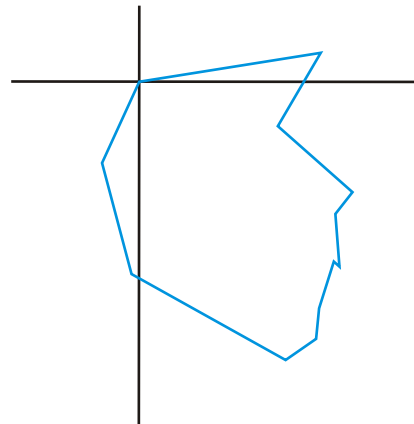
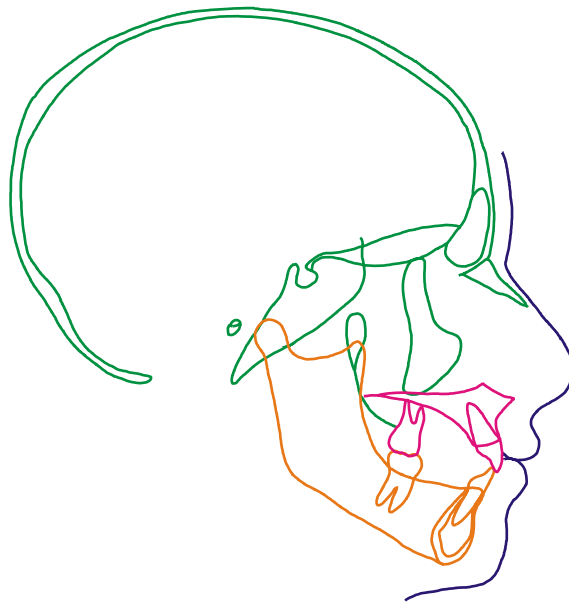


ATLAS DE CRECIMIENTO Y DESARROLLO CRANEOFACIAL DEL GUATEMALTECO NO INDIGENA

ATLAS OF CRANIOFACIAL GROWTH
AND DEVELOPMENT OF GUATEMALAN
NON INDIAN



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Estándares Cefalométricos del Grupo de Estudio de
Crecimiento del Aparato Estomatognático del Guatemalteco.

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Reconocimientos:

Este trabajo de investigación longitudinal, no hubiera sido posible realizarlo sin la cooperación y participación de muchas personas e Instituciones que también durante muchos años y con mucho entusiasmo han colaborado para poder terminarlo y así colaborar con el campo de la estomatología en la comprensión de algunos de los procesos de crecimiento y desarrollo Craneofacial de nuestra población.

Como se comprenderá, la lista es bastante extensa, pero quisiéramos expresar nuestra gratitud a las siguientes personas:

En primer lugar a todos los miembros de la muestra de población estudiada ya que ellos con mucho entusiasmo llegaron durante todos los años que duro el presente estudio longitudinal para que se pudieran tomar los registros pertinentes al mismo, y a sus respectivos padres de familia.

A los profesores del Departamento de Educación Odontológica y del Multicentro de Innovaciones Estomatológicas de la Facultad de Odontología de la Universidad de San Carlos que participaron en la toma de muestras del estudio

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Al Reverendo Gregorio Shaefer de la Parroquia de San Lucas Tolimán, Sololá
Dr. Chester Summners (capacitación de personal en Guatemala)

Al programa de Becas Fullbright para Investigación del Gobierno de los Estados Unidos de América que nos dio la oportunidad de ir a procesar las ciento ochenta y nueve variables cefalométricas, en el Centro de Crecimiento y Desarrollo Humano de la Universidad de Michigan en 1,987.

Al Ministerio de Educación, Ciencia y Cultura (MONBUSHO) del Gobierno de Japón, por medio de su programa de becas para investigación, y que también dio la oportunidad al Dr. José A. Andrino de efectuar la elaboración de diagramas de perfil del complejo craneofacial de la muestra de población guatemalteca no indígena en el Centro de Computo del Primer Departamento de Ortodoncia de la Facultad de Odontología de la Universidad Médica y Dental de Tokio, Japón, en 1,991.

A todo el personal del Centro de Crecimiento y Desarrollo Humano de la Universidad de Michigan, U.S.A.

A todo el personal del Centro de Computo del Primer Departamento de Ortodoncia de la Facultad de Odontología de Universidad Médica y Dental de Tokio, Japón.

José Andrino, dedico este Atlas :

A DIOS: Porque el Atlas tampoco sería posible
sin su intervención.

A MIS HIJOS: JOSE ERNESTO ANDRINO HERNANDEZ
ANA CAROLINA ANDRINO HERNANDEZ

Con cariño y como ejemplo de constancia.

A MI ESPOSA: ANA MARIA HERNANDEZ DE ANDRINO

Con amor y porque juntos lleguemos a la
meta que nos hemos propuesto.

A MIS PADRES: ESTEBAN ANDRINO ROCHE
LAURA CAROLINA ALVAREZ DE ANDRINO
Como un reconocimiento a sus esfuerzos y
sacrificios.

A GUATEMALA.

Al Prof. ROBERT E. MOYERS, D.D.S.; Ph. D.:
Center for Human Growth and Development
University of Michigan, U.S.A.

A su memoria y por su ejemplo
de lo que es ser un verdadero maestro.

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1. INTRODUCCION

En 1974, el Centro de Crecimiento y Desarrollo Humano de la Universidad de Michigan, Estados Unidos de América, publicó el primer Atlas de Crecimiento Craneofacial, de una muestra de población caucásica. (1) Este Atlas se ha empleado desde entonces como referencia en muchas partes del mundo para el estudio, Enseñanza-Aprendizaje y solución de problemas de crecimiento y desarrollo Craneofacial, dentro de ellos los tratamientos de Ortodoncia.

El Departamento de Educación Odontológica de la Facultad de Odontología de la Universidad de San Carlos de Guatemala, para evitar la dependencia y el uso de patrones cefalométricos que no corresponden a la población guatemalteca, A propuesta del Dr. Carlos Enrique Pomés, se realizó un estudio longitudinal de Crecimiento y Desarrollo Craneofacial en una muestra de población no indígena representativa de una comunidad rural de Guatemala.

Antes del inicio de este proyecto, en una Primera Fase se requirió y se recibió asistencia del Centro de Crecimiento y Desarrollo Humano de la Universidad de Michigan por medio del Prof. Robert E. Moyers y también del Dr. Chester Summers, en cuanto a planificación, ejecución y evaluación del Proyecto.

En la Segunda Fase, se obtuvieron dos Becas Fullbright de Investigación otorgadas por el gobierno de los Estados Unidos de América para procesar electrónicamente los datos de los cefalogramas, obteniéndose como resultado las tablas y gráficas de 189 variables cefalométricas de la muestra de estudio de la población.

Posteriormente en la Tercera Fase, como resultado de un proyecto cooperativo entre la Universidad Médica y Dental de Tokio, Japón y la Universidad de San Carlos de Guatemala, y con los recursos y equipos de computación del Primer Departamento de Ortodoncia de la Facultad de Odontología de la Universidad Medica y Dental de Tokio, Japón; y también por medio de una beca de investigación otorgada por el gobierno de Japón, se obtuvieron diagramas de tamaño natural promedio de los componentes craneofaciales estudiados.

2. FORMULACION DEL PROBLEMA

En nuestro medio, el tratamiento Odontológico y de Ortodoncia ofrecido a la población, es en base a medidas cefalométricas determinadas para otros grupos étnicos, y aplicadas a los pacientes de Guatemala. Dichas medidas, lógicamente no pueden ser referencia para el estudio, enseñanza-aprendizaje y solución de problemas de crecimiento y desarrollo craneofacial de la población de Guatemala.

3. PROPOSITO DEL ATLAS

Desde el punto de vista Académico:

Proporcionar material de referencia para el estudio, Enseñanza-Aprendizaje, Servicio y formulación de soluciones para los problemas del Sistema Estomatognático de la población de Guatemala, con datos propios y originales, que evitan la dependencia y el uso de patrones cefalométricos foráneos establecidos para otros grupos étnicos.

Desde el punto de vista Interdisciplinario:

La creación de nuevo conocimiento en Crecimiento Craneofacial del Guatemalteco tiene importancia significativa en otros campos como la Medicina, Antropología Física y Social, y teorías del origen del hombre en el continente Americano.

Desde el punto de vista Internacional:

Esta publicación es importante y significativa ya que con ella se podrán comparar la muestra guatemalteca con muestras extranjeras, para la búsqueda de posibles diferencias o similitudes, tanto en crecimiento como en el desarrollo craneofacial del ser humano.

