	27.9	349	106	1.0	1000(584)					160(4)**	
345	26.2	332	55	07	1000(455)						

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/	\tilde{Z}/\tilde{Z}^*	fi					()	$X^2(df)$
0	238	286	333	11.9	24	1000(84)	34.7(20)*	
1	302	260	330	10.2	0.5	1000(215)		
2	225	291	368	10.5	1.1	1000(285)		
3	27.8	25.8	38.7	7.2	0.5	1000(194)		
4	37.2	27.0	31.4	4.4	-	1000(137)		
5	41.9	25.8	26.6	4.0	1.6	1000(124)		
	28.0	30.3	33.1	8.0	0.6	1000(489)	-	
	27.3	23.6	34.5	14.5	-	1000(55)		
	30.7	24.6	35.4	8.1	1.2	1000(492)		
	38.1	25.8	28.9	5.2	2.1	1000(97)	-	
	40.5	26.2	25.0	8.3	-	1000(84)		
	39.4	42.4	15.2	3.0	-	1000(33)		
	27.6	26.2	36.5	8.7	0.9	1000(539)		
	26.2	28.5	35.2	9.4	0.7	1000(267)		
	18.8	18.8	56.2	6.2	-	1000(16)		
	-	33.3	33.3	33.3	-	1000(3)		

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* $p < .05$ ** $p < .01$

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						()	4
	5.3	4.8	4.0	6.6	1000(153)	2.5	
	-	41.9	48.4	9.7	1000(153)	2.7	
	4.5	61.4	34.1	-	1000(153)	2.4	
	7.8	42.9	40.3	9.1	1000(153)	2.5	
F						2.1	
	3.2	31.7	52.3	12.8	1000(1,108)	2.7	
	2.8	33.2	53.5	10.5	1000(1,112)	2.7	

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		rX` a	
	()		()
	27 (1,108)	27	(1,112)
	28 (258)	27	(57)
	28 (217)	28	(219)
	27 (227)	27	(07)
	27 (193)	27	(15)
	27 (213)	27	(214)
F	21 [#]	F	1.4
	27 (969)	27	(1,022)
	28 (57)	28	(90)
	30 (80)	t	-1.4 (1,112)
F	45		

$p < .1$, * $p < .05$

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					()	X ² (df)
	189	59.4	20.5	1.3	100(1,039)	
	17.5	58.2	22.6	1.7	100(584)	68(3) [#]
	20.7	60.9	17.8	0.7	100(455)	
0	20.2	59.5	17.9	2.4	100(84)	
1	14.9	59.1	24.2	1.9	100(215)	
2	18.6	57.2	22.8	1.4	100(285)	-
3	19.1	58.2	22.2	0.5	100(194)	
4	22.6	59.9	16.8	0.7	100(137)	
5	21.0	66.1	12.1	0.8	100(124)	
	23.7	59.8	15.5	1.0	100(97)	
	27.4	47.6	22.6	2.4	100(84)	
	30.3	42.4	27.3	-	100(33)	-
	17.3	61.2	20.2	1.3	100(539)	
	16.1	61.0	21.7	1.1	100(267)	
	25.0	56.2	18.8	-	100(16)	
	-	100.0	-	-	100(3)	

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98	359	464	7.8	1000(153)	26
242	529	176	5.2	1000(153)	21
33	209	601	15.7	1000(153)	29

30	195	61.9	15.7	1000(1,110)	29
62	427	431	7.9	1000(1,107)	25
32	238	55.0	18.0	1000(1,107)	29

1.9	208	638	13.4	1000(1,109)	29
48	45.4	44.9	4.9	1000(1,113)	25
27	30.7	56.5	10.1	1000(1,107)	27

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													()			
	98	35.9	464	7.8	26	242	52.9	17.6	5.2	2.1	3.3	20.9	60.1	15.7	2.9	(153)
	00	29.0	61.3	9.7	2.8	9.7	54.8	35.5	0.0	2.2	0.0	22.6	61.3	16.1	2.9	(31)
	9.1	43.2	38.6	9.1	2.7	22.7	63.6	11.4	2.3	2.1	0.0	27.3	56.8	15.9	3.0	(44)
	14.1	34.6	44.9	6.4	2.5	30.8	46.2	14.1	9.0	2.0	6.4	16.7	61.5	15.4	2.8	(78)
X ² (df)/F	11.6(6) [#]				3.6 [*]	17.7(6) ^{**}				1.2	-				0.7	

p < .1, * p < .05, ** p < .01

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	()				()			
	29	25	29	(1,107)	29	25	27	(1,113)
	29	26	28	(258)	29	25	27	(258)
	29	25	29	(218)	30	26	28	(220)
	30	25	29	(226)	29	25	27	(207)
	29	25	29	(193)	29	25	27	(214)
	28	25	29	(212)	28	25	28	(214)
F	2.2 [#]	1.0	0.3		1.2	0.9	2.1	
	29	25	29	(968)	29	25	27	(1,022)
	29	26	29	(57)	30	26	29	(91)
F	1.3	0.2	1.6		-1.4	-1.4	-2.2 [*]	

p < .1, * p < .05

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	97	327	48	130	49	87	23	45	(755)
	99	324	53	133	53	97	27	58	(414)
	94	331	41	126	44	76	18	29	(341)
X ² (df)		01(2)		07(2)		14(2)		44(2)	
0	127	345	-	109	18	55	-	36	(55)
1	88	333	41	122	54	88	27	61	(147)
2	99	311	75	146	61	113	33	61	(212)
3	104	313	28	104	49	83	21	14	(144)
4	100	340	40	160	70	90	-	60	(100)
5	72	351	62	124	10	52	31	21	(97)
X ² (df)		22(10)		11.4(10)		-		-	
	107	41.7	95	167	48	143	24	36	(84)
	95	397	63	127	79	79	16	48	(63)
	11.1	185	7.4	37	-	148	37	-	(27)
	93	333	41	142	49	83	21	47	(387)
	98	27.2	33	103	43	7.1	27	54	(184)
X ² (df)	125	37.5	-	125	125	-	-	-	(8)

