

Table 1. Descriptive statistics for Octo-twin

Variable	Year of Assessment				
	Baseline (n = 702) M (SD)	Year 2 (n = 600) M (SD)	Year 4 (n = 433) M (SD)	Year 6 (n = 315) M (SD)	Year 8 (n = 222) M (SD)
Demographic					
Age, years	83.58(3.2)	85.47(3.1)	87.24(2.8)	89.07(2.8)	90.81(2.5)
Education, years	7.14(2.29)	--	--	--	--
Height, cm	161.68	--	--	--	--
Smoking history (%)	39.0	--	--	--	--
Cardiovascular disease (%)	46.3	--	--	--	--
Diabetes (%)	10.3	--	--	--	--
Physical					
Pulmonary: PEF	319.69(108.4)	334.20(107.8)	327.95(98.05)	296.13(98.7)	279.64(98.9)
Muscle: Grip Strength	8.96(9.0)	8.01(2.96)	7.22(3.1)	6.8(2.9)	6.29(2.7)
Gait: Walking Speed					
Cognitive					
MMSE	24.51(7.1)	23.56(8.0)	23.20(8.6)	22.63(8.9)	22.00(8.2)
Digit Span Forward	5.36(1.2)	5.01(1.4)	4.89(1.5)	4.75(1.3)	4.77(1.4)
Digit Span Backward	3.16(1.6)	3.03(1.6)	2.76(1.7)	2.81(1.6)	2.84(1.4)
Prose	8.86(4.5)	8.61(4.7)	8.67(4.7)	8.94(4.9)	8.76(4.6)
Information	26.84(12.0)	27.48(12.0)	27.08(12.6)	26.63(13.0)	25.82(11.6)
Block Design	10.67(7.4)	10.39(7.5)	10.28(7.5)	10.44(7.3)	9.81(7.4)
Synonyms test	16.62(6.0)	16.12(6.3)	16.32(6.2)	16.57(6.3)	16.19(6.1)
Figure Reasoning	15.39(4.2)	15.43(4.3)	15.93(4.0)	15.45(4.5)	15.32(3.9)
Digit Symbol	23.19(11.7)	23.21(11.5)	23.24(12.0)	22.84(12.6)	21.12(11.59)
Objects Recalled	5.86(2.9)	5.34(3.3)	5.27(3.4)	5.46(3.5)	5.68(3.5)
Study Characteristics					
Retention from previous wave (%)	85.5	72.2	72.2	72.7	70.5
Representative sample	yes				
Oldest Birth Cohort (year)					

Table 2. Descriptive statistics for Octo-Twin (Males)

Variable	Year of Assessment				
	Baseline (n = 234) M (SD)	Year 2 (n = 199) M (SD)	Year 4 (n = 143) M (SD)	Year 6 (n = 90) M (SD)	Year 8 (n = 57) M (SD)
Demographic					
Age, years	83.14(2.9)	84.92(2.7)	86.84(2.6)	88.55(2.5)	90.53(2.5)
Education, years	7.47(2.9)	--	--	--	--
Height, cm	171.03(6.5)	--	--	--	--
Smoking history (%)	72.1	--	--	--	--
Cardiovascular disease(%)	51.9	--	--	--	--
Diabetes (%)	11.8	--	--	--	--
Physical					
Pulmonary: PEF	387.80(118.3)	396.08(114.0)	391.45(101.6)	368.17(110.7)	338.24(124.4)
Muscle: Grip Strength	11.02(3.0)	9.85(2.8)	9.08(3.3)	8.74(3.0)	8.20(3.2)
Gait: Walking Speed					
Cognitive					
MMSE	25.39(5.7)	24.53(6.7)	24.05(7.3)	22.82(8.1)	21.68(7.6)
Digit Span Forward	5.56(1.2)	5.18(1.1)	4.98(1.2)	4.82(1.3)	4.83(1.5)
Digit Span Backward	3.16(1.6)	3.06(1.7)	2.77(1.6)	2.68(1.7)	2.84(1.5)
Prose	8.94(4.4)	8.17(4.9)	8.18(4.9)	9.28(5.3)	8.82(4.7)
Information	31.23(9.6)	30.10(11.1)	30.03(11.2)	28.45(12.1)	27.77(11.9)
Block Design	10.94(7.6)	10.53(8.1)	10.30(8.3)	10.31(7.9)	10.78(7.9)
Synonyms test	16.33(6.6)	15.98(6.9)	15.65(6.9)	15.48(7.4)	15.94(6.7)
Figure Reasoning	15.45(4.3)	15.30(4.2)	15.96(4.1)	14.82(4.6)	16.51(3.6)
Digit Symbol	23.89(11.5)	22.68(11.7)	23.42(12.5)	22.28(13.0)	22.0(12.2)
Objects Recalled	5.63(2.6)	5.11(3.0)	4.95(3.2)	5.05(3.4)	5.30(3.5)
Study Characteristics	yes				
Retention from previous wave (%)	100.0	85.0	71.9	62.9	63.3
Representative sample	yes				
Oldest Birth Cohort (year)					