4. METODO Y MATERIALES

MUESTRA DE LA POBLACION:

La comunidad seleccionada para el presente estudio de investigación longitudinal fue la de San Lucas Tolimán en el Departamento de Sololá. La muestra de población no indígena corresponde a descendientes de los Españoles y con las siguientes características antropológicas(3, 4): Nariz alta y delgada, labios medianos, prognatismo ligero, ojos rectos, pelo castaño (ondulado o rizado), barba y vello en el cuerpo, cabeza larga (dolicocefalia) o redonda (mesocefalia) piel blanca o morena.

La muestra representativa no indígena está compuesta por veintitres individuos, diez del sexo masculino y trece del sexo femenino. El rango de tiempo del estudio fué desde los cinco hasta los catorce años de edad.

Los materiales que se tomaron anualmente, comprenden: Radiografías cefalométricas laterales, modelos de estudio, radiografías de mano, modelos dentales del maxilar superior y del maxilar inferior, fotografías intraorales y faciales, y registros de la ficha clínica para el índice de necesidades del servicio estomatológico del Dr. Chester Summers. Los datos para el presente estudio fueron tomados exclusivamente de las radiografías cefalométricas laterales. Ninguno de los miembros de la muestra de población estudiados estuvo bajo tratamiento de ortodoncia durante el tiempo que duró esta investigación. Todos los registros fueron tomados anualmente y en fechas similares.

TRAZADO DE LOS CEFALOGRAMAS: Cada radiografía lateral cefalométrica, fue trazada siguiendo los lineamientos que se usaron en el Atlas publicado por el Centro de Crecimiento y Desarrollo Humano de la Universidad de Michigan, luego, se sometió a uno de los investigadores a un método de calibración estadística, para luego proceder a digitalizar las variables cefalométricas y almacenarlas electrónicamente en los equipos de computación de la Universidad de Michigan, bajo la supervisión del Ingeniero Richard Miller y del Bioestadista Tom Ten Have.

Luego que las variables cefalométricas se habian generado, se computaron mediciones angulares y lineales. Estas mediciones incluyen distancias, ángulos, distancias perpendiculares, diferencias, sumas, multiplicaciones y adiciones de las distintas variables cefalométricas que se incluyen en el presente estudio.

Para el análisis estadístico de las variables, se utilizó el paquete estadístico que emplean en la Universidad de Michigan (MIDAS) y así se procedió a obtener tablas estadísticas por edad y sexo. Luego se procedió a la elaboración de las gráficas correspondientes a cada tabla de valores para cada una de las 189 variables cefalométricas (las variables 1 a 74 son de tipo

angular y las del 75 a la 188 son lineales en mm.). Las muestras de población masculina y femenina fueron comparadas por medio de la prueba de “t” para evaluar la significancia de la diferencia entre dos medias. El nivel de significancia es de 0.05 y 0.02.

ERROR DEL METODO: La distancia del generador de rayos X al plano sagital medio de la cabeza de la persona ES de 152.25 cm. y la distancia del plano sagital hasta la película radiográfica es de 17.84. Estos factores produjeron un 12.7 % de agrandamiento de todas las mediciones lineales que se presentan en el Atlas.(1)

ELABORACION DE LOS DIAGRAMAS DEL COMPLEJO CRANEOFACIAL: Para la obtención de los diagramas, se utilizaron los datos digitalizados (raw data) en el Centro de Crecimiento y Desarrollo Humano de la Universidad de Michigan y se utilizo el equipo y programas de computación del Primer Departamento de Ortodoncia de la Facultad de Odontología de la Universidad Médica y Dental de Tokio, Japón; y se generaron diagramas del tamaño natural promedio del complejo Craneofacial, perfil del tamaño natural promedio del complejo Craneofacial, y los diagramas del tamaño natural promedio individuales de maxilar superior e inferior. Todos los diagramas están clasificados por edad y sexo respectivamente, y basados en los puntos de referencia cefalométricos del estudio del Dr. Sakamoto (2).

5. UTILIZACION DEL ATLAS

5.1 Cada una de las 189 variables cefalométricas, se presenta con sus componentes de manera similar al Atlas de la Universidad de Michigan (1), con la finalidad de que sus resultados y gráficas se puedan comparar de una manera fácil y rápida. La figura 1 es un ejemplo de una página reducida del Atlas. Cada página contiene algunos componentes que a continuación se describen:

(A) En la esquina superior derecha de cada página está la descripción de cada variable cefalométrica, también se define si es una variable angular o lineal.

(B) En la esquina superior izquierda de cada página, se presenta un diagrama para una mejor comprensión de la variable que se describe en la esquina superior derecha.

(C) En la porción media de cada página, se presentan las tablas estadísticas de cada variable, por edad, sexo y el análisis estadístico incluye el rango de valores mínimo y máximo, la media, desviación estándar, skewness y kurtosis para cada edad.

(D) Una columna de asteriscos puede aparecer entre las tablas, la presencia de un solo asterisco en la línea de una edad en particular indica que la prueba “t” que compara las muestras masculina y femenina es significativa a un nivel de 0.05. La presencia de dos asteriscos indica que dicha prueba es significativa a un nivel de 0.02. Algunas variables no presentan dimorfismo sexual y por lo tanto no aparecen asteriscos.

(E) La gráfica que aparece en la parte inferior de cada variable presentada, representa los valores del grupo masculino y femenino trazados por edad. El trazado del eje vertical ha sido separado para cada variable cefalométrica en intervalos de 0.5, 1,2, o hasta 5 unidades.

5.2 Los diagramas del complejo maxilofacial se clasificaron en grupos de acuerdo a edad y sexo, utilizando los cincuenta y siete puntos cefalométricos del atlas. Tomando como referencia para su presentación el plano 4 (plano de Frankfort) trasladado al punto No. 35 (Sella).

5.3 Los diagramas del maxilar superior se clasificaron en grupos de acuerdo a edad y sexo, utilizando 11 puntos cefalométricos y se presentan tomando como referencia el plano 5 (plano palatal).

5.4 Los diagramas del maxilar inferior se clasificaron en grupos de acuerdo a edad y sexo, utilizando 19 puntos cefalométricos y se presentan tomando como referencia el plano 8 (plano mandibular).

5.5 Los diagramas del perfil cefalométrico se clasificaron en grupos de acuerdo a edad y sexo, utilizando 12 puntos cefalométricos. Tomando como referencia para su presentación el plano 4 (plano de Frankfort) trasladado al punto No. 35 (Sella).

