

4) Scales for Subjective Well-being

1. Life Satisfaction Index-K (LSI-K)

LSI-K has 9 items with 2 or 3 point response format to measure overall subjective well-being. This scale also consists of 3 subscales include: satisfaction with life as a whole, psychological stability, and evaluation of own aging. Response to 3-point scale is dichotomized when calculating total score, so that the possible total score range is 0 to 9. Higher score indicates higher Life Satisfaction.

LSI-K: total score of 3 subscales (9 items, possible range 0-9)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	5.1	1.8	154	5.3	2.0	149	5.0	2.1	132	4.9	2.1	138	5.1	2.0	573
Female	5.4	1.8	144	5.3	1.9	134	5.2	2.0	138	4.5	2.1	135	5.1	2.0	551
Total	5.2	1.8	298	5.3	2.0	283	5.1	2.0	270	4.7	2.1	273	5.1	2.0	1124

LSI-K subscale1: satisfaction with life as a whole (4 items, possible range 0-4)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	1.8	1.1	154	1.9	1.2	149	2.1	1.2	132	2.1	1.2	138	2.0	1.1	573
Female	2.0	1.1	144	2.1	1.1	134	2.2	1.2	138	2.2	1.2	135	2.1	1.2	551
Total	1.9	1.1	298	2.0	1.1	283	2.2	1.2	270	2.1	1.2	273	2.1	1.2	1124

LSI-K subscale2: psychological stability (3 items, possible range 0-3)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	1.7	0.9	155	1.7	0.9	149	1.7	0.9	133	1.6	0.9	138	1.7	0.9	575
Female	1.6	1.0	144	1.6	1.0	135	1.6	1.0	138	1.3	1.0	135	1.5	1.0	552
Total	1.7	0.9	299	1.7	0.9	284	1.6	0.9	271	1.5	0.9	273	1.6	0.9	1127

LSI-K subscale3: evaluation of own aging (2 items, possible range 0-2)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	1.6	0.6	155	1.6	0.6	149	1.2	0.7	134	1.1	0.7	138	1.4	0.7	576
Female	1.7	0.6	145	1.6	0.6	135	1.4	0.7	138	1.0	0.8	135	1.4	0.7	553
Total	1.7	0.6	300	1.6	0.6	284	1.3	0.7	272	1.1	0.7	273	1.4	0.7	1129

2.The Satisfaction with Life Scale (SWLS)

This scale includes 5 items (7 options, possible range 5-35) to tap global life satisfaction. People satisfied with their own life are supposed to indicate higher score on the scale.

The satisfaction with life scale (total score of 5 items, possible range 5-35)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	20.2	5.5	155	21.1	5.6	149	21.5	5.7	134	22.0	5.4	138	21.2	5.6	576
Female	20.6	5.3	145	20.9	5.4	135	22.2	5.4	138	22.1	5.6	135	21.5	5.5	553
Total	20.4	5.4	300	21.0	5.5	284	21.9	5.6	272	22.1	5.5	273	21.3	5.5	1129

5) Scales for Stress-Related Factors

1. Stress Coping Scale

This scale includes 30 items (5 options) each of which except two items comes under one of the 7 subscales as follows: passive, selective ignoring, distancing, help-seeking, avoidance, positive coping, and suppression. Higher scores of the scale mean frequent use of the coping strategies.

Stress coping scale, total score of 7 subscales: (30 items, possible range 30-150)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	71.9	10.2	155	72.7	11.1	149	74.8	11.9	134	73.0	12.3	136	73.1	11.4	574
Female	74.3	11.5	142	75.3	11.4	135	77.0	10.6	138	77.2	13.0	134	76.0	11.7	549
Total	73.1	10.9	297	74.0	11.3	284	75.9	11.3	272	75.1	12.8	270	74.5	11.6	1123

