

Table 1. Means and mean difference between chronological age and dental age estimated by the different methods under study

| Sex | CA(SD) | Method | DE(SD) | CA-DA(SD) | CI (95%) | Sig.* | | |
|---------------------|---------------|---------------|---------------|------------------|-----------------|--------------|-------|--|
| Male (n = 243) | 12.16 (3.47) | DEM | 12.13 (2.84) | 0.02 (1.40) | 0.15 | 0.20 | 0.768 | |
| | | CHA | 12.05 (3.08) | 0.10 (1.33) | 0.27 | 1.25 | 0.209 | |
| Female (n = 273) | 12.30 (3.36) | DEM | 11.93 (2.57) | 0.35 (1.50) | 0.17 | 0.53 | 0.000 | |
| | | CHA | 11.73 (2.80) | 0.55 (1.41) | 0.39 | 0.72 | 0.000 | |
| Total (516) | | DEM | 12.02 (2.70) | 0.20 (1.46) | 0.07 | 0.32 | 0.002 | |
| | | CHA | 11.88 (2.94) | 0.34 (1.39) | 0.22 | 0.46 | 0.000 | |

* Related-samples t-test. DEM: Demirjian et al method, CHA: Chaille et al method, CA: chronological age, DA: dental age, SD: standard deviation, CI: confidence interval, Sig: significance ($p < 0.05$).

Table 2. Means and mean difference between chronological age and dental age estimated by the methods of Demirjian et al and Chaillet et al by age group, males

| AG (n) | CA (SD) | Methods | DA (SD) | CA-DA (SD) | CI | | Sig.* |
|---------------|----------------|----------------|----------------|-------------------|-------------|-------------|--------------|
| | | | | | Max. | Min. | |
| 6 (18) | 6.45 (0.29) | DEM | 7.53 (0.74) | -1.08 (0.75) | -1.45 | -0.70 | 0.000 |
| | | CHA | 7.10 (1.03) | -0.65 (1.09) | -1.20 | -0.12 | 0.020 |
| 7 (15) | 7.36 (0.32) | DEM | 8.20 (0.64) | -0.83 (0.64) | -1.19 | -0.48 | 0.000 |
| | | CHA | 7.81 (0.61) | -0.45 (0.64) | -0.80 | -0.09 | 0.017 |
| 8 (21) | 8.56 (0.45) | DEM | 9.40 (1.06) | -0.84 (0.88) | -1.25 | -0.44 | 0.000 |
| | | CHA | 9.29 (1.04) | -0.73 (0.87) | -1.13 | -0.35 | 0.001 |
| 9 (19) | 9.44 (0.37) | DEM | 9.91 (1.34) | -0.46 (1.27) | -1.08 | 0.14 | 0.129 |
| | | CHA | 9.58 (1.27) | -0.13 (1.25) | -0.74 | 0.46 | 0.637 |
| 10(18) | 10.36(0.26) | DEM | 10.83(1.48) | -0.46(1.53) | -1.22 | 0.29 | 0.213 |
| | | CHA | 10.57(1.57) | -0.20(1.64) | -1.02 | 0.61 | 0.604 |
| 11(30) | 11.40(0.29) | DEM | 11.61(0.99) | -0.21(1.04) | -0.59 | 0.17 | 0.278 |
| | | CHA | 11.22(0.95) | 0.18(1.01) | -0.19 | 0.55 | 0.340 |
| 12(26) | 12.46(0.31) | DEM | 12.66(0.93) | -0.20(1.02) | -0.62 | 0.22 | 0.338 |
| | | CHA | 12.47(1.13) | -0.02(1.19) | -0.51 | 0.47 | 0.941 |
| 13(15) | 13.40(0.27) | DEM | 13.63(1.08) | -0.23(1.08) | -0.83 | 0.36 | 0.418 |
| | | CHA | 13.41(1.11) | -0.02(1.09) | -0.62 | 0.58 | 0.947 |
| 14(19) | 14.46(1.13) | DEM | 14.24(1.13) | 0.22(1.22) | -0.36 | 0.81 | 0.441 |
| | | CHA | 14.10(1.17) | 0.35(1.29) | -0.26 | 0.98 | 0.245 |
| 15(17) | 15.38(0.23) | DEM | 15.08(1.44) | 0.29(1.48) | -0.46 | 1.05 | 0.426 |
| | | CHA | 15.39(1.26) | -0.11(1.30) | -0.68 | 0.65 | 0.971 |
| 16(14) | 16.40(0.28) | DEM | 15.32(1.27) | 1.07(1.18) | 0.39 | 1.76 | 0.005 |
| | | CHA | 15.37(1.33) | 1.02(1.27) | 0.29 | 1.75 | 0.010 |
| 17(19) | 17.61(0.24) | DEM | 15.74(0.25) | 1.86(0.30) | 1.72 | 2.01 | 0.000 |
| | | CHA | 16.07(0.11) | 1.53(0.30) | 1.39 | 1.68 | 0.000 |
| 18(11) | 18.31(0.32) | DEM | 15.72(0.30) | 2.59(0.40) | 2.31 | 2.86 | 0.000 |
| | | CHA | 15.88(0.46) | 2.43(0.45) | 2.12 | 2.73 | 0.000 |