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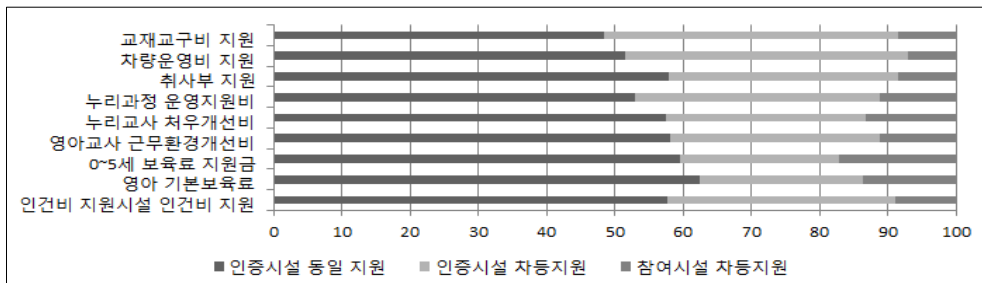
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	485	430	85	100(200)
	51.5	41.4	7.1	100(200)
	580	335	85	100(200)
	530	359	11.1	100(200)
	574	294	132	100(198)
	581	308	11.1	100(198)
0-5	596	232	17.2	100(199)
	624	239	137	100(199)
	57.8	33.2	9.0	100(199)



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	485	430	85	51.5	41.4	7.1	(200)
	61.5	288	96	65.4	288	58	(52)
	47.3	436	9.1	50.9	38.2	10.9	(55)
	41.9	505	7.5	44.0	50.5	5.5	(93)

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	rX \ a			rX \ a			()
	/ , / /	/ , / /	/	/ , / /	/	/	()
	580	335	85	530	359	11.1	(200)
	65.4	288	58	63.5	250	11.5	(52)
	56.4	30.9	12.7	56.4	32.7	10.9	(55)
	54.8	37.6	7.5	45.1	44.0	11.0	(93)

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	rX \ a			rX \ a			()
	/ , / /	/ , / /	/	/ , / /	/	/	()
	57.4	29.4	13.2	58.1	30.8	11.1	(198)
	62.7	23.5	13.7	64.7	21.6	13.7	(51)
	65.5	23.6	10.9	61.8	27.3	10.9	(55)
	49.5	36.3	14.3	52.2	38.0	9.8	(92)
X ² (df)		49(4)			47(4)		

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	0-5									()
	/	/	/	/	/	/	/	/	/	
	596	232	172	624	239	137	578	332	90	(199)
	667	98	235	660	120	220	667	176	157	(51)
	61.8	236	145	67.3	236	91	564	345	91	(55)
X ² (df)	543	304	152	57.6	304	120	538	409	54	(93)
	85(4) [#]			88(4) [#]			-			

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p < .1

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									()
1	85	170	63	101	527	1.4	1.8	22	100(1,110)
2	63	156	93	198	245	7.1	11.2	62	100(1,052)
1+2	148	326	156	299	772	85	130	84	
1	69	124	42	21	71.2	1.1	1.1	1.1	100(1,115)
2	89	250	132	11.2	188	97	98	34	100(1,105)
1+2	158	374	174	133	900	108	109	45	

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	X	ei	ep	X	X	X	X	rX	
	85	170	63	101	527	14	1.8	22	1000(1,110)
	1.2	124	47	97	686	1.6	0.4	1.6	1000(258)
	83	197	55	37	569	1.4	1.4	32	1000(218)
	35	21.6	7.9	62	520	31	2.6	31	1000(227)
	109	166	83	135	435	1.0	4.1	21	1000(193)
	206	154	56	182	383	-	0.9	0.9	1000(214)
	7.7	170	65	97	538	1.5	1.9	20	1000(971)
	143	17.9	1.8	125	429	1.8	1.8	7.1	1000(56)
	136	17.3	7.4	123	469	-	1.2	1.2	1000(81)
	69	124	42	21	71.2	1.1	1.1	1.1	1000(1,115)
	39	136	31	1.2	733	1.2	1.6	23	1000(258)
	64	127	36	05	736	1.8	0.9	0.5	1000(220)
	7.2	139	63	24	663	1.0	1.0	1.9	1000(208)
	7.9	98	28	28	735	1.4	1.9	-	1000(215)
	98	11.7	5.6	37	687	-	-	0.5	1000(214)
	63	11.9	4.5	20	723	1.1	1.0	1.1	1000(1,024)
	143	17.6	1.1	33	593	1.1	2.2	1.1	1000(91)

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					()	X ² (df)
81.1	96	7.2	21	1000	(1,111)	
82.2	124	5.0	04	1000	(259)	ž
81.7	87	7.8	1.8	1000	(218)	
81.1	101	5.3	35	1000	(227)	
82.5	62	7.2	41	1000	(194)	
77.9	99	11.3	09	1000	(213)	
83.7	95	5.3	1.4	1000	(972)	ž
64.3	7.1	21.4	7.1	1000	(56)	
61.7	123	19.8	62	1000	(81)	
69.9	17.2	10.0	3.0	1000	(1,115)	
71.7	198	7.4	1.2	1000	(258)	154(12)
71.8	182	7.3	2.7	1000	(220)	
66.8	17.3	11.1	4.8	1000	(208)	
67.0	15.8	13.5	3.7	1000	(215)	
71.5	14.5	11.2	2.8	1000	(214)	
72.0	17.0	8.6	2.4	1000	(1,024)	431(3)***
46.2	19.8	25.3	8.8	1000	(91)	