Stress coping scale, subscale1: passive coping (8 items, possible range 8-40)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	14.7	4.1	155	14.7	4.3	149	13.7	4.5	134	12.9	4.3	137	14.0	4.4	575
Female	16.4	4.8	145	15.7	4.9	135	14.2	4.8	138	13.9	4.7	135	15.1	4.9	553
Total	15.5	4.6	300	15.2	4.6	284	13.9	4.6	272	13.4	4.5	272	14.5	4.7	1128

Stress coping scale, subscale2: selective ignoring (5 items, possible range 5-25)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	14.7	3.6	155	15.2	3.5	149	16.6	3.9	134	17.0	4.1	138	15.9	3.9	576
Female	15.5	3.6	144	16.2	3.4	135	17.5	3.8	138	18.6	4.6	135	16.9	4.0	552
Total	15.1	3.6	299	15.7	3.5	284	17.1	3.9	272	17.8	4.4	273	16.4	4.0	1128

Stress coping scale, subscale3: Distancing (3 items, possible range 3-15)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	7.4	2.4	155	7.7	2.4	149	8.8	2.5	134	8.6	2.6	137	8.1	2.5	575
Female	7.6	2.6	145	7.9	2.4	135	8.8	2.5	138	8.9	2.6	134	8.3	2.6	552
Total	7.5	2.5	300	7.8	2.4	284	8.8	2.5	272	8.7	2.6	271	8.2	2.6	1127

Stress coping scale, subscale4: Help-seeking (3 items, possible range 3-15)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	7.6	2.2	155	7.5	2.2	149	7.3	2.2	134	7.1	2.1	138	7.4	2.2	576
Female	8.5	2.1	145	8.3	2.2	135	8.2	2.4	138	7.8	2.5	135	8.2	2.3	553
Total	8.0	2.2	300	7.9	2.2	284	7.8	2.4	272	7.5	2.4	273	7.8	2.3	1129

Stress coping scale, subscale5: avoidance (3 items, possible range 3-15)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	4.9	1.9	155	4.5	1.7	149	4.1	1.7	134	3.7	1.0	138	4.3	1.7	576
Female	3.7	1.1	144	3.6	1.1	135	3.3	0.9	138	3.3	0.8	135	3.5	1.0	552
Total	4.3	1.7	299	4.1	1.5	284	3.7	1.4	272	3.5	0.9	273	3.9	1.4	1128

Stress coping scale, subscale6: positive coping (3 items, possible range 3-15)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	9.0	2.0	155	9.5	2.0	149	10.0	2.2	134	10.1	2.3	138	9.6	2.2	576
Female	9.0	2.1	144	9.7	2.2	135	10.3	2.4	138	10.2	2.6	135	9.8	2.4	552
Total	9.0	2.0	299	9.6	2.1	284	10.2	2.3	272	10.1	2.5	273	9.7	2.3	1128

Stress coping scale, subscale7: suppression (3 items, possible range 3-15)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	8.9	2.0	155	8.8	2.1	149	9.4	2.6	134	9.0	2.6	138	9.0	2.3	576
Female	8.9	2.4	145	9.0	2.3	135	9.5	2.3	138	9.6	2.9	135	9.2	2.5	553
Total	8.9	2.2	300	8.9	2.2	284	9.4	2.4	272	9.3	2.8	273	9.1	2.4	1129

2. Life Events Checklist

This checklist contains 63 events selected from traditional checklists including Social Readjustment Scale (Holmes and Rahe, 1967). Participants are asked to check off or report the events they experienced in the lifetime and recent past (2 year prior to the assessment time). Total number of experienced events is calculated by summing up the responses to the list.

Total number of life events experienced through the Life (possible range 0-63)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	19.4	9.1	155	21.9	9.4	149	21.2	9.6	134	20.4	7.9	137	20.7	9.1	575
Female	16.9	8.0	145	17.5	8.5	135	17.2	7.3	139	16.7	6.5	135	17.1	7.6	554
Total	18.2	8.7	300	19.8	9.2	284	19.2	8.7	273	18.6	7.5	272	18.9	8.6	1129