* Related-samples t-test. DEM: Demirjian et al method, CHA: Chaille et al method, AG: age group, CA: chronological age, DA: dental age, SD: standard deviation, CI: confidence interval, Max.: maximum, Min.: minimum, Sig: significance ($p < 0.05$).

Table 3. Means and mean difference between chronological age and dental age estimated by the methods of Demirjian et al and Chaillet et al by age group, females

| GE(n) | EC (DE) | Métodos | ED(DE) | EC-ED (DE) | CI | | Sig.* |
|--------|-------------|------------|----------------------------|----------------------------|----------------|----------------|----------------|
| | | | | | Max. | Min. | |
| 6(14) | 6.55(0.31) | DEM CHA | 7.54(1.11) 7.22(1.07) | -0.98(1.27) -0.66(1.26) | -1.72 -1.40 | -0.24 0.06 | 0.013 0.071 |
| 7(17) | 7.49(0.29) | DEM CHA | 8.05(0.70) 7.52(0.66) | -0.56(0.63) -0.02(0.59) | -0.89 -0.33 | -0.23 0.27 | 0.003 0.841 |
| 8(21) | 8.47(0.30) | DEM CHA | 9.46(1.02) 9.00(0.85) | -0.99(0.98) -0.53(0.79) | -1.44 -0.89 | -0.54 -0.16 | 0.000 0.000 |
| 9(20) | 9.30(0.28) | DEM CHA | 9.85(0.90) 9.34(1.12) | -0.55(0.93) -0.24(1.12) | -0.99 -0.77 | -0.11 0.28 | 0.015 0.344 |
| 10(27) | 10.40(0.30) | DEM CHA | 10.75(0.97) 10.18(1.10) | -0.34(1.10) 0.22(1.20) | -0.78 -0.25 | 0.09 0.70 | 0.113 0.344 |
| 11(30) | 11.33(0.24) | DEM CHA | 11.59(0.91) 11.03(1.16) | -0.26(0.91) 0.29(1.20) | -0.60 -0.15 | 0.08 0.76 | 0.131 0.187 |
| 12(23) | 12.45(0.31) | DEM CHA | 11.93(1.08) 11.89(1.08) | 0.43(1.01) 0.55(1.00) | -0.01 0.11 | 0.87 0.98 | 0.051 0.015 |
| 13(29) | 13.47(0.46) | DEM CHA | 12.87(1.40) 12.89(1.41) | 0.60(1.35) 0.58(1.37) | 0.08 0.05 | 1.11 1.10 | 0.024 0.030 |
| 14(24) | 14.41(0.26) | DEM CHA | 13.42(1.45) 13.58(1.52) | 0.99(1.46) 0.82(1.53) | 0.37 0.18 | 1.61 1.47 | 0.003 0.030 |
| 15(21) | 15.40(0.33) | DEM CHA | 14.55(1.28) 14.47(1.51) | 0.85(1.28) 0.93(1.55) | 0.26 0.22 | 1.43 1.63 | 0.003 0.011 |
| 16(15) | 16.53(0.28) | DEM CHA | 15.07(0.87) 15.28(0.92) | 1.46(0.95) 1.25(1.02) | 0.93 0.68 | 1.98 1.81 | 0.007 0.012 |
| 17(13) | 17.58(0.28) | DEM CHA | 15.42(0.14) 15.55(0.10) | 2.16(0.32) 2.02(0.30) | 1.96 1.84 | 2.35 2.20 | 0.000 0.000 |
| 18(15) | 18.61(0.30) | DEM CHA | 15.43(0.12) 15.55(0.10) | 3.18(0.31) 3.06(0.32) | 3.00 2.88 | 3.35 3.24 | 0.000 0.000 |

* Related-samples t-test. DEM: Demirjian et al method, CHA: Chaille et al method, AG: age group, CA: chronological age, DA: dental age, SD: standard deviation, CI: Confidence interval, Max.: maximum, Min.: minimum, Sig: significance ($p < 0.05$).