Table 3. Descriptive statistics for Octo-Twin (Females)

Variable	Year of Assessment				
	Baseline (n = 468) M (SD)	Year 2 (n = 401) M (SD)	Year 4 (n = 290) M (SD)	Year 6 (n = 225) M (SD)	Year 8 (n = 165) M (SD)
Demographic					
Age, years	83.80(3.3)	85.73(3.2)	87.44(3.0)	89.28(2.9)	90.91(2.54)
Education, years	6.96(1.9)	--	--	--	--
Height, cm	157.04	--	--	--	--
Smoking history (%)	20.5	--	--	--	--
Cardiovascular disease(%)	39.7	--	--	--	--
Diabetes (%)	9.5	--	--	--	--
Physical					
Pulmonary: PEF	281.82(80.6)	297.64(85.0)	292.71(76.0)	263.13(71.9)	254.71(73.5)
Muscle: Grip Strength	7.89(2.4)	7.08(2.6)	6.25(2.6)	5.98(2.5)	5.64(2.2)
Gait: Walking Speed					
Cognitive					
MMSE	24.07(7.6)	23.07(8.6)	22.78(9.2)	22.55(9.2)	22.12(8.4)
Digit Span Forward	5.26(1.2)	4.92(1.5)	4.85(1.6)	4.72(1.4)	4.75(1.4)
Digit Span Backward	3.16(1.6)	3.02(1.6)	2.76(1.7)	2.86(1.5)	2.84(1.4)
Prose	8.83(4.5)	8.81(4.7)	8.89(4.7)	8.85(4.8)	8.74(4.8)
Information	24.58(12.4)	26.05(12.3)	25.53(13.0)	25.88(13.4)	25.12(11.5)
Block Design	10.53(7.3)	10.31(7.1)	10.28(7.0)	10.50(7.1)	9.49(7.2)
Synonyms test	16.77(5.7)	16.21(6.0)	16.67(5.8)	17.01(5.8)	16.28(5.9)
Figure Reasoning	15.36(4.1)	15.51(4.3)	15.91(3.8)	15.73(4.5)	14.91(3.9)
Digit Symbol	22.83(11.8)	23.51(11.3)	23.14(11.8)	23.07(12.5)	20.79(11.4)
Objects Recalled	5.97(3.0)	5.46(3.4)	5.43(3.5)	5.64(3.6)	5.81(3.5)
Study Characteristics					
Retention from previous wave (%)	100.0	85.7	72.3	77.6	73.3
Representative sample	yes				
Oldest Birth Cohort (year)					

Table 4. Descriptive statistics for Octo-twin (Excluding older adults with dementia)

Variable	Year of Assessment				
	Baseline (n = 477) M (SD)	Year 2 (n = 404) M (SD)	Year 4 (n = 294) M (SD)	Year 6 (n = 223) M (SD)	Year 8 (n = 174) M (SD)
Demographic					
Age, years	83.47(3.2)	85.37(3.1)	87.09(2.8)	88.90(2.8)	90.65(2.4)
Education, years	7.29(2.5)	--	--	--	--
Height, cm	161.94(8.8)	--	--	--	--
Smoking history (%)	40.6	--	--	--	--
Cardiovascular disease(%)	43.6	--	--	--	--
Diabetes (%)	9.4	--	--	--	--
Physical					
Pulmonary: PEF	325.31(106.5)	340.28(107.2)	331.04(96.7)	300.32(96.7)	278.97(97.4)
Muscle: Grip Strength	9.07(2.9)	8.33(2.7)	7.71(2.8)	7.06(2.7)	6.52(2.6)
Gait: Walking Speed					
Cognitive					
MMSE	26.88(3.9)	26.70(4.3)	27.05(4.0)	26.23(5.3)	24.76(5.5)
Digit Span Forward	5.48(1.2)	5.24(1.1)	5.2(1.1)	5.1(1.0)	5.1(1.0)
Digit Span Backward	3.41(1.5)	3.38(1.4)	3.26(1.4)	3.18(1.3)	3.01(1.3)
Prose	9.97(4.0)	10.41(3.6)	10.43(3.7)	10.91(3.4)	10.12(3.5)
Information	29.21(10.5)	30.37(10.1)	30.04(10.8)	29.92(11.2)	27.51(10.5)
Block Design	12.14(7.1)	12.63(6.8)	12.69(6.6)	12.15(6.8)	11.38(6.9)
Synonyms test	17.08(6.0)	17.03(6.2)	16.82(6.2)	17.33(6.1)	16.55(6.2)
Figure Reasoning	15.67(4.2)	15.87(3.9)	16.00(3.9)	16.01(4.0)	15.67(3.8)
Digit Symbol	25.47(10.7)	25.90(10.4)	26.40(10.8)	26.12(10.7)	23.54(10.4)
Objects Recalled	6.79(2.2)	6.77(2.3)	6.80(2.5)	6.89(2.7)	6.71(2.9)
Study Characteristics					
Retention from previous wave (%)	100.0	84.7	72.8	75.9	78.0
Representative sample	yes				
Oldest Birth Cohort (year)					