Total number of life events experienced during the past two years (possible range 0-63)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	5.7	4.3	155	5.8	4.5	149	5.5	4.1	134	3.4	2.8	137	5.1	4.1	575
Female	5.4	3.9	145	5.2	3.7	135	4.0	2.8	139	3.3	2.6	135	4.5	3.4	554
Total	5.5	4.1	300	5.5	4.2	284	4.7	3.6	273	3.3	2.7	272	4.8	3.8	1129

6) ADL Scales

1. Tokyo Metropolitan Institute of Gerontology (TMIG) Index of Competence

This scale comprises thirteen items to measure Instrumental Activities of Daily Living (IADL). Each item has Yes (1)/No (0) response options so that the possible score range is 0-13. Higher score indicates higher level of competence in IADL.

The TMIG index of competence: total score of 13 items (possible range 0-13)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	12.1	1.2	154	12.2	1.1	148	12.1	1.3	134	12.4	1.1	138	12.2	1.2	574
Female	12.6	0.8	145	12.7	0.7	135	12.4	0.9	138	12.2	1.3	135	12.5	1.0	553
Total	12.4	1.1	299	12.4	1.0	283	12.3	1.1	272	12.3	1.2	273	12.3	1.1	1127

2. The Katz Index

This scale generates the index of one's ADL level. The index permits ranking of individuals according to adequacy of performance in six functions (bathing, dressing, going to toilet, transferring, continence, and feeding). Adequacy is expressed as a grade (A to G). Level A means overall independence in the functions, and the opposite pole is level G, which means general dependence in ADL. None of the participants so far were graded as level D to G.

The Katz index

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
level A	Male	154	100.0	149	100.0	134	100.0	136	99.3	573	99.8
	Female	145	100.0	133	99.3	137	98.6	131	97.0	546	98.7
	Total	299	100.0	282	99.6	271	99.3	267	98.2	1119	99.3
level B	Male	0	0	0	0	0	0	1	0.7	1	0.2
	Female	0	0	0	0	2	1.4	4	3.0	6	1.1
	Total	0	0	0	0	2	0.7	5	1.8	7	0.6
level C	Male	0	0	0	0	0	0	0	0	0	0
	Female	0	0	1	0.7	0	0	0	0	1	0.2
	Total	0	0	1	0.4	0	0	0	0	1	0.1

7) Intelligence and Cognitive Function Scales

1. Wechsler Adult Intelligence Scale-Revised Short Forms (WAIS-R-SF)

This short form of WAIS-R provides cost-effective and useful estimates of intelligence particularly for elderly participants since their attention and motivation could diminish easily if testing becomes prolonged. WAIS-R-SF has the following four subtests: information, similarities, picture completion, and digit symbol. Estimated intelligence quotient (EIQ) is derived from all four subtests. Intelligence level of individuals are ranked according to EIQ scores as low ($EIQ < 80$), middle ($80 \leq EIQ < 120$), and high ($120 \leq EIQ$).

WAIS-R-SF: total score of four-subtest full scale (possible range 41-76)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	44.0	7.1	154	44.6	7.9	149	42.2	9.0	133	42.9	8.9	137	43.4	8.3	573
Female	42.7	7.8	145	41.1	8.0	134	37.4	8.2	139	38.2	8.5	134	39.9	8.4	552
Total	43.4	7.5	299	43.0	8.1	283	39.7	8.9	272	40.5	9.0	271	41.7	8.5	1125

WAIS-R-SF: estimated intelligence quotient (EIQ) with four-subtest full scale

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	106.6	13.4	154	107.7	13.1	149	103.7	14.7	133	104.8	14.1	137	105.8	13.9	573
Female	104.9	13.8	145	102.0	13.9	134	95.8	13.0	139	97.1	13.6	134	100.0	14.0	552
Total	105.8	13.6	299	105.0	13.8	283	99.6	14.4	272	101.0	14.3	271	102.9	14.2	1125