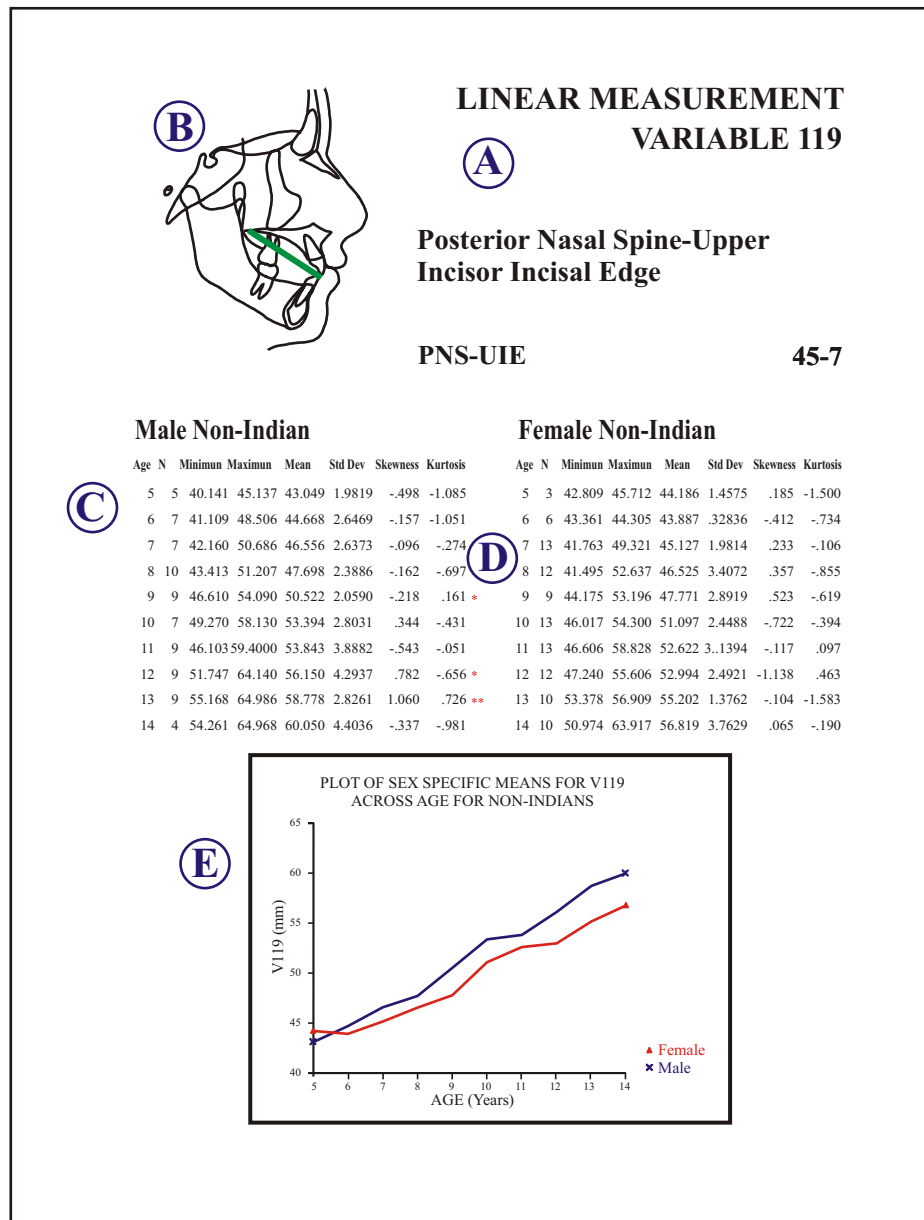
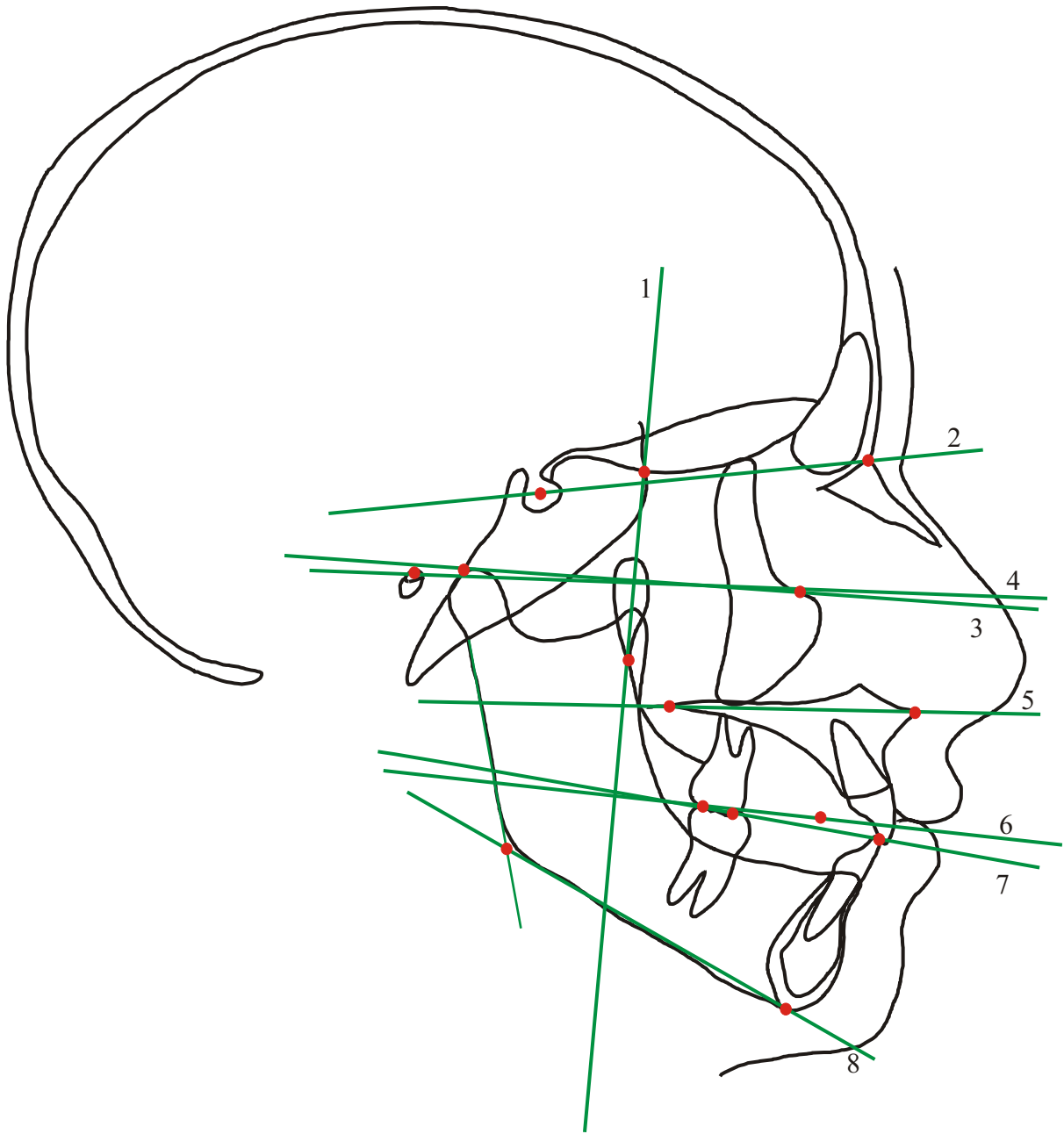


Figura 1. Muestra de una página del atlas

6. PLANOS CEFALOMETRICOS (1)

Los siguientes planos se han utilizado en todo el Atlas:

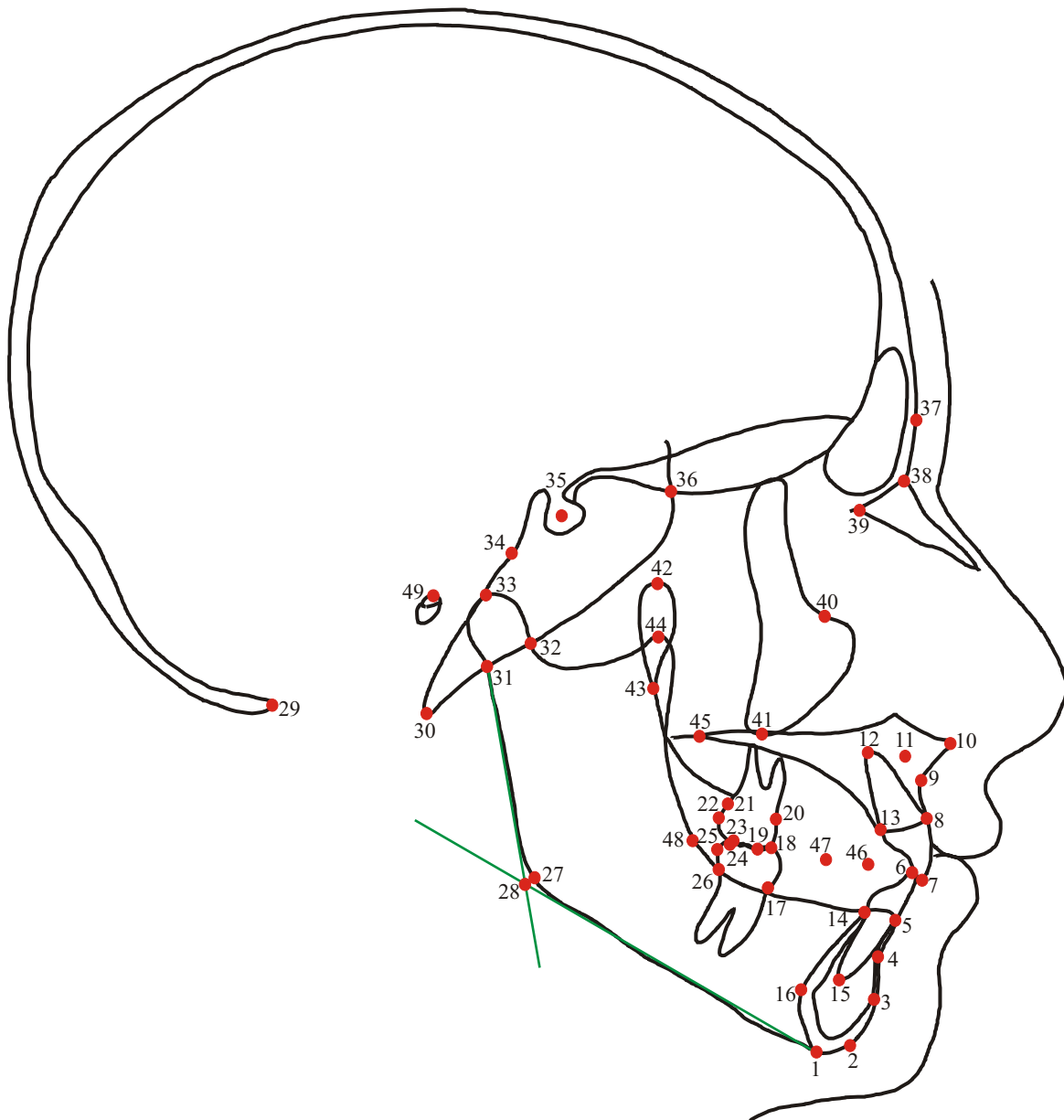
- | | |
|----------------------------|---|
| 1) PM VERTICAL | Fisura pterigomaxilar inferior - Punto de Registro del etmoides.
PTM-SE (43-36). |
| 2) PLANO SILLA-NASION | Silla - Nasion.
S - N (35-38). |
| 3) PLANO CONDILAR | Cóndilo - Orbital.
CO - OR (33-40). |
| 4) PLANO DE FRANKFORT | Porion - Orbital.
PO - OR (49-40). |
| 5) PLANO PALATAL | Espina nasal anterior - Espina nasal Posterior.
ANS - PNS (10-45). |
| 6) PLANO OCLUSAL FUNCIONAL | Punto de contacto mesial premolar - Vértice de la cúspide distal de molar Superior.
PMC - UDT (46-23). |
| 7) PLANO OCLUSAL DE DOWNS | Punto anterior de Downs - Punto posterior de Downs.
ADP - PDP (56-57). |
| 8) PLANO MANDIBULAR | Menton - Intersección gonial.
ME - GOI (1-28). |