Table 4. Summary of the chronological age-dental age difference in the various samples in which the methods of Demirjian et al (1976)¹¹ and Chaillet et al¹² were used

| Country | Author | Year | Place | Sample | | | Age range (years) | CA-DA difference | |
|--------------------|--|------|-----------------------------------|--------|------|--------|-------------------|--------------------------|--------------------------|
| | | | | Total | Male | Female | | Male | Female |
| Argentina | Poletto and Giménez ⁶ | 2012 | Cuyo | 374 | - | - | 5-17 | DEM: -0.4^ | DEM: -0.4^ |
| Australia | Flood et al ¹⁴ | 2013 | Adelaide | 408 | 211 | 197 | 4.9-14.5 | DEM: -0.49 | DEM: 0.75^ |
| Brazil | Eid et al ⁴ | 2002 | São Paulo | 689 | 321 | 368 | 6-14 | DEM: -0.68 | DEM: -0.61 |
| Bosnia-Herzegovina | Galic et al ²⁵ | 2013 | Sarajevo | 1772 | 792 | 980 | 6.04-14.90 | CHA: -0.28 | CHA: -0.09 |
| China | Ye et al ²⁰ | 2014 | Shanghai | 940 | 410 | 531 | 7-14 | DEM: -1.68 | DEM: -1.28 |
| Korea | Lee et al ¹³ | 2011 | Seoul | 1483 | 754 | 729 | 3-16 | DEM: -0.002 CHA: 0.37 | DEM: -0.11 CHA: 0.31 |
| Spain | Cruz-Landeira et al ² | 2009 | Galicia | 308 | 151 | 157 | 4-17 | DEM: -0.76 CHA: -0.37 | DEM: -0.88 CHA: -0.21 |
| France | Urzel et al ⁷ | 2013 | Bordeaux, Mont-de-Marsan, Floirac | 743 | 357 | 386 | 4-15 | DEM: -0.46 CHA: 0.18 | DEM: -0.45 CHA: 0.59 |
| Iran | Abesi et al ¹⁸ | 2013 | Babol | 168 | 84 | 84 | 7-15 | DEM: -0.72 | DEM: -0.05 |
| Iran | Bagherian and Sadeghi ⁵ | 2011 | Rafsanjan | 519 | 264 | 255 | 3.5-13.5 | DEM: -0.19 | DEM: -0.15 |
| Paraguay | Funk et al ¹⁰ | 2015 | Asunción | 390 | 172 | 218 | 3-15.9 | DEM: -0.94 | DEM: -0.92 |
| Peru | Peña ⁹ | 2010 | Lima | 321 | 167 | 154 | 5.5-13.5 | DEM: -0.58 | DEM: -0.50 |
| Tunisia | Aissaoui et al ¹⁵ | 2016 | Monastir | 280 | 145 | 135 | 3-16 | DEM: -0.30 | DEM: -0.26 |
| Turkey | Nur et al ¹⁶ | 2012 | Trabzon | 673 | 342 | 331 | 5-15.9 | DEM: -0.86 | DEM: -0.89 |
| Venezuela | Cruz-Landeira et al ² | 2009 | Mérida | 200 | 103 | 97 | 4-17 | DEM: 0.23 CHA: 0.48 | DEM: 0.10 CHA: 0.61 |
| Venezuela | Medina ³ | 2014 | Caracas | 238 | 117 | 121 | 5-13 | DEM*: -0.90 | DEM*: -0.96 |
| Venezuela | Ortega-Pertuz and Martínez ²⁴ | 2015 | Maracaibo | 342 | 170 | 172 | 6-20 | DEM: -0.40 | DEM: 0.48 |
| Venezuela | Tineo et al ²³ | 2006 | Maracaibo | 30 | 16 | 14 | 6-12 | DEM*: -0.99^ | DEM*: -1.02^ |
| Yugoslavia | Arbankova et al ¹⁹ | 2014 | Skopje | 966 | 481 | 485 | 6-13 | DEM: -0.86 | DEM: -0.99 |

CA: chronological age, DA: dental age, DEM: Demirjian et al method, CHA: Chaille et al method, ^ calculation obtained from table in original article, * original version of the Demirjian method (1973)