WAIS-R-SF: parameter of distribution by EIQ levels

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
low ($EIQ < 80$)	Male	2	1.3	5	3.4	6	4.5	3	2.2	16	2.8
	Female	7	4.8	8	6.0	12	8.6	13	9.7	40	7.2
	Total	9	3.0	13	4.6	18	6.6	16	5.9	56	5.0
middle ($80 \leq EIQ < 120$)	Male	124	80.5	117	78.5	107	80.5	109	79.6	457	79.8
	Female	122	84.1	114	85.1	121	87.1	113	84.3	470	85.1
	Total	246	82.3	231	81.6	228	83.8	222	81.9	927	82.4
high ($120 \leq EIQ$)	Male	28	18.2	27	18.1	20	15.0	25	18.2	100	17.5
	Female	16	11.0	12	9.0	6	4.3	8	6.0	42	7.6
	Total	44	14.7	39	13.8	26	9.6	33	12.2	142	12.6

WAIS-R-SF subtests 1: information (29 items, possible range 0-29)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	17.0	5.3	155	17.1	4.9	149	14.8	5.7	134	13.6	5.3	137	15.7	5.5	575
Female	14.3	5.8	145	13.2	5.5	134	11.2	5.2	139	10.1	4.5	135	12.2	5.5	553
Total	15.7	5.7	300	15.2	5.5	283	13.0	5.7	273	11.8	5.2	272	14.0	5.8	1128

WAIS-R-SF subtests 2: similarities (14 items, possible range 0-28)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	17.1	4.5	155	14.9	5.2	149	12.1	6.0	134	10.9	5.7	137	13.9	5.9	575
Female	16.1	4.6	145	13.6	5.2	134	10.5	5.3	139	9.8	5.4	135	12.5	5.7	553
Total	16.6	4.5	300	14.3	5.2	283	11.3	5.7	273	10.3	5.6	272	13.2	5.8	1128

WAIS-R-SF subtests 3: picture completion (21 items, possible range 0-21)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	13.4	2.5	155	12.3	2.8	149	10.7	3.2	134	10.2	3.5	137	11.7	3.3	575
Female	12.7	2.7	145	10.8	3.7	134	8.8	3.7	139	7.8	4.0	135	10.1	4.0	553
Total	13.1	2.6	300	11.6	3.3	283	9.7	3.6	273	9.0	3.9	272	10.9	3.7	1128

WAIS-R-SF subtests 4: digit symbol (possible range 0-93)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	64.6	10.3	154	55.2	11.7	149	46.3	12.6	133	38.9	10.6	137	51.8	14.9	573
Female	67.6	11.2	145	56.6	11.2	134	42.7	10.9	139	36.1	10.5	134	51.0	16.4	552
Total	66.1	10.9	299	55.9	11.5	283	44.5	11.8	272	37.5	10.6	271	51.4	15.7	1125

2. Mini Mental State Examination (MMSE)

MMSE is a brief, easily-scored test for several cognitive functions. This scale comprises 11 questions concerning orientation in place and time, immediate and delayed recall of three words, attention and calculation, language and praxis, and visual construction. Only participants over 60 years old administer this scale because of the characteristic of the scale as a screening test for dementia. Possible total score ranges from 0 to 30.

MMSE: total score of 30 items (possible range 0-30, less than 60 years old unperformed)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	0	0	0	0	0	0	27.4	2.4	134	27.0	2.4	137	27.2	2.4	271
Female	0	0	0	0	0	0	27.4	2.0	137	26.9	2.5	135	27.2	2.3	272
Total	0	0	0	0	0	0	27.4	2.2	271	26.9	2.5	272	27.2	2.3	543

VIII. Visual and Auditory Examinations

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1) Visual system

1. Refraction

Spherical equivalent of refractive error in right eye (Diopter)

Spherical equivalent of refractive error in left Eye (Diopter)

2. Visual acuity: near vision (33 cm), distant vision (5 m)

Presenting visual acuity - right eye

Presenting visual acuity - left eye

Best-corrected visual acuity - right eye

Best-corrected visual acuity - left eye

Presenting near vision - right eye

Presenting near vision - left eye

3. Kinetic visual acuity

Static visual acuity

Kinetic visual acuity

4. Stereoscopic vision

Stereo acuity - Titmus stereo test

Stereo acuity - TNO stereo test

5. Color perception

Correct answer in blue-yellow discrimination test (%)