Table 5. Descriptive statistics for Octo-Twin (Excluding older adults with dementia, Males)

Variable	Year of Assessment				
	Baseline (n = 166) M (SD)	Year 2 (n = 138) M (SD)	Year 4 (n = 100) M (SD)	Year 6 (n = 63) M (SD)	Year 8 (n = 45) M (SD)
Demographic					
Age, years	83.22(3.0)	84.94(2.7)	86.84(2.5)	88.33(2.2)	90.25(2.2)
Education, years	7.64(3.1)	--	--	--	--
Height, cm	170.97	--	--	--	--
Smoking history (%)	72.1	--	--	--	--
Cardiovascular disease(%)	53.3	--	--	--	--
Diabetes (%)	11.8	--	--	--	--
Physical					
Pulmonary: PEF	393.78(115.3)	408.11(113.0)	395.51(99.7)	374.89(104.6)	330.76(122.2)
Muscle: Grip Strength	10.86(3.0)	10.04(10.0)	9.30(9.3)	8.90(8.9)	8.32(8.3)
Gait: Walking Speed					
Cognitive					
MMSE	26.56(4.0)	26.37(4.8)	26.93(4.2)	25.84(6.0)	23.84(5.6)
Digit Span Forward	5.63(1.3)	5.29(1.09)	5.20(1.09)	5.02(1.12)	5.19(1.02)
Digit Span Backward	3.26(1.6)	3.38(1.5)	3.22(1.3)	3.04(1.5)	3.03(1.4)
Prose	9.50(4.3)	10.00(4.1)	9.97(4.2)	11.22(3.9)	9.57(4.1)
Information	32.45(8.8)	32.43(9.3)	32.06(9.9)	32.00(9.8)	28.80(11.3)
Block Design	11.75(7.4)	12.43(7.6)	12.27(7.8)	11.77(7.5)	11.67(7.7)
Synonyms test	16.86(7.0)	16.87(6.9)	16.89(7.1)	16.44(7.2)	16.21(6.9)
Figure Reasoning	15.55(4.4)	15.76(3.8)	15.64(4.2)	15.83(3.8)	16.63(3.7)
Digit Symbol	25.45(11.1)	24.90(11.1)	26.46(11.3)	25.45(11.4)	24.23(11.5)
Objects Recalled	6.23(2.2)	6.26(2.3)	6.23(2.6)	6.20(2.9)	6.22(3.0)
Study Characteristics					
Retention from previous wave (%)	100.0	83.1	72.5	63.0	71.4
Representative sample	yes				
Oldest Birth Cohort (year)					

Table 6. Descriptive statistics for Octo-Twin (Excluding older adults with dementia, Females)

Variable	Year of Assessment				
	Baseline (n = 311) M (SD)	Year 2 (n = 266) M (SD)	Year 4 (n = 194) M (SD)	Year 6 (n = 160) M (SD)	Year 8 (n = 129) M (SD)
Demographic					
Age, years	83.61(3.3)	85.60(3.3)	87.22(2.9)	89.13(2.9)	90.80(2.5)
Education, years	7.10(2.0)	--	--	--	--
Height, cm	157.37(5.7)	--	--	--	--
Smoking history (%)	23.6	--	--	--	--
Cardiovascular disease(%)	44.3	--	--	--	--
Diabetes (%)	8.1	--	--	--	--
Physical					
Pulmonary: PEF	288.93(80.7)	303.46(83.7)	297.05(75.7)	268.74(73.5)	257.34(74.1)
Muscle: Grip Strength	8.13(2.3)	7.45(2.3)	6.87(2.2)	6.35(2.3)	5.91(2.2)
Gait: Walking Speed					
Cognitive					
MMSE	27.05(3.8)	26.88(4.1)	27.12(4.0)	26.38(5.1)	25.08(5.4)
Digit Span Forward	5.40(1.2)	5.22(1.1)	5.27(1.0)	5.08(.9)	5.02(1.0)
Digit Span Backward	3.49(1.4)	3.38(1.3)	3.27(1.4)	3.24(1.2)	3.00(1.3)
Prose	10.23(3.8)	10.60(3.4)	10.63(3.3)	10.82(3.3)	10.28(3.3)
Information	27.54(10.9)	29.25(10.3)	28.95(11.1)	29.11(11.7)	27.04(10.24)
Block Design	12.34(6.9)	12.74(6.3)	12.91(5.9)	12.30(6.4)	11.29(6.6)
Synonyms test	17.20(5.5)	17.11(5.8)	17.16(5.7)	17.67(5.6)	16.66(6.0)
Figure Reasoning	15.74(4.0)	15.93(4.0)	16.20(3.7)	16.09(4.2)	15.35(3.8)
Digit Symbol	25.49(10.6)	26.46(10.1)	26.38(10.5)	26.38(10.4)	23.30(10.1)
Objects Recalled	7.07(2.2)	7.04(2.3)	7.09(2.4)	7.18(2.6)	6.87(2.9)
Study Characteristics					
Retention from previous wave (%)	100.0	85.5	72.9	82.4	80.6
Representative sample	yes				
Oldest Birth Cohort (year)					