**PLANOS CEFALOMÉTRICOS
(1-8)**

7. DEFINICION DE PUNTOS CEFALOMETRICOS DE REFERENCIA (1)

<u>Número</u>	<u>Código</u>	<u>Definición</u>
1	ME	MENTON: El punto más inferior del contorno de la sínfisis.
2	GN	GNATION: El punto más anterior de la Símfisis mandibular. Se determina bisectando el ángulo formado por el plano mandibular y la línea entre Pogonio y Nasion.
3	PG	POGONIO: Punto más anterior de la sínfisis mandibular Determinado por una tangente desde Nasion.
4	B	PUNTO "B": El punto más posterior a una línea desde Infradental a Pogonion en el contorno de la sínfisis de la mandíbula. El punto "B" debe estar entre el tercio apical de las raíces incisales. Cuando no hay concavidad en esta región y no se puede determinar el punto "B" por el método descrito, entonces se selecciona con la ayuda de radiografías anteriores y posteriores, dado que los dientes en erupción pueden en ocasiones ocultar la concavidad anterior de la mandíbula.
5	ID	INFRADENTAL: El punto superior y anterior en el hueso alveolar de la mandíbula en su contacto con el incisivo central mandibular.
6	LIE	BORDE INCISAL DEL INCISIVO INFERIOR: El vértice incisal del incisivo central mandibular.
7	UIE	BORDE INCISAL DEL INCISIVO SUPERIOR: El vértice incisal del incisivo central maxilar.
8	SD	SUPRADENTAL: El punto más anterior e inferior del hueso alveolar del maxilar en su contacto con el incisivo central superior.
9	A	PUNTO "A": El punto más posterior en la concavidad anterior del maxilar superior, desde la línea de la espina nasal anterior y supradental.
10	ANS	ESPINA NASAL ANTERIOR: La cresta del paladar duro en el margen inferior de la apertura nasal anterior.
11	L	PUNTO "L": Representa un punto en la superficie anterior de la imagen de la lámina labial en la región del ápice del incisivo central maxilar. Cuando los incisivos permanentes (antes de la erupción) están posicionados entre el hueso alveolar con sus coronas en la región de la base apical, el punto "L" se toma 1 o 2 milímetros anteriores a la altura de el contorno de la corona del diente y relacionada a una línea trazada desde supradental y paralela con el axis del incisivo central. Cuando los incisivos permanentes ya han erupcionado y sus raíces no están totalmente formadas, el punto "L" se localiza al final de la raíz y axialmente de una línea hasta supradental. Cuando la raíz está completa, se localiza desde la línea axial con el vértice radicular.