Correct answer in red-green discrimination test (%)

6. Contrast sensitivity

Contrast sensitivity 1.5 (cycles/degree)

Contrast sensitivity 3 (cycles/degree)

Contrast sensitivity 6 (cycles/degree)

Contrast sensitivity 12 (cycles/degree)

Contrast sensitivity 18 (cycles/degree)

7. Visual field

Central threshold in visual field in right eye (dB)

Central threshold in visual field in left eye (dB)

Mean sensitivity in visual field in right eye (dB)

Mean Sensitivity in visual field in left eye (dB)

Visual field in right eye

Visual field in left eye

8. Intraocular pressure

Intraocular pressure in right eye (mmHg)

Intraocular pressure in left eye (mmHg)

9. Quantitative test of lens opacity

Anterior subcapsular opacification in right eye (scattering intensity) (cct)

Anterior subcapsular opacification in left eye (scattering intensity) (cct)

Nuclear opacification in right eye (scattering intensity) (cct)

Nuclear opacification in left eye (scattering intensity) (cct)

10. Retinal camera

Cup-disc ratio of optic disc in right eye

Cup-disc ratio of optic disc in left eye

Fundus photography in right eye - diabetic retinopathy

Fundus photography in right eye - arteriosclerosis (Keith-Wagener grading)

Fundus photography in right eye - macular degeneration

Fundus photography in left eye - diabetic retinopathy

Fundus photography in left eye - arteriosclerosis (Keith-Wagener grading)

Fundus photography in left eye - macular degeneration

2) Auditory system

1. Pure-tone audiometry

Air conduction thresholds at 500,1000,2000,4000,8000Hz (dBHL)

Bone conduction thresholds at 500,1000,2000,4000Hz (dBHL)

2. Impedance audiometry

Single frequency tympanometry

Tympanometric peak pressure in the single frequency tympanogram
at 226Hz (daPa)

Static compliance in the single frequency tympanogram at 226Hz (ml)

Multifrequency tympanometry

Middle ear resonance frequency (Hz)

1. Refraction

Autorefracton was obtained with the NIDEK-ARK700A.
 Refractive errors, in spherical equivalent, were assessed.

Spherical equivalent of refractive error of the right eye (Diopter)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	-1.32	1.50	155	-0.99	1.38	149	-0.22	1.12	132	-0.18	1.24	132	-0.71	1.41	568
Female	-1.08	1.42	145	-0.54	1.27	135	-0.07	1.30	139	0.07	1.23	132	-0.42	1.38	551
Total	-1.20	1.46	300	-0.78	1.34	284	-0.14	1.21	271	-0.05	1.24	264	-0.57	1.40	1119

Spherical equivalent of refractive error of the left eye (Diopter)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	-1.26	1.49	155	-0.94	1.38	149	-0.12	0.97	133	-0.13	1.40	132	-0.65	1.42	569
Female	-1.17	1.47	145	-0.59	1.22	134	0.03	1.03	137	0.19	0.99	131	-0.40	1.31	547
Total	-1.22	1.48	300	-0.77	1.32	283	-0.04	1.00	270	0.03	1.22	263	-0.53	1.38	1116

2. Visual acuity: near vision (33 cm), distant vision (5 m)

Distant visual acuity was measured for each eye with a Landolt broken ring at 5m.

Presenting visual acuity was measured with the participant's current distance correction; when distance correction was not used, the unaided distant visual acuity was measured.

Subsequently, best-corrected visual acuity for each eye was determined after objective autorefraction and subjective refinement.

Presenting near vision was measured with the participant's current near correction for each eye with a Landolt broken ring designed for use at 33 cm; when near correction was not used, the unaided near vision was measured.