*** p < .001

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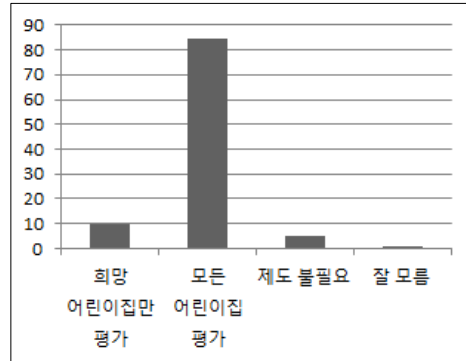
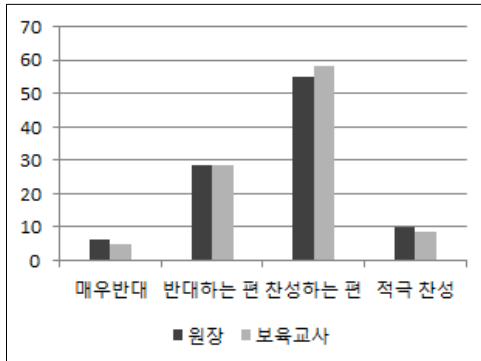
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	X	ej	ej	X	X	X	X	χ^2 (df)	a
	63	286	549	102	1000	(1,111)			
	39	202	620	140	1000	(258)			
	60	275	550	11.5	1000	(218)	-		
	57	273	559	11.0	1000	(227)			
	129	309	490	7.2	1000	(194)			
	42	393	505	61	1000	(214)			
	51	271	572	106	1000	(972)			
	158	368	439	35	1000	(57)	345(6)	***	
	138	413	350	100	1000	(80)			
	47	287	582	84	1000	(1,113)			
	58	233	609	101	1000	(258)			
	23	291	591	9.5	1000	(220)			
	34	308	582	7.7	1000	(208)	139(12)		
	61	276	593	7.0	1000	(214)			
	56	338	531	7.5	1000	(213)			
	40	286	587	87	1000	(1,022)	132(3)	**	
	121	297	527	55	1000	(91)			

** $p < .01$, *** $p < .001$

	X	ej	ek	X	X	X	χ^2 (df)	a
	100	843	51	06	1000	(1,039)		
0	143	798	48	1.2	1000	(84)		
1	84	865	42	09	1000	(215)		
2	98	825	7.4	04	1000	(285)		
3	82	871	36	1.0	1000	(194)		
4	109	861	29	-	1000	(137)		
5	121	81.5	65	-	1000	(124)		
	11.7	836	43	04	1000	(489)		
	36	855	7.3	36	1000	(55)		
	91	848	57	04	1000	(492)		



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	3	6	12	13	1	2	3	
	7.1	32.8	52.5	7.6	10.1	40.4	49.5	(198)
	15.7	37.3	45.1	2.0	5.8	40.4	53.8	(51)
	3.6	20.0	58.2	18.2	5.7	22.6	71.7	(55)
	4.3	38.0	53.3	4.3	15.1	50.5	34.4	(92)

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	560	240	120	80	49.5	42.5	80	(200)
	462	231	17.3	135	38.5	50.0	11.5	(52)
	545	21.8	182	5.5	45.5	47.3	7.3	(55)
	624	25.8	5.4	65	58.1	35.5	65	(93)
X ² (df)	109(3) [#]				-			

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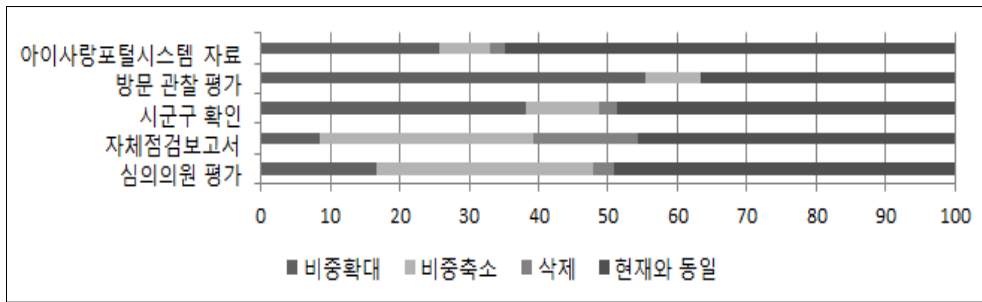
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	256	7.5	20	648	100(199)
	55.3	80	-	367	100(199)
	38.2	106	25	487	100(199)
	85	30.7	151	457	100(199)
	166	31.2	30	49.2	100(199)



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	256	7.5	20	648	55.3	80	367	(199)
	27.5	5.9	20	647	45.1	17.6	37.3	(51)
	27.3	14.5	1.8	564	54.5	12.7	32.7	(55)
	23.7	4.3	2.2	60.9	61.3	-	38.7	(93)

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382	106	25	487	85	307	151	457	166	31.2	30	492	(199)	
37.3	7.8	39	51.0	98	255	59	588	176	27.5	-	549	(51)	
27.3	182	36	509	109	255	9.1	545	236	236	36	491	(55)	
45.2	7.5	1.1	462	65	366	237	333	11.8	37.6	43	462	(93)	

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548	45.2	1000	(197)					439	56.1	1000	(197)		
431	56.9	1000	(197)	,	,			442	55.8	1000	(197)		
386	61.4	1000	(197)					533	46.7	1000	(197)		
426	57.4	1000	(197)	.				431	56.9	1000	(197)		
645	35.5	1000	(197)					437	56.3	1000	(197)		
487	51.3	1000	(197)										

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	533	467	431	569	437	563	(197)
	765	235	725	275	686	31.4	(51)
	527	47.3	527	47.3	545	45.5	(55)
	407	59.3	209	79.1	231	76.9	(91)
X ² (df)	168(2) ^{***}		384(2) ^{***}		31.2(2) ^{***}		

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					55	7.3	91			
	71.0	60	7.0	140	20	300	295	37.0	35	(200)
	404	7.7	7.7	423	1.9	17.3	346	42.3	58	(52)
	745	55	109	7.3	1.8	25.5	400	32.7	1.8	(55)
	860	54	43	22	22	39.8	204	36.6	32	(93)

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	67.3	27.6	5.0	93.0	5.0	2.0	95.0	3.5	1.5	(199)
	80.8	13.5	5.8	96.2	1.9	1.9	90.4	5.8	3.8	(52)
	77.8	18.5	3.7	88.9	9.3	1.9	92.6	5.6	1.9	(54)
	53.8	40.9	5.4	93.5	4.3	2.2	98.9	1.1	-	(93)