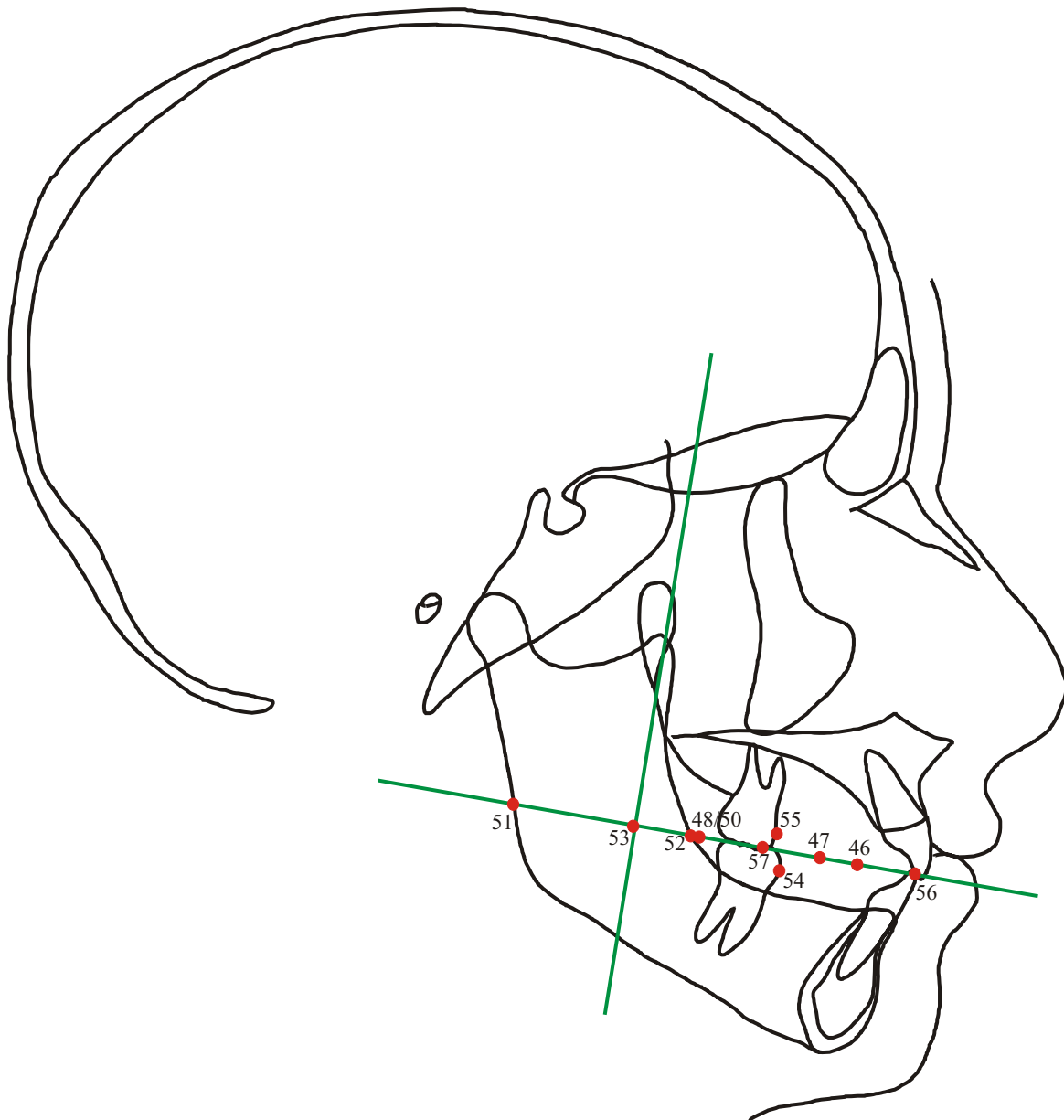


**PUNTOS CEFALOMÉTRICOS DE REFERENCIA
(1-49)**

Número	Código	Definición
12	UIA	APICE DEL INCISIVO SUPERIOR: El vértice de la raíz del incisivo central maxilar. En los casos en que la raíz no está completa, se marca el punto medio en el vértice de la raíz que se esta formando.
13	UIB	PUNTO DE CONTACTO CON EL HUESO LINGUAL DEL INCISIVO SUPERIOR: Punto de contacto del hueso alveolar lingual con el incisivo central maxilar. Este punto generalmente corresponde con la unión cemento-amelida lingual (CEJ).
14	LIB	PUNTO DE CONTACTO CON EL HUESO LINGUAL DEL INCISIVO INFERIOR: Punto de contacto del hueso alveolar lingual con el incisivo central inferior. Este punto generalmente corresponde con la unión cemento-amelida lingual (CEJ).
15	LIA	APICE DEL INCISIVO INFERIOR: El vértice de la raíz del incisivo central mandibular. Cuando la raíz no se ha completado de formar, se marca el punto medio de la raíz en crecimiento.
16	SYMP	PUNTO LINGUAL DE LA SINFISIS: Es un punto construido y utilizado para determinar el ancho de la sínfisis desde Pogonion. El punto SYMP se localiza en la intersección de una línea desde Pogonion y paralela con el plano mandibular con el borde posterior de la sínfisis de la mandíbula.
17	LMJ	UNION CEMENTO-AMELIDA MESIAL DE LA MOLAR INFERIOR: Es la unión cemento-amelida anterior de la primera molar mandibular.
18	LMT	VERTICE DE LA CUSPIDE MESIAL DE LA MOLAR INFERIOR: El vértice de la cúspide anterior de la primera molar mandibular.
19	UMT	VERTICE DE LA CUSPIDE MESIAL DE LA MOLAR SUPERIOR: El vértice de la cúspide anterior de la primera molar maxilar.
20	UMJ	UNION CEMENTO-AMELIDA MESIAL DE LA MOLAR SUPERIOR: Es la unión cemento-amelida anterior de la primera molar maxilar.
21	UDJ	UNION CEMENTO-AMELIDA DISTAL DE LA MOLAR SUPERIOR: Es la unión cemento-amelida posterior de la primera molar maxilar.
22	UDC	PUNTO DE CONTACTO DISTAL DE LA MOLAR SUPERIOR: El contacto posterior (del contorno de la altura) de la primera molar maxilar.
23	UDT	VERTICE DE LA CUSPIDE DISTAL DE LA MOLAR SUPERIOR: El vértice de la cúspide posterior de la primera molar maxilar.

Número	Código	Definición
24	LDT	VERTICE DE LA CUSPIDE DISTAL DE LA MOLAR INFERIOR: El vértice de la cúspide posterior de la primera molar mandibular.
25	LDC	PUNTO DE CONTACTO DISTAL DE MOLAR INFERIOR: El punto de contacto posterior de la primera molar mandibular.
26	LDJ	UNION CEMENTO-AMELIDA DISTAL DE LA MOLAR INFERIOR: Es la unión cemento-amelida posterior de la primera molar mandibular.
27	GO	GONION: Punto medio de el ángulo de la mandíbula. Se encuentra bisectando el ángulo formado por el plano mandibular y el plano hasta Articulare (AR). Este último plano es posterior y a lo largo del borde posterior de la rama mandibular, desde (AR) hasta su intersección con el plano mandibular.
28	GOI	INTERSECCION GONIAL: La intersección del plano mandibular con plano hasta Articulare(AR). Este último plano es posterior y a lo largo del borde posterior de la rama mandibular, desde (AR) hasta su intersección con el plano mandibular.
29	OP	OPISTHION: El punto sagital medio posterior en el margen posterior del foramen magnum.
30	BA	BASION: El punto más posterior e inferior en el margen anterior del foramen magnum.
31	AR	ARTICULARE (Articulare Posterior): El punto de intersección de la superficie inferior de la base craneal y el promedio de las superficies posteriores de los cóndilos mandibulares.
32	AA	ARTICULARE, ANTERIOR: El punto de intersección de la superficie inferior de la base craneal y el promedio de las superficies anteriores de los cóndilos mandibulares.
33	CO	CONDYLION: El punto más superior y posterior en la curvatura promedio de los contornos de las cabezas de los cóndilos mandibulares. Se determina como un punto tangente a una línea perpendicular a los bordes anterior y posterior de la cabeza del cóndilo. Entonces, el punto CO está localizado como el punto axial más superior de la cabeza condilar en lugar de que sea el punto más superior del cóndilo en si.
34	SOS	CENTRO DE LA SINCONDROSIS ESFENO-OCCIPITAL: El punto medio de la unión cartilaginosa del borde anterior de la porción basilar del hueso occipital y la superficie posterior del cuerpo del hueso esfenoides. En los casos en que no se aprecia bien la sincondrosis, se localiza comparando con cefalogramas previos o posteriores.
35	S	SILLA TURCA: El centro de la fosa pituitaria del hueso esfenoides. Se determina por inspección.

Número	Código	Definición
36	SE	PUNTO DE REGISTRO DEL ETMOIDES: La intersección del plano etmoidal con el promedio del ala mayor del esfenoides.
37	GB	GLABELLA: La altura de la curvatura del hueso que cubre el seno frontal. En los casos que no se aprecia bien este punto, se utiliza el perfil del tejido suave que recubre dicha región.
38	N	NASION: La unión de la sutura frontonasal, en el punto más posterior sobre la curva en el puente nasal.
39	FMN	SUTURA NASAL FRONTOMAXILAR: La unión de los huesos nasal maxilar y frontal.
40	OR	ORBITALE: El punto más inferior del promedio de los bordes derecho e izquierdo del hueso de la órbita.
41	IZ	ZIGOMA INFERIOR: El punto más inferior del promedio del contorno derecho e izquierdo del zigoma.
42	PTMS	FISURA PTERIGOMAXILAR, SUPERIOR: El punto más superior del promedio del contorno derecho e izquierdo de la fisura pterigomaxilar.
43	PTM	FISURA PTERIGOMAXILAR, INFERIOR: El punto más inferior del promedio del contorno derecho e izquierdo de la fisura pterigomaxilar.
44	CP	PROCESO CORONOIDES: El punto más superior del promedio del contorno derecho e izquierdo de el proceso coronoides. Determinado como el punto tangente a un trazo perpendicular al plano del borde anterior de la rama mandibular.
45	PNS	ESPINA NASAL POSTERIOR: El punto más posterior en el plano sagital en el paladar duro.
46	PMC	PUNTO DE CONTACTO MESIAL PREMOLAR: Punto establecido por la intersección de una línea a lo largo del contacto oclusal de las premolares superiores e inferiores y una línea perpendicular a ella hasta el promedio del contacto anterior de las primeras premolares maxilares con el canino maxilar.
47	PDC	PUNTO DE CONTACTO DISTAL PREMOLAR: Se localiza a lo largo de la misma línea de oclusión premolar como en el punto 46 (PMC) pero en el punto de una línea perpendicular entre el contacto distal de la primera premolar superior. La distancia de PMC a PCD deber ser igual al promedio del diámetro mesio-distal de la primera premolar superior.



**PUNTOS CEFALOMÉTRICOS DE REFERENCIA
(46-57)**

Número	Código	Definición
48	TP	PUNTO TRICHOTOMUS: Este punto tiene tres métodos de interpretaciones para su determinación: a) Cuando las primeras molares permanentes están ausentes (fuera de oclusión) y las segundas molares primarias son las que se han trazado, el punto 48 se selecciona en la línea formada por los puntos 46 y 47 y en la región del borde anterior de la rama mandibular. Su presencia en caso es para indicar que dientes primarios en lugar de dientes permanentes han sido trazados; b) Cuando las primeras molares permanentes han erupcionado y se han trazado, el punto 48(TP) no se marca, excepto por lo que sigue; c) Cuando las segundas molares permanentes han erupcionado y en completa oclusión, el punto 48 se marca en el punto de contacto distal de las mismas.
49	PO	PORION: El punto medio de la línea que conecta el punto más superior de la radiopacidad generada por cada uno de los rodos auriculares del cefalómetro.
50	FPP	PUNTO DEL PLANO OCLUSAL FUNCIONAL: Este punto es determinado lógicamente y por lo tanto no es una referencia trazada. Se usa para definir la localización posterior del plano de oclusión funcional, y consecuentemente su valor está relacionado con la presencia o ausencia del punto 48 (TP). a) Si el punto 48 está presente y la persona tiene menos de 9 años de edad, el punto 50 (FPP) asume el mismo que el punto 48. b) En todos los demás casos, el punto 50 (FPP) toma el valor de el punto 23 (UDT).
51	PB	BORDE POSTERIOR DE LA RAMA: Se define como la intersección de el plano oclusal funcional con el borde posterior de la rama mandibular.
52	AB	BORDE ANTERIOR DE LA RAMA: Se define como la intersección de el plano oclusal funcional con el borde anterior de la rama mandibular.
53	LT	TUBEROSIDAD LINGUAL: Se deriva por la extensión de la distancia entre los puntos 51 y 52 y anterior sobre el plano oclusal funcional desde la intersección de este último y la línea vertical RA (RAMUS en el análisis del Dr. Enlow).
54	LMC	CONTACTO MESIAL DE LA MOLAR INFERIOR: El contacto mesial (del contorno de la altura coronal) de la primera molar mandibular y es relacionado con el FOP (plano oclusal funcional).
55	UMC	CONTACTO MESIAL DE LA MOLAR SUPERIOR: El contacto mesial (del contorno de la altura coronal) de la primera molar maxilar y es relacionado con el FOP (plano oclusal funcional).
56	ADP	PUNTO DOWNS ANTERIOR: El punto medio en la línea que conecta los puntos de referencia 6 y 7 (LIE y UIE). Este representa el punto anterior por donde pasa el Plano Oclusal de Downs.