Presenting visual acuity - right eye

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
less than 0.3	Male	4	2.6	4	2.7	5	3.7	4	2.9	17	3.0
	Female	5	3.4	7	5.2	12	8.6	22	16.3	46	8.3
	Total	9	3.0	11	3.9	17	6.2	26	9.5	63	5.6
0.3-0.6	Male	23	14.8	26	17.4	31	23.1	53	38.4	133	23.1
	Female	21	14.5	26	19.3	46	33.1	36	26.7	129	23.3
	Total	44	14.7	52	18.3	77	28.2	89	32.6	262	23.2
0.7 or more	Male	128	82.6	119	79.9	98	73.1	81	58.7	426	74.0
	Female	119	82.1	102	75.6	81	58.3	77	57.0	379	68.4
	Total	247	82.3	221	77.8	179	65.6	158	57.9	805	71.2

Presenting visual acuity - left eye

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
not recorded	Male	0	0	0	0	0	0	1	0.7	1	0.2
	Female	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	1	0.4	1	0.1
less than 0.3	Male	3	1.9	3	2.0	3	2.2	11	8.0	20	3.5
	Female	11	7.6	7	5.2	3	2.2	18	13.3	39	7.0
	Total	14	4.7	10	3.5	6	2.2	29	10.6	59	5.2
0.3-0.6	Male	20	12.9	20	13.4	24	17.9	52	37.7	116	20.1
	Female	20	13.8	25	18.5	46	33.1	36	26.7	127	22.9
	Total	40	13.3	45	15.8	70	25.6	88	32.2	243	21.5
0.7 or more	Male	132	85.2	126	84.6	107	79.9	74	53.6	439	76.2
	Female	114	78.6	103	76.3	90	64.7	81	60.0	388	70.0
	Total	246	82.0	229	80.6	197	72.2	155	56.8	827	73.2

Best-corrected visual acuity - right eye

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
not recorded	Male	0	0	0	0	0	0	0	0	0	0
	Female	0	0	0	0	0	0	1	0.7	1	0.2
	Total	0	0	0	0	0	0	1	0.4	1	0.1
less than 0.3	Male	0	0	2	1.3	2	1.5	2	1.4	6	1.0
	Female	1	0.7	0	0	2	1.4	8	5.9	11	2.0
	Total	1	0.3	2	0.7	4	1.5	10	3.7	17	1.5
0.3-0.6	Male	2	1.3	4	2.7	17	12.7	30	21.7	53	9.2
	Female	1	0.7	4	3.0	23	16.5	31	23.0	59	10.6
	Total	3	1.0	8	2.8	40	14.7	61	22.3	112	9.9
0.7 or more	Male	153	98.7	143	96.0	115	85.8	106	76.8	517	89.8
	Female	143	98.6	131	97.0	114	82.0	95	70.4	483	87.2
	Total	296	98.7	274	96.5	229	83.9	201	73.6	1000	88.5

Best-corrected visual acuity - left eye

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
not recorded	Male	0	0	0	0	0	0	1	0.7	1	0.2
	Female	0	0	0	0	0	0	1	0.7	1	0.2
	Total	0	0	0	0	0	0	2	0.7	2	0.2
less than 0.3	Male	0	0	0	0	2	1.5	4	2.9	6	1.0
	Female	2	1.4	1	0.7	0	0	6	4.4	9	1.6
	Total	2	0.7	1	0.4	2	0.7	10	3.7	15	1.3
0.3-0.6	Male	1	0.6	5	3.4	12	9.0	33	23.9	51	8.9
	Female	6	4.1	12	8.9	19	13.7	32	23.7	69	12.5
	Total	7	2.3	17	6.0	31	11.4	65	23.8	120	10.6
0.7 or more	Male	154	99.4	144	96.6	120	89.6	100	72.5	518	89.9
	Female	137	94.5	122	90.4	120	86.3	96	71.1	475	85.7
	Total	291	97.0	266	93.7	240	87.9	196	71.8	993	87.9