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	330		635		35	100(200)
	327		61.5		58	100(52)
	291		69.1		1.8	100(55)
	355		61.3		32	100(93)

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	35	130	56.0	230	45	100(200)
	7.7	17.3	53.8	17.3	38	100(52)
	1.8	12.7	65.5	200	-	100(55)
	22	10.8	51.6	280	7.5	100(93)

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	50	335	435	155	25	1000(200)
	1.9	231	51.9	173	58	1000(52)
	36	41.8	327	21.8	-	1000(55)
$\chi^2(df)$	7.5	344	452	108	22	1000(93)

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			427	20	11.6	201	236	1000(200)
			21.6	35	10.1	342	307	1000(200)
			220	50	240	295	195	1000(200)
			236	25	7.5	37.7	286	1000(200)
			59.5	22.5	45	10.5	30	1000(200)
, 6			51.8	9.5	90	21.6	80	1000(200)
			59.5	160	80	150	1.5	1000(200)
			57.5	180	7.5	15.5	1.5	1000(200)
			33.5	25.0	31.0	7.5	30	1000(200)
			39.5	220	28.5	80	20	1000(200)

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	595	225	45	105	30	51.8	95	90	21.6	80	1000(200)
	57.7	154	11.5	96	58	45.1	59	137	25.5	98	1000(52)
	345	382	1.8	21.8	36	47.3	127	7.3	21.8	109	1000(55)
	75.3	17.2	2.2	43	1.1	58.1	97	7.5	19.4	54	1000(93)

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	595	160	80	150	1.5	57.5	180	7.5	15.5	1.5	1000(200)
	57.7	135	135	135	1.9	57.7	11.5	135	135	38	1000(52)
	41.8	200	109	236	36	45.5	200	109	21.8	1.8	1000(55)
	71.0	15.1	3.2	108	-	64.5	204	2.2	12.9	-	1000(93)

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	335	250	31.0	7.5	30	39.5	220	28.5	80	20	1000(200)
	32.7	135	40.4	7.7	58	40.4	135	36.5	7.7	1.9	1000(52)
	27.3	236	32.7	12.7	36	25.5	236	34.5	12.7	36	1000(55)
	37.6	32.3	24.7	4.3	1.1	47.3	25.8	20.4	5.4	1.1	1000(93)

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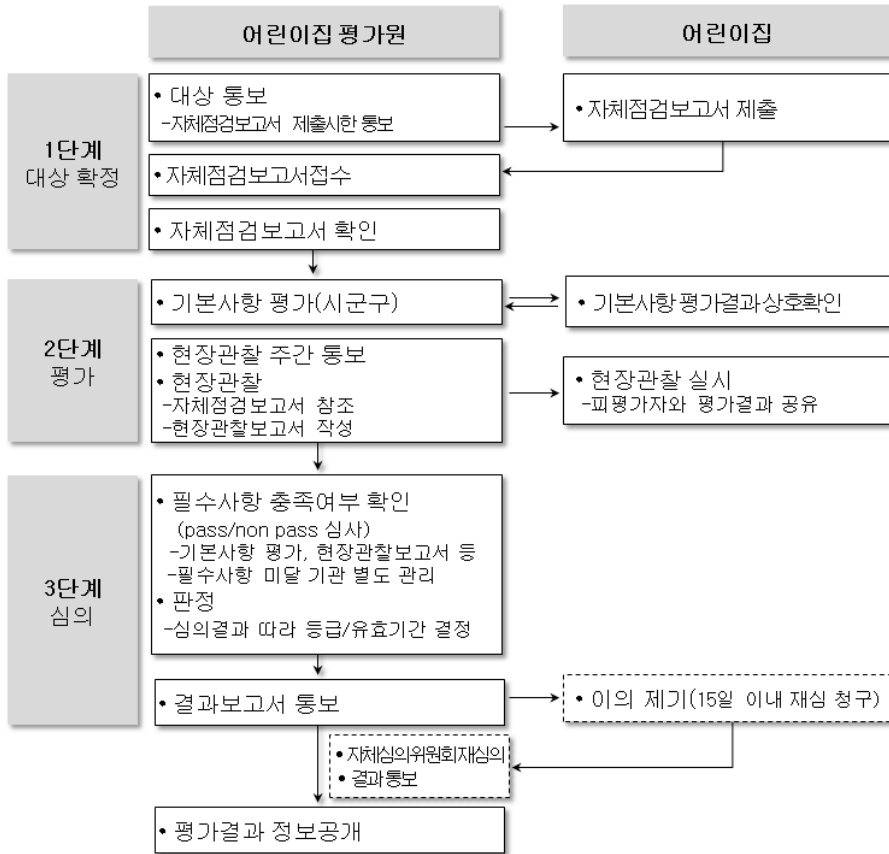
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- • • • • : 3
- • • • • , 33 pp. 333-357.
- • • • • (2007).
- • • • • , 13(1), 40-52
- • • • • (2003).
- • • • • (2011).
- • • • • DEA
- • • • • , 17(2), 1-33
- • • • • (2001). 2000
- • • • • (2010).
- • • • • (Q&A).
- • • • • (2013). 2013
- • • • • (2012). 2012
- • • • • (2000).
- • • • • (2009).
- • • • • (2010).

- (2009).
- (2013).
- (202), 39-47.
- (2004).
- (2012).
- (2010). AHP DEA_AR, 11(7), 2406-2419.
- (2012).
- , 2012, 3, 441-456
- (2004).
- (2006).
- (2007).
- (2007).
- (2006).
- (2008). 3, 3(1), pp. 105-124
- (2011).
- (2008).
- , 15(2), 23-48
- (2012).
- (2010).
- , 15(2), 253-278
- (2002).

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, 27(4). 327~353

(2011).

(2008).

, 21(6), 2549-2580

Australian Children's Education & Care Quality Authority(2013). The NQF Snapshot Q2 2013

Australian Children's education & care quality authority(2013). Guide to the National Quality Standard.