Número	Código	Definición
57	PDP	PUNTO DOWNS POSTERIOR: El punto medio en la línea que conecta los puntos de referencia 18 y 19 (LMT y UMT). Este representa el punto posterior por donde pasa el Plano Oclusal de Downs.

5. UTILIZATION OF ATLAS (1)

5.1- Figure 1 is a reduced example or a typical text page. Each such page contains several components which are described below with reference to the figure.

A) An identification block appears in the upper right corner. It contains the complete designation of the measurement (e.g., Posterior Nasal Spine- Upper Incisor Incisal Edge), its abbreviation (PNS-UIE), and the landmark numbers involved in its computation. In addition, it contains a designation of the type of measurement (i.e., linear or angular) and the variable number (i.e. 119 in the figure). This number is useful in locating other tabled references to this variable.

B) A drawing in the upper left corner illustrates diagrammatically where the measurement is made. For linear measurements, a green line designates the measurement; for angular measurements, lines are drawn to show the construction of the angle.

C) Tabulated data is given for each sex. The quantities tabulated are the age of measurement (i.e. 5 to 14 years), the sample size at each age, the minimum and maximum values (the range), the estimated mean value at each age, the estimated standard deviation, the estimated skewness and the estimated kurtosis.

D) A column of asterisks (* or **) may appear between the male and female tabulations. The presence of a single asterisk on the line for a particular age indicates that the 2 sample t-test comparing the male and female samples was significant at the 0.05 level of significance. Two asterisks indicate that it was significant at the 0.02 level of significance. Some measurements show no sexual dimorphism so consequently no asterisks appear (1).

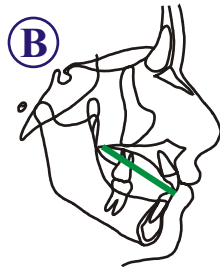
E) The graph at the bottom of the page shows the male and female mean values plotted against age. The plot characters for each sex are different. The scale on the vertical axis has been chosen separately for each variable with increments of 0.5, 1.2 or 5 units.

5.2- The maxilofacial complex diagrams were classified into groups according to age and sex. Using the 57 cephalometric landmarks. And they are presented utilizing as reference the cephalometric plane No.4 (Frankfort plane) and translated to the landmark number 35 (Sella).

5.3- The maxillary diagrams were classified into groups according to age and sex. Using 11 cephalometric landmarks and presented utilizing as reference the cephalometric plane number 5 (palatal plane).

5.4- The mandibular diagrams were classified into groups according to age and sex. Using 19 cephalometric landmarks and presented utilizing as reference the cephalometric plane number 8 (mandibular plane).

5.5- The profilograms were classified into groups according to age and sex. Using the 12 cephalometric landmarks. And they are presented utilizing as reference the cephalometric plane No.4 (Frankfort plane) and translated to the landmark number 35 (Sella).



**LINEAR MEASUREMENT
VARIABLE 119**



**Posterior Nasal Spine-Upper
Incisor Incisal Edge**

PNS-UIE

45-7

Male Non-Indian

Female Non-Indian



Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	40.141	45.137	43.049	1.9819	-.498	-1.085
6	7	41.109	48.506	44.668	2.6469	-.157	-1.051
7	7	42.160	50.686	46.556	2.6373	-.096	-.274
8	10	43.413	51.207	47.698	2.3886	-.162	-.697
9	9	46.610	54.090	50.522	2.0590	-.218	.161 *
10	7	49.270	58.130	53.394	2.8031	.344	-.431
11	9	46.103	59.400	53.843	3.8882	-.543	-.051
12	9	51.747	64.140	56.150	4.2937	.782	-.656 *
13	9	55.168	64.986	58.778	2.8261	1.060	.726 **
14	4	54.261	64.968	60.050	4.4036	-.337	-.981



Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	42.809	45.712	44.186	1.4575	.185	-1.500
6	6	43.361	44.305	43.887	.32836	-.412	-.734
7	13	41.763	49.321	45.127	1.9814	.233	-.106
8	12	41.495	52.637	46.525	3.4072	.357	-.855
9	9	44.175	53.196	47.771	2.8919	.523	-.619
10	13	46.017	54.300	51.097	2.4488	-.722	-.394
11	13	46.606	58.828	52.622	3.1394	-.117	.097
12	12	47.240	55.606	52.994	2.4921	-1.138	.463
13	10	53.378	56.909	55.202	1.3762	-.104	-1.583
14	10	50.974	63.917	56.819	3.7629	.065	-.190

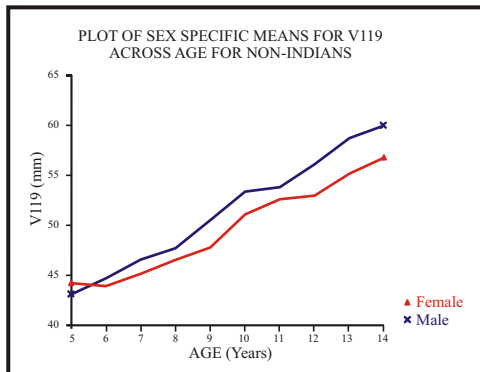
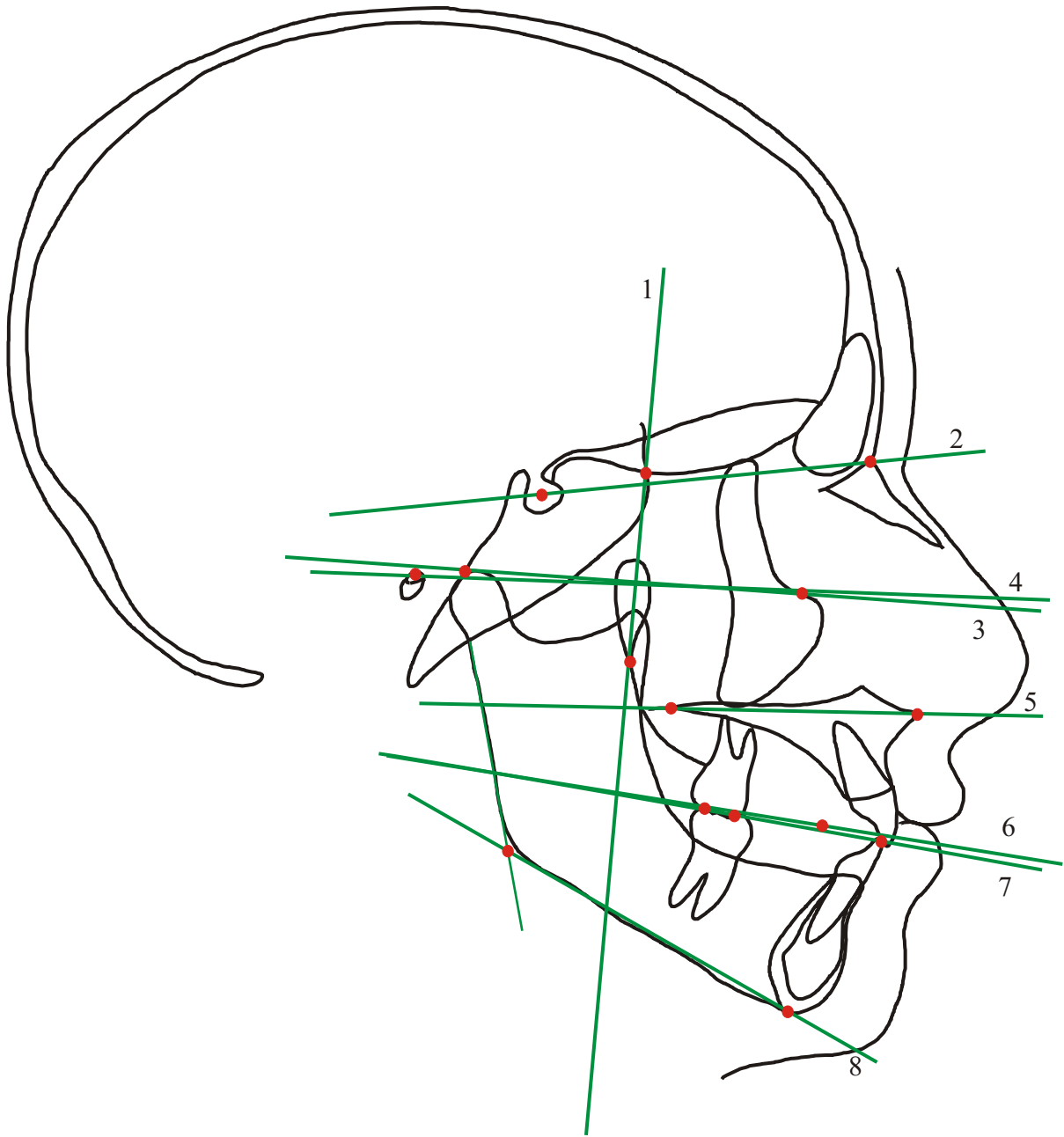


Figure 1. Sample page of Atlas.