Presenting near vision - right eye

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
not recorded	Male	1	0.6	1	0.7	0	0	0	0	2	0.3
	Female	0	0	0	0	2	1.4	0	0	2	0.4
	Total	1	0.3	1	0.4	2	0.7	0	0	4	0.4
less than 0.3	Male	6	3.9	17	11.4	17	12.7	23	16.7	63	10.9
	Female	11	7.6	10	7.4	25	18.0	28	20.7	74	13.4
	Total	17	5.7	27	9.5	42	15.4	51	18.7	137	12.1
0.3-0.6	Male	29	18.7	60	40.3	55	41.0	77	55.8	221	38.4
	Female	42	29.0	61	45.2	69	49.6	57	42.2	229	41.3
	Total	71	23.7	121	42.6	124	45.4	134	49.1	450	39.8
0.7 or more	Male	119	76.8	71	47.7	62	46.3	38	27.5	290	50.3
	Female	92	63.4	64	47.4	43	30.9	50	37.0	249	44.9
	Total	211	70.3	135	47.5	105	38.5	88	32.2	539	47.7

Presenting near vision - left eye

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
not recorded	Male	1	0.6	1	0.7	0	0	1	0.7	3	0.5
	Female	0	0	0	0	2	1.4	0	0	2	0.4
	Total	1	0.3	1	0.4	2	0.7	1	0.4	5	0.4
less than 0.3	Male	7	4.5	17	11.4	13	9.7	22	15.9	59	10.2
	Female	12	8.3	11	8.1	18	12.9	22	16.3	63	11.4
	Total	19	6.3	28	9.9	31	11.4	44	16.1	122	10.8
0.3-0.6	Male	27	17.4	48	32.2	52	38.8	64	46.4	191	33.2
	Female	34	23.4	54	40.0	70	50.4	63	46.7	221	39.9
	Total	61	20.3	102	35.9	122	44.7	127	46.5	412	36.5
0.7 or more	Male	120	77.4	83	55.7	69	51.5	51	37.0	323	56.1
	Female	99	68.3	70	51.9	49	35.3	50	37.0	268	48.4
	Total	219	73.0	153	53.9	118	43.2	101	37.0	591	52.3

3. Kinetic Visual Acuity

Binocular kinetic visual acuity and binocular static visual acuity were assessed with KOWA AS-4C.

Kinetic visual acuity was measured five times, then the mean value of the measurements was used for analysis.

Static visual acuity

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
not recorded	Male	1	0.6	0	0	1	0.7	1	0.7	3	0.5
	Female	1	0.7	0	0	2	1.4	1	0.7	4	0.7
	Total	2	0.7	0	0	3	1.1	2	0.7	7	0.6
less than 0.3	Male	0	0	0	0	0	0	3	2.2	3	0.5
	Female	0	0	0	0	1	0.7	6	4.4	7	1.3
	Total	0	0	0	0	1	0.4	9	3.3	10	0.9
0.3-0.6	Male	22	14.2	20	13.4	43	32.1	62	44.9	147	25.5
	Female	13	9.0	20	14.8	40	28.8	68	50.4	141	25.5
	Total	35	11.7	40	14.1	83	30.4	130	47.6	288	25.5
0.7 or more	Male	132	85.2	129	86.6	90	67.2	72	52.2	423	73.4
	Female	131	90.3	115	85.2	96	69.1	60	44.4	402	72.6
	Total	263	87.7	244	85.9	186	68.1	132	48.4	825	73.0

Kinetic visual acuity

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
not recorded	Male	1	0.6	0	0	0	0	0	0	1	0.2
	Female	0	0	0	0	1	0.7	1	0.7	2	0.4
	Total	1	0.3	0	0	1	0.4	1	0.4	3	0.3
less than 0.3	Male	25	16.1	37	24.8	30	22.4	80	58.0	172	29.9
	Female	19	13.1	23	17.0	58	41.7	91	67.4	191	34.5
	Total	44	14.7	60	21.1	88	32.2	171	62.6	363	32.1
0.3-0.6	Male	89	57.4	95	63.8	90	67.2	56	40.6	330	57.3
	Female	89	61.4	83	61.5	72	51.8	39	28.9	283	51.1
	Total	178	59.3	178	62.7	162	59.3	95	34.8	613	54.2
0.7 or more	Male	40	25.8	17	11.4	14	10.4	2	1.4	73	12.7
	Female	37	25.5	29	21.5	8	5.8	4	3.0	78	14.1
	Total	77	25.7	46	16.2	22	8.1	6	2.2	151	13.4

4. Stereoscopic vision

Stereo acuity was assessed with the Titmus stereotest and TNO stereotest.