Australian Children's Education and Care Authority(2013). Guide to Assessment and Rating for Regulatory Authorities.

Australian Children's Education and Care Quality Authority(2013), Annual Report 2012-

Australian Children's Education & Care Quality Authority(2013). Guide to Assessment and Rating for Services.

Australian Department for Education(2013). Early Years Learning Framework.

Greenfield, D., & Braithwaite, J (2008). Health sector accreditation research: a systematic review. International journal for quality in health care, 20(3), 172-183

(<https://www.koiha.or.kr>).



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	50.8	45.9	33	100(1,112)	80.6	46.6	48.5	5.0	100(1,110)	77.8
	50.5	45.2	43	100(1,110)	81.5	45.2	47.7	7.1	100(1,113)	79.3
	49.2	46.8	40	100(1,111)	80.2	41.5	52.4	6.1	100(1,113)	79.7
	40.3	55.2	45	100(1,109)	80.8	35.0	59.4	5.6	100(1,109)	78.1
	34.8	60.7	45	100(1,106)	81.3	34.3	60.6	5.1	100(1,108)	79.6
	35.5	60.5	40	100(1,109)	82.3	35.3	58.7	6.0	100(1,111)	79.5
	40.2	54.5	5.3	100(1,112)	79.9	38.1	54.6	7.3	100(1,110)	77.6
	40.4	56.2	3.4	100(1,112)	79.4	35.8	58.3	5.8	100(1,113)	76.7

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	()				
	55.0	41.5	35	100(1,111)	81.9
	53.5	42.8	37	100(1,112)	81.8
	39.6	57.5	2.9	100(1,111)	82.2
	36.2	60.2	3.6	100(1,111)	82.4
	55.9	40.2	3.9	100(1,112)	81.0
	37.7	57.9	4.4	100(1,110)	81.9
	31.1	64.7	4.1	100(1,111)	82.2
	51.8	43.7	4.6	100(1,111)	79.0
	53.3	41.7	5.0	100(1,110)	78.2
	35.3	60.9	3.8	100(1,111)	79.1
	39.3	56.7	4.0	100(1,111)	78.4
	50.9	44.1	5.0	100(1,111)	78.9
	34.5	59.9	5.6	100(1,111)	79.7
	27.2	67.7	5.1	100(1,110)	80.2

:

j11

X em X	X	X X	X	X	X	X	X	X	X	rX` a
										()
551	508	505	492	403	348	355	402	404		(1,111)
560	51.0	506	486	41.3	363	357	41.3	41.7		(259)
502	51.4	530	505	35.2	357	338	385	399		(218)
568	546	542	480	44.2	344	35.2	41.0	436		(226)
562	485	466	51.5	41.2	342	39.7	38.1	41.2		(194)
561	481	47.2	47.9	39.3	33.2	33.6	41.6	35.0		(214)
564	52.9	520	50.3	41.4	35.8	36.2	41.4	42.3		(972)
509	42.1	45.6	42.1	33.3	33.9	35.1	38.6	33.3		(57)
420	32.1	35.0	41.3	31.3	22.5	27.5	27.2	22.2		(80)

:

X en X X	X	X	X X X	rX	rX` a				
81.5	806	81.5	802	808	81.3	823	799	794	
81.8	81.9	81.4	800	789	81.7	835	804	808	
824	806	821	81.3	823	832	840	822	809	
81.4	804	81.8	805	81.1	81.5	81.4	793	791	
81.5	801	805	796	81.7	793	805	789	788	
802	799	81.3	798	806	806	822	786	769	
F	05	05	02	03	08	09	1.0	09	1.1
81.4	806	81.5	803	808	81.6	826	800	796	
85.3	839	845	828	837	822	81.3	829	804	
781	788	784	77.9	77.4	749	78.5	74.5	738	
F	25 [#]	1.1	1.6	09	1.1	2.3	1.2	2.2	1.5
()	(602)	(556)	(552)	(537)	(437)	(378)	(385)	(438)	(442)

:

p < .1

X eo X X X X X X rX

	rX` a							
	()							
	55.0	53.5	39.6	36.2	55.9	37.7	31.1	(1,111)
	58.3	57.1	43.2	38.2	62.9	37.5	30.9	(259)
	56.2	54.6	36.4	35.0	55.0	37.8	30.9	(218)
	56.4	52.0	43.6	39.2	56.8	40.1	35.2	(226)
	51.5	51.5	40.2	36.6	52.1	34.2	29.4	(194)
	51.4	51.4	33.6	31.3	50.9	38.3	29.0	(214)
	55.7	54.4	40.8	36.8	54.4	38.6	31.9	(972)
	43.9	47.4	33.3	36.8	47.4	29.8	28.1	(57)
	54.3	46.9	28.8	27.5	46.9	31.3	23.8	(80)

:

X ep X X X X X rX

	rX` a						
	81.9	81.8	82.2	82.4	81.0	81.9	82.2
	81.0	81.7	82.1	81.8	81.2	81.0	81.3
	83.1	82.7	83.2	83.3	81.1	82.5	82.4
	81.5	81.7	82.6	82.1	80.4	82.3	84.1
	81.8	81.3	82.3	82.4	81.4	82.1	82.0
	82.3	81.8	80.9	82.6	81.0	82.0	80.7
X ² (df)	0.5	0.2	0.3	0.1	0.1	0.2	0.7
	81.8	82.0	82.4	82.3	80.9	82.1	82.4
	86.0	85.1	84.9	86.4	85.5	85.2	84.3
	80.0	77.5	76.8	78.7	79.6	77.4	75.2
X ² (df)	1.9	3.4 [#]	2.4 [#]	1.7	1.7	2.0	2.9 [#]
()	(597)	(279)	(431)	(393)	(610)	(408)	(339)