6. CEPHALOMETRIC PLANES (1)

The following planes have been utilized throughout this atlas:

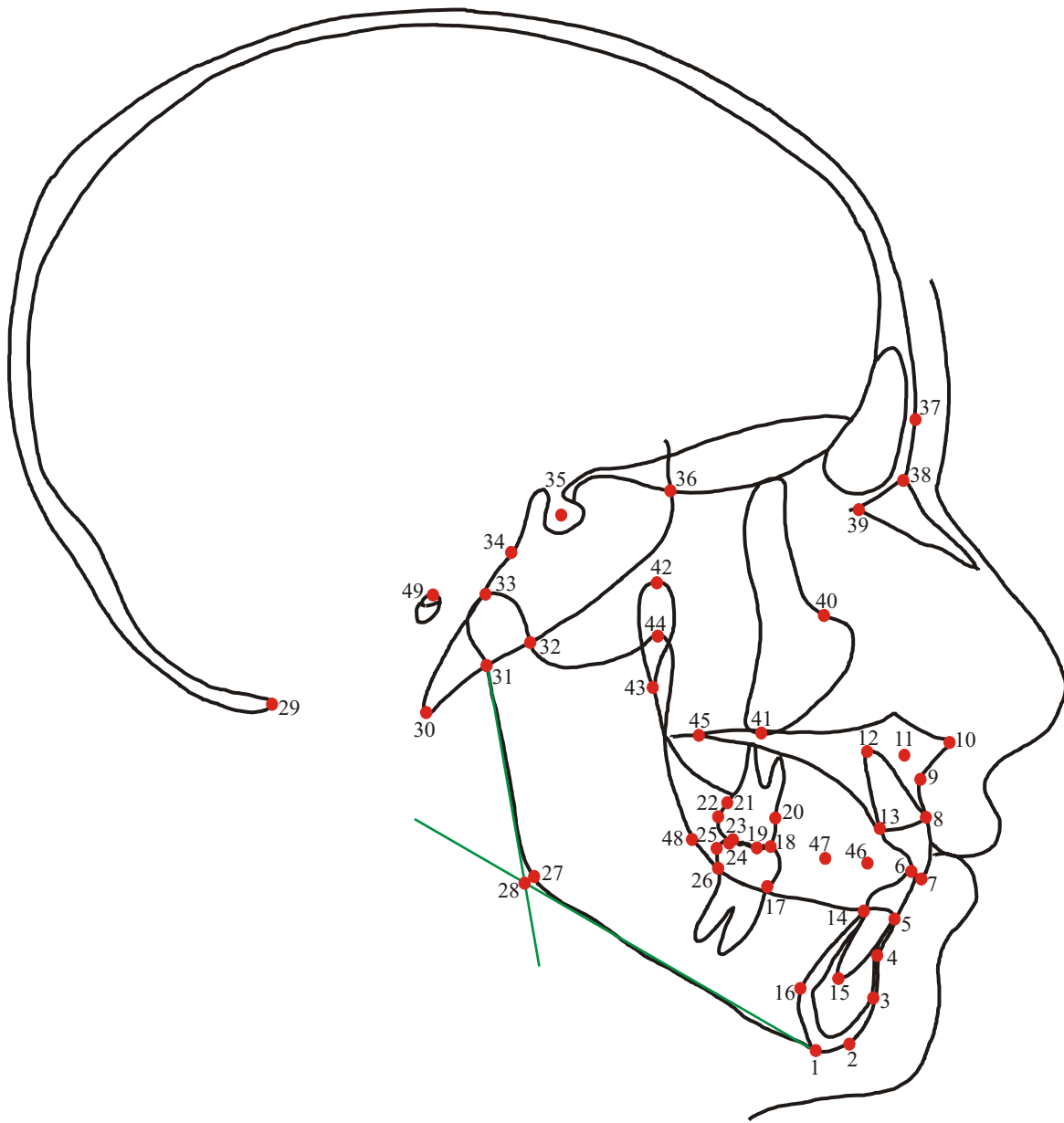
- | | |
|------------------------------|--|
| 1) PM VERTICAL | Pterygo-Maxillary Fissure, Inferior-Ethmoid Registration Point.
PTM-SE (43-36). |
| 2) SELLA-NASION PLANE | Sella-Nasion
S-N (35-38). |
| 3) CONDYLAR PLANE | Condylion-Orbitale
CO-OR (33-40). |
| 4) FRANKFORT PLANE | Porion-Orbitale
PO-OR (49-40). |
| 5) PALATAL PLANE | Anterior Nasal Spine-Posterior Nasal Spine
ANS-PNS (10-45). |
| 6) FUNCTIONAL OCCLUSAL PLANE | Premolar Mesial Contact Point- Upper Molar Distal Cusp Tip.
PMC-UDT (46-23). |
| 7) DOWNS OCCLUSAL PLANE | Anterior Downs Point-Posterior Downs Point
ADP-PDP (56-57). |
| 8) MANDIBULAR PLANE | Menton-Gonial Intersection
ME-GOI (1-28). |



**CEPHALOMETRIC PLANES
(1-8)**

7. LANDMARK DEFINITIONS (1)

<u>Number</u>	<u>Code</u>	<u>Definition</u>
1	ME	MENTON: The most inferior point on the symphyseal outline.
2	GN	GNATHION: The most anterior - inferior point on the contour of the bony chin symphysis. Determined by bisecting the angle formed by the mandibular plane and a line through Pogonion and Nasion.
3	PG	POGONION: The most anterior point on the contour of the bony chin. Determined by a tangent through Nasion.
4	B	B- POINT: The point most posterior to a line from Infradentale to Pogonion on the anterior surface of the symphyseal outline of the mandible. B-Point should be within the apical third of the incisor roots. When there is no curvature in this region and determination of B Point is not possible by the above method, it is chosen with the aid of preceding or succeeding films because erupting teeth obscure mandibular concavity on occasion.
5	ID	INFRADENTALE: The anterior superior point on the mandible at its labial contact with the mandibular central incisor.
6	LIE	LOWER INCISOR INCISAL EDGE: The incisal tip of the mandibular central incisor.
7	UIE	UPPER INCISOR INCISAL EDGE: The incisal tip of the maxillary central incisor.
8	SD	SUPRADENTALE: The most anterior inferior point on the maxilla at its labial contact with the maxillary central incisor.
9	A	A POINT: The most posterior point on the curve of the maxilla between the anterior nasal spine and supradentale.
10	ANS	ANTERIOR NASAL SPINE: The tip of the median, sharp bony process of the maxilla at the lower margin of the anterior nasal opening.