Stereo acuity - Titmus stereo test

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
not recorded	Male	1	0.6	1	0.7	1	0.7	2	1.4	5	0.9
	Female	1	0.7	1	0.7	3	2.2	2	1.5	7	1.3
	Total	2	0.7	2	0.7	4	1.5	4	1.5	12	1.1
poor (200sec.or less)	Male	6	3.9	8	5.4	16	11.9	32	23.2	62	10.8
	Female	7	4.8	7	5.2	16	11.5	30	22.2	60	10.8
	Total	13	4.3	15	5.3	32	11.7	62	22.7	122	10.8
moderate (80 - 140sec.)	Male	5	3.2	18	12.1	29	21.6	36	26.1	88	15.3
	Female	9	6.2	14	10.4	26	18.7	40	29.6	89	16.1
	Total	14	4.7	32	11.3	55	20.1	76	27.8	177	15.7
good (60sec.or more)	Male	143	92.3	122	81.9	88	65.7	68	49.3	421	73.1
	Female	128	88.3	113	83.7	94	67.6	63	46.7	398	71.8
	Total	271	90.3	235	82.7	182	66.7	131	48.0	819	72.5

Stereo acuity - TNO stereo test

		40-49yr		50-59yr		60-69yr		70-79yr		Total	
		N	%	N	%	N	%	N	%	N	%
not recorded	Male	5	3.2	3	2.0	7	5.2	15	10.9	30	5.2
	Female	10	6.9	6	4.4	9	6.5	4	3.0	29	5.2
	Total	15	5.0	9	3.2	16	5.9	19	7.0	59	5.2
good (120sec.or more)	Male	137	88.4	111	74.5	73	54.5	52	37.7	373	64.8
	Female	111	76.6	113	83.7	80	57.6	66	48.9	370	66.8
	Total	248	82.7	224	78.9	153	56.0	118	43.2	743	65.8
positive (240sec.or less)	Male	7	4.5	27	18.1	32	23.9	42	30.4	108	18.8
	Female	17	11.7	9	6.7	37	26.6	40	29.6	103	18.6
	Total	24	8.0	36	12.7	69	25.3	82	30.0	211	18.7
negative	Male	6	3.9	8	5.4	22	16.4	29	21.0	65	11.3
	Female	7	4.8	7	5.2	13	9.4	25	18.5	52	9.4
	Total	13	4.3	15	5.3	35	12.8	54	19.8	117	10.4

5. Color perception

Red-Green color discrimination acuity and Blue-Yellow color discrimination acuity were assessed with Standard Pseudo-isochromatic Plates (SPP) part 2.

Correct answer of the blue-yellow discrimination test (%)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Male	98.0	4.6	154	95.6	8.7	149	92.0	12.0	132	84.7	20.1	136	92.8	13.4	571
Female	98.2	5.6	145	95.9	8.5	135	93.0	10.8	137	80.8	21.0	134	92.1	14.3	551
Total	98.1	5.1	299	95.7	8.6	284	92.5	11.4	269	82.8	20.6	270	92.5	13.9	1122

Correct answer of the red-green discrimination test (%)

	40-49yr			50-59yr			60-69yr			70-79yr			Total		
	Mean	SD	N	Mean	SD	N									
Male	95.8	16.3	153	95.2	15.4	149	89.6	23.1	132	87.4	23.4	137	92.2	20.0	571
Female	97.8	6.5	144	95.6	12.1	135	95.5	9.4	137	85.3	21.7	133	93.7	14.3	549
Total	96.8	12.6	297	95.4	13.9	284	92.6	17.7	269	86.4	22.6	270	92.9	17.4	1120