:

p < .1, * p < .05

jl n

X eq X X X X X X X ` aX hi k

										rX
20	21-39	40-49	50-80	81-99	100-160	161-200	201-240	241-300	300	
98	707	272.3	345	132	71	7	3	-	-	
2,181	21	-	-	-	-	-	-	-	-	
37	245	117	86	37	32	5	2	2	-	
507	-	-	-	-	-	-	-	-	-	
36	200	93	80	29	52	9	-	1	-	
450	-	-	-	-	-	-	-	-	-	
19	180	86	128	63	55	12	2	-	-	
852	-	-	-	-	-	-	-	-	-	
8	93	38	56	22	35	14	5	2	-	
461	-	-	-	-	-	-	-	-	-	
18	138	45	51	26	24	-	-	-	-	
775	-	-	-	-	-	-	-	-	-	
14	138	46	58	30	19	2	-	-	-	
270	-	-	-	-	-	-	-	-	-	
-	9	2	5	1	2	-	-	-	-	
39	-	-	-	-	-	-	-	-	-	
188	1,236	361	443	224	204	37	12	6	-	
5,661	21	-	-	-	-	-	-	-	-	
28	126	34	56	23	17	5	-	-	-	
394	-	-	-	-	-	-	-	-	-	
15	104	35	56	38	29	6	3	2	-	
379	-	-	-	-	-	-	-	-	-	
40	184	51	74	36	35	7	2	1	-	
768	-	-	-	-	-	-	-	-	-	
26	114	41	75	41	32	5	-	1	-	
583	-	-	-	-	-	-	-	-	-	
126	83	32	61	29	33	6	5	2	-	
341	-	-	-	-	-	-	-	-	-	
75	273	74	110	56	43	1	2	1	-	
756	-	-	-	-	-	-	-	-	-	
66	352	102	114	72	49	6	1	-	-	
1,505	3	-	-	-	-	-	-	-	-	
23	82	29	28	16	7	2	-	-	-	
117	-	-	-	-	-	-	-	-	-	

: (2012).

X ei h X X X ` a

										rX
20	21-39	40-49	50-80	81-99	100-160	161-200	201-240	241-300	300	
15	30	45	65	85	130	180	220	270	300	

Xj fXj X Xk X X

fXh X

X ei X XX

§	%
#Ž#ž	#Ž#ž
#ŽSž	ž
#Ž%ž	#ŽSž / fi ž
#Ž%ž	#Ž%ž ž
SŽ%ž	#ŽSž ž
#Ž%ž	#Ž ž ž
#ŽSž	#Ž(ž ž
#Ž ž	#Ž(ž ž
#Ž(ž	#Ž(ž ž
#Ž)ž	#Ž)ž ž
#Ž*ž	#Ž*ž ž
#ŽSž	#Ž ž ž
#Ž ž	#Ž ž ž
#Ž(ž	#Ž)ž ž
#Ž)ž	#Ž*ž ž
#Ž*ž	#Ž*ž ž
#Ž+ž	#Ž*ž ž ž
#Ž# ž	#Ž*ž ž ž
#Ž##ž	#Ž*ž ž ž

jlp

X ej X X X

S	%
SŽ#ž	SŽ#ž ž
SŽ ž , #	SŽSž ž
SŽ&ž	SŽ%ž ž
SŽ(ž	SŽ&ž ž
SŽSž	SŽ ž ž
' Ž# ž	SŽ(ž ž
SŽ)ž	SŽ*ž ž
SŽ*ž	SŽ+ž ž
SŽ+ž	SŽ# ž ž
SŽ# ž	SŽ#Sž ž
SŽ#Sž	SŽ##ž ž
SŽ##ž	

X ek X X X X

S	%
%Ž#ž	%Ž#ž ž
%Ž ž	%ŽSž ž
%ŽSž	%Ž%ž ž
%Ž%ž	%Ž&ž ž
%Ž&ž	%Ž(ž ž
%Ž#ž / fi	%Ž)ž ž
%ŽSž	%Ž*ž ž
%Ž%ž	%Ž##ž ž
%Ž*ž	%Ž# ž ž
%Ž##ž	%Ž)ž ž
%Ž# ž	%Ž*ž ž
%Ž)ž	

X el X XX X

S	%
%Z*ž	&Z#ž ž
%Z+ž	&ZSž ž
%Z##ž	&Z%ž ž l
%Z#Sž	&Z&ž ž
%Z#%ž	&Z ž ž
%Z#&ž	&Z(ž ! ž
&Z ž	&Z) ž ž
&Z&ž	&Z*ž ž
&Z ž	&Z+ž ž
&Z)ž	&Z#" ž ž
&Z(ž	&Z# ž ž
&Z+ž	&Z ž ž

j mh

X em X XnX

S	%
'Ž#ž	
'ŽSž l l l	'Ž#ž ž
'Ž%ž	
'Ž*ž	
'Ž#ž	
'ŽSž l l l	'ŽSž / fi
'Ž%ž	ž
'Ž&ž	
'Ž ž	'Ž%ž ž
'Ž+ž	'Ž&ž ž
'Ž#ž / fi	'Ž ž ž
'Ž# ž	
'Ž(ž l	'Ž(ž ž
'Ž ž	
'Ž(ž l	'Ž)ž ž
'Ž#ž	'Ž*ž ž
'Ž#Sž	

X en X XnX X

S	%
(Ž#ž	(Ž#ž ž
(ŽSž	(ŽSž / fi ž
(Ž%ž	(Ž&ž l ž
(Ž&ž	(Ž)ž ž
(Ž ž	(Ž ž l
(Ž(ž	(Ž&ž ž
(Ž)ž	(Ž ž ž
(Ž*ž	(Ž(ž ž
(Ž+ž	(Ž)ž ž
(Ž# ž	(Ž)ž ž
(Ž# ž	(Ž)ž ž
'Ž+ž	(Ž*ž ž
(Ž# ž	l ž

fXkq X

X eo X X X X

S	%
#ŽSž	#Ž#ž
#Žž	ž
	#ŽSž / fi
	ž
	#Žž
	ž
#Ž(ž	#Ž&ž
	ž
#Ž#ž	#Ž ž
	ž
SŽ ž	
SŽ(ž	#Ž(ž
SŽ+ž	
SŽ# ž	ž
SŽ##ž	
SŽ ž	
SŽ(ž	#Ž) ž
SŽ+ž	ž
SŽ# ž	
SŽ##ž	
#Ž+ž	#Ž*ž l l ž

j nj

X ep X X X X

S	%
#Z&ž	SZ#ž ž
#Z)ž , #	SZSž ž SŽ%ž ž
#Z*ž	SZ&ž ž
#Z ž &Z# ž	SZ ž ž
#Z# ž	SZ(ž ž
#Z##ž	SZ)ž ž SŽ*ž ž

X eq X X X X

S	%
SZ#ž	%Z#ž ž
SZ&ž	%ZSž ž
SZSž	%Z%ž ž
SZ)ž	
&Z&ž	
%Z#ž / fi	%Z&ž ž
%ZSž	
%Z%ž	
%Z*ž	%Z ž ž
%Z##ž	%Z(ž ž
%Z# ž	%Z)ž ž %Z*ž ž

X ei h X X X X

S	%
SŽ ž	SŽ#ž ž
SŽ(ž	SŽSž ž
SŽ*ž	SŽ%ž ž !
SŽ+ž	SŽ&ž ž
SŽ# ž	SŽ ž ž
SŽ##ž	SŽ(ž ž !
%Ž ž	%Ž)ž ž
%Ž&ž	%Ž*ž ž
%Ž ž	%Ž)ž ž
%Ž)ž	%Ž+ž ž
%Ž(ž	%Ž# ž ž
%Ž+ž	%Ž)ž ž

j ml

X e i i X XnX

S	%
ŠZ#ž	
ŠZSž l l l	' Ž#ž ž
ŠZ%ž	
ŠZ*ž	
ŠZ#ž	
ŠZSž l l l	' ŽSž / fi
ŠZ%ž	ž
ŠZ&ž	
ŠŽ ž	' Ž%ž ž
ŠŽ+ž	' Ž&ž ž
%Ž#ž / fi	' Ž ž ž
ŠŽ# ž	
ŠŽ ž	' Ž(ž ž
ŠŽ(ž l	
ŠŽ ž	' Ž)ž ž
ŠŽ(ž l	
ŠŽ##ž	' Ž*ž ž
ŠŽ#Sž	

X e i j X XnX X

S	%
' Ž#ž	(Ž#ž ž
' ŽSž	(ŽSž / fi ž
' Ž&ž	(Ž%ž l ž
' Ž ž	
' Ž(ž	(Ž&ž ž
' Ž)ž	(Ž ž l ž
' Ž*ž	
' Ž+ž	(Ž(ž ž
' Ž# ž	(Ž)ž ž
' Ž# ž	
ŠŽ+ž	(Ž*ž l ž
' Ž# ž	

jmp

9.

?

#fi		
\$fi		
%fi		

9.1	
9.2	
9.3	

10.

?

10

11.

?

11

12.

1)		xxx a x a
2)	% fi / l l fi &	
3)	/ fi / fi / fi	
4)	?	XXXXXXXXXXXX

X X X X X X

X fX

X

	1 ž
--	-----

4 4 4

1		ž
	# " "	
	ž	
ž	l	
l		ž
ž		
		S" #%" #"

	_____	_____	_____
	/ fi		

j nh

4 B 4

#ž 1

Sž 1/ S" #% + ži

Sž#ž	/	fi	/	fi	/	fi
SžSž	/	fi	/	fi	/	fi

%ž 1

/ fi / fi
/ fi

&ž/ fi 1 / l fi

'ž 1 / 'Ž# fi / 'Ž# fi
// (fi

'Ž#ž/	fi	ž
	ž	

4 B 4 4< 4 4 4 4 4 B

6ž / l fi 1 / fi
/ (Ž# fi / (Ž% fi

6Ž#ž/ fi 1
/ (ŽS fi / (ŽS fi

6žSž/ l fi 1 ž

6Ž%ž/ fi / l fi 1

/ , fi

)ž / ! fi / l fi ž

)Ž#ž/ fi 1

*ž 1 / + fi

*Ž#ž/ fi 1

+ž l , fi fi 1 / ž

4	4	4	4		
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#ž + ž 1

/ fi	l	l	l	l	l	l
------	---	---	---	---	---	---

##ž/ 1 fi / fi

/ , fi / fi

#Sž/ 1 fi

/ fi

44	4	4	4	44	
----	---	---	---	---------------	--

#%ž S S' #% ++ S l # " %

ž / #%ž# fi / #%ž# fi 1

#%ž#ž/ l fi ž

j nj

#& 1 S ž ž

44 4 4 4 4

ž 1 & ž ž

#fi	/#` fi	/ _____ fi	/ _____ fi
Sfi	/#` fi	/ _____ fi	/ _____ fi
%fi	/'` fi	/ _____ fi	/ _____ fi
&fi	/S` fi	/ _____ fi	/ _____ fi

#(ž 1 SžS' /%ž" fi)' /#" fi ž ž
/ _____ł , _____fi / _____ł , _____fi

#)ž % ž 1 / fi

#*ž ž

# , /	fi	S , /	fi
/& fi #	'`		
/%+ fi #	&` /	fi	
#)"		
/& fi	ł	/%+ fi /	fi

44 4 4 4 4

#+ž 1 ž

#fi				
Sfi				
%fi				
&fi				

S' ž

ž

1				
#fi				
Sfi	/	fi		
%fi				

S#ž

l

ž

1

SSž

ž

1				
#fi				
Sfi	ž	1	ž	
	ž	/*	l +'	/*
	ž	/*	fi	l (
	ž	/*	fi	1 (

4 ~~fi~~ 4

S%ž

~~%~~ _____ &' _____
1

ž

/ S%ž# fi / S%ž# fi

S%ž#ž / fi 1

/ , fi

S&ž

*

1

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#	/	fi	S	/	fi
/	fi	/	l	fi	
/	fi				

S' ž

/# l S l % fi

1

#fi #p%	#p&	#p'	ž		
Sfi		"	ž		
%fi	l	ž			

j nl

S(ž 1 l l % ž

#fi	ž			
\$fi	ž #			
%fi		ž		
&fi		ž		
' fi	ž			

S)ž 1

#fi			
\$fi			

4 4 4

S*ž

ž

ž

	S*ž#fi 1 < >	S*ž\$fi / #" 1 ++ _____ ž ž	fi
#fi	(žž)		
\$fi	(žž)		
%fi	(žž)		
&fi	(žž)		
' fi	(žž)		
(fi	(žž)		
) fi	(žž)		
*fi	(žž)		
+fi	(žž)		

S+ž

ž

l

	S+ž#fi 1 < >	S+žSfi / #" 1 ++ l	fi ž ž
1)	(292)		
2)	(292)		
3)	(292)		
4) .	(292)		
5)	(292)		
6)	(292)		
7)	(292)		

%ž

ž

l

#fi	/	l	fi				
Sfi							
%fi							
&fi							
'fi							

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%#ž S" #%" +

ž

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#fi							
Sfi							
%fi							
&fi	/	l	l	fi			

%Sž

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#fi							
Sfi							
%fi							
&fi							

j nn

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%ž l 1 ž
/ fi S / fi

%, ž / , fi
l / fi

% ž 1

44 4 4 4 4 4 4 B S fi

%(ž 1 ž
/ fi S / fi

%) ž 1

%ž 1 ž
/ fi S / fi

/ , fi

%ž 1 S ž
/ fi S / fi

& ž 1 / fi
/ , fi

4 B 4

&#z 1 _____

&Sž 1

&ž X /šl % fi &

&&ž 1/ ži
% X s #

& ž 1
(2013 9 .)

&(ž 1
(2013 9 .)

j np

XmX X

	l ž
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	ž
ž	ž
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	ž
ž	
	S" #%" #"

	/ fi		

4	B	4	
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#ž 1 _____

Sž 1

%ž 1
/šl % fi &

&ž 1/ ži
% S #

'ž 1

(ž 1/ ži

)ž 1/ ži

*ž 1/ fi
/ , _____ fi/ *ž# fi
/ , _____ fi/ *ž# fi

*ž#ž/ fi 1

4	B	4	
---	--------------	---	--

+ž / l fi ž / !
fi 1

+ž#ž/ fi 1

#ž/ fi 1
/ #ž# fi / #ž# fi

#ž#ž/ fi 1

j oh

#ž / ž l
fi 1
/ , fi

4 4 4

44 4 4 4 4 4

#ž ž S S' #% ++ S l # " %
/ #ž# fi / #ž# fi 1

#ž#ž / l fi ž

#ž 1 S ž ž
ž

44 4 4 4 4 4 4

#ž Sž' /ž" fi)' /#" fi ž ž
/ , ___ l , ___ fi / , ___ l , ___ fi

ž % ž 1

/ fi

44 4 4 4 4 4

#(ž ž 1

#fi				
Sfi				
%fi				
&fi				

j oj

S%ž 1 1 1 % ž

#fi				
\$fi ž #				
%fi ž				
&fi ž				
'fi ž				

S&ž 1

#fi			
\$fi			

~~B~~ 4 4

S' ž

ž ž

	S' Ž#fi 1 < >	S' Ž\$fi / fi #" 1 ++ l ž
#fi	(252)	
\$fi	(252)	
%fi	(252)	
&fi	(252)	
'fi	(252)	
(fi	(252)	
)fi	(252)	
*fi	(252)	
+fi	(252)	

S(ž

l

ž

	S(Ž#fi 1 < >	S(ŽSfi/ #" fi 1 ž ž l
1)	(262)	
2)	(262)	
3)	(262)	
4)	(262)	
5)	(262)	
6)	(262)	
7)	(262)	

S) ž

ž

l

#fi	/	l	fi	
Sfi				
%fi				
&fi				
'fi				

44 4 4 4 4 44

S*ž S" #%" +

ž

l

#fi				
Sfi				
%fi				
&fi	/	l	l	fi

S+ž

l

#fi				
Sfi				
%fi				
&fi				
'fi				

j ol

44 4 4 4 4 4 4

%ž l 1 ž
/ fi S / fi

%#ž / , fi
1
l / fi / , fi

%š 1

44 4 4 4 4 4 4 4 4

%ž 1 ž
/ fi S / fi

%š 1

%ž 1 ž
/ fi S / fi

/ , fi

%ž 1 S ž
/ fi S / fi

%ž 1 fi
/ , fi

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z	z
l	z
z	z
S" #%	##

※ 귀하의 간략한 인적사항을 기록해 주십시오.

성별		연령	_____
최종학력	/& fi		
직장유형	l l		
거주지	_____		

j on

4 4 4 4

44 4 4 4 4

#ž + ž
l/# fi

4 fi l l l l l l l l

Sž ž S S" #% ++ S l # " %
l/# fi

%ž / & fi S ž l
/ %ž# fi / & fi
& fi

%ž#ž/ % & ' ()p*
fi l/# fi

&ž & ž ž l

#fi	/#_ fi	/ _____ fi	/ _____ fi
Sfi	/#_ fi	/ _____ fi	/ _____ fi
%fi	/'_ fi	/ _____ fi	/ _____ fi
&fi	/S_ fi	/ _____ fi	/ _____ fi

' ž 1 Sž' /%ž" fi)' /#" fi ž ž# fi
/ , _____ l , _____ fi / , _____ l , _____ fi

X X X rX j fj m gkfh X aX X `om gh X aX X X fXX

(ž % ž l/# fi / fi

)ž ž ž

, / fi S , / fi

/& fi # ' " /
/%+ fi # &_ / fi
)" , /%+ fi / fi
/& fi l

44 4 4 4 4

*ž % & 1/# fi ž

*ž#ž/ fi 1/# fi

/ , fi

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#	/	fi	S	/	fi
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영지

1

항목	① 즉시 재평가	② 평가 주기 단축	③ 감점 또는 등급조정	④ 관련 정보 공개	④ 해당없음 (법적 조치)
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