**CEPHALOMETRIC LANDMARKS
(1-49)**

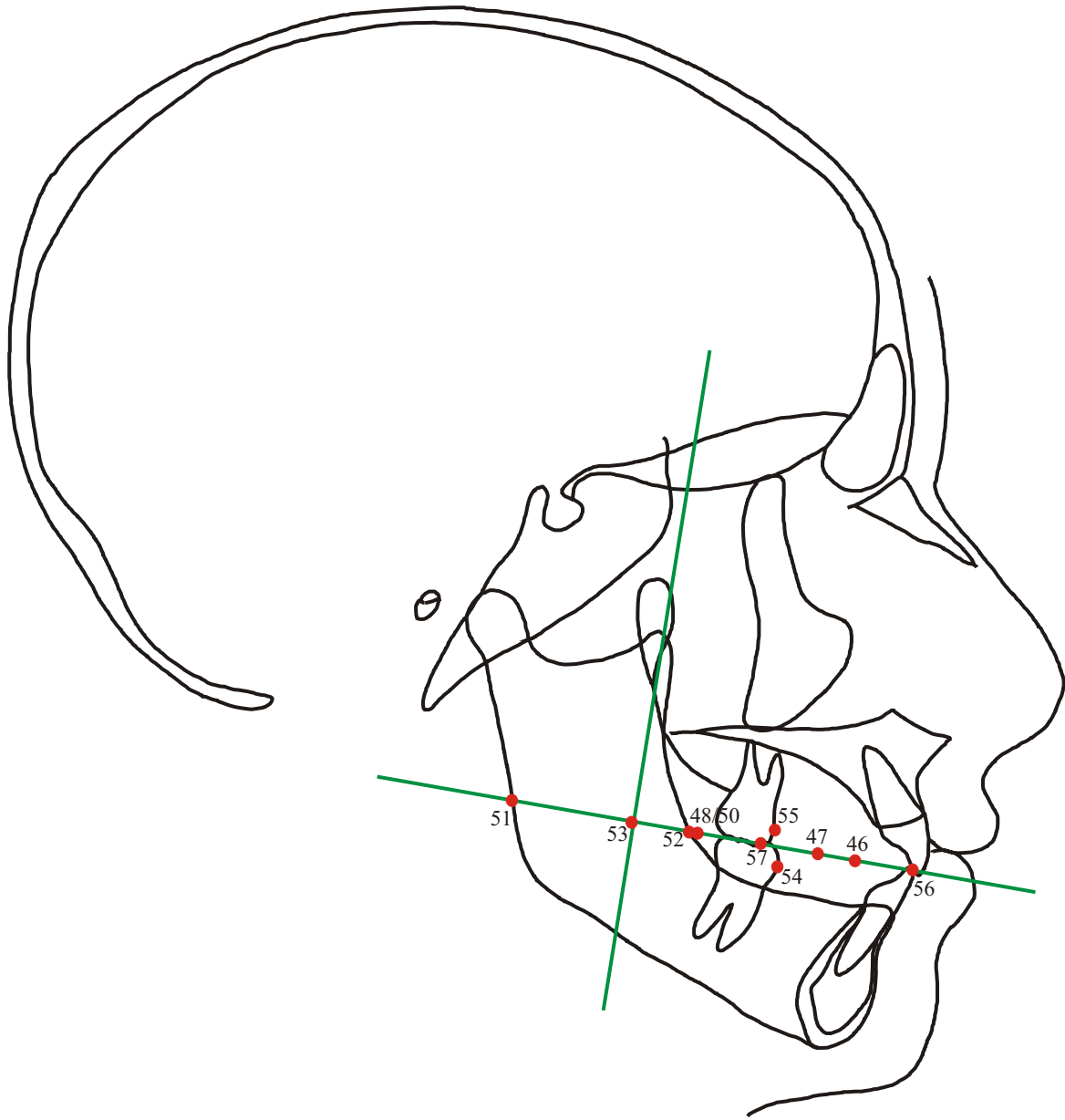
Number	Code	Definition
11	L	L POINT: Represents a point on the anterior surface on the image of the labial lamella at the apex region of the maxillary central incisor. When the permanent incisors (before eruption) are positioned within bone with their crown in the apical base region, L Point is taken 1-2 millimeters anterior to the height of contour of the crown relative to and on a line drawn through supradentale and parallel to the axis of the central incisor. When the permanent incisors are erupted and their roots are not fully formed, L Point is located at the root end along an axially placed line through supradentale. When the root is completed, L Point is located along the same axial line at the root tip. The procedure for locating L Point is well illustrated by Vander Linden, Amer. J. Orthodont., 59: 111-125,1971.
12	UIA	UPPER INCISOR APEX: The root tip of the maxillary central incisor. In cases where the root is not yet completed, the midpoint of the growing root tip is marked.
13	UIB	UPPER INCISOR LINGUAL BONY CONTACT POINT: The lingual contact of alveolar bone with the maxillary central incisor. This point generally corresponds with the lingual cemento enamel junction (CEJ).
14	LIB	LOWER INCISOR LINGUAL BONY CONTACT POINT: The lingual contact of alveolar bone with the mandibular central incisor. Generally corresponds with the lingual CEJ.
15	LIA	LOWER INCISOR APEX: The root tip of the mandibular central incisor. When the root is not yet completed, the midpoint of the growing root tip is marked.
16	SYMP	LINGUAL SYMPHYSEAL POINT: A constructed point used to determine symphyseal width at Pogonion. The SYMP Point is located at the intersection of a construction line through Pogonion and parallel with the mandibular plane with the posterior border of the mandibular symphysis.
17	LMJ	LOWER MOLAR MESIAL CEJ: The anterior cemento-enamel junction of the mandibular first molar.
18	LMT	LOWER MOLAR MESIAL CUSP TIP: The anterior cusp tip of the mandibular first molar.
19	UMT	UPPER MOLAR MESIAL CUSP TIP: The anterior cusp tip of the maxillary first molar.
20	UMJ	UPPER MOLAR MESIAL CEJ: The anterior cemento-enamel junction of the maxillary first molar.

Number	Code	Definition
21	UDJ	UPPER MOLAR DISTAL CEJ: The posterior cemento-enamel junction of the maxillary first molar.
22	UDC	UPPER MOLAR DISTAL CONTACT POINT: The posterior contact (height of contour) of the maxillary first molar.
23	UDT	UPPER MOLAR DISTAL CUSP TIP: The posterior cusp tip of the maxillary first molar.
24	LDT	LOWER MOLAR DISTAL CUSP TIP: The posterior cusp tip of the mandibular first molar.
25	LDC	LOWER MOLAR DISTAL CONTACT POINT: The posterior contact point of the mandibular first molar.
26	LDJ	LOWER MOLAR DISTAL CEJ: The posterior cemento-enamel junction of the mandibular first molar.
27	GO	GONION: The midpoint of the angle of the mandible. Found by bisecting the angle formed by the mandibular plane and a plane through Articulare, Posterior and along the portion of the mandibular ramus inferior to it.
28	GOI	GONIAL INTERSECTION: The intersection of the mandibular plane with a plane through Articulare, Posterior and along the portion of the mandibular ramus inferior to it.
29	OP	OPISTHION: The posterior midsagittal point on the posterior margin of foramen magnum.
30	BA	BASION: The most inferior, posterior point on the anterior margin of foramen magnum.
31	AR	ARTICULARE (Articulare Posterior): The point of intersection of the inferior cranial base surface and the averaged posterior surfaces of the mandibular condyles.
32	AA	ARTICULARE, ANTERIOR: The point of intersection of the inferior surface of the cranial base and the averaged anterior surfaces of the mandibular condyles.

Number	Code	Definition
33	CO	CONDYLION: The most posterior superior point on the curvature of the average of the right and left outlines of the condylar head. Determined as the point of tangency to a perpendicular construction line to the anterior and posterior borders of the condylar head. The CO point is, therefore, located as the most superior axial point of the condylar head rather than as the most superior point on the condyle.
34	SOS	CENTER OF THE SPHENO-OCCIPITAL SYNCHONDROSIS : The midpoint of the cartilaginous union of the anterior end of the basilar portion of the occipital bone and the posterior surface of the body of the sphenoid bone. In cases where the synchondrosis is not readily apparent, it is located by comparison with either previous or subsequent cephalograms.
35	S	SELLA TURCICA: The center of the pituitary fossa of the sphenoid bone. Determined by inspection.
36	SE	ETHMOID REGISTRATION POINT: Intersection of the sphenoidal plane with the averaged greater sphenoid wing.
37	GB	GLABELLA: The height of curvature of the bone overlying the frontal sinus. In cases where this point is not readily apparent, the overlying soft tissue is used to locate it.
38	N	NASION: The junction of the frontonasal suture at the most posterior point on the curve at the bridge of the nose.
39	FMN	FRONTOMAXILLARY NASAL SUTURE: The junction of the frontal, maxillary and nasal bones.
40	OR	ORBITALE: The lowest point on the average of the right and left borders of the bony orbit.
41	IZ	INFERIOR ZIGOMA: The lowest point on the average of the right and left outlines of the zygoma.
42	PTMS	PTERYGO - MAXILLARY FISSURE, SUPERIOR: The most superior point on the average of the right and left outlines of the pterygo-maxillary fissure.
43	PTM	PTERYGO - MAXILLARY FISSURE, INFERIOR: The most inferior point on the average of the right and left outlines of the pterygo-maxillary fissure.

Number	Code	Definition
44	CP	CORONOID PROCESS: The most superior point on the average of the right and left outlines of the coronoid process. Determined as the point of tangency to a perpendicular drawn to the plane of the anterior border of the ramus.
45	PNS	POSTERIOR NASAL SPINE: The most posterior point at the sagittal plane on the bony hard palate.
46	PMC	PREMOLAR MESIAL CONTACT POINT : A point established by the intersection of a line along the occlusal contact of the upper and lower premolars and a perpendicular line to it through the averaged anterior contact of the first maxillary premolars with the maxillary cuspid.
47	PDC	PREMOLAR DISTAL CONTACT POINT: Established along the same premolar occlusion line as point 46 but at the point of a perpendicular line through the distal contact of the maxillary first premolar. The distance from PMC to PCD should be equal to the averaged mesial-distal distance of the first maxillary premolar.
48	TP	TRICHOTOMOUS POINT: This point has three determinative methods and interpretations: (a) when the permanent first molars are absent (not in occlusion) and the deciduous second molars are traced, point 48 is chosen along a line through points 46 and 47 and in the region of the anterior border of the mandibular ramus. Its presence in this case is to indicate that deciduous, rather than permanent teeth were traced; (b) when the first permanent molars are erupted and traced, point 48 is not marked except as below; (c) when the second permanent molars are erupted and in full occlusion, point 48 is marked at their distal contact points.
49	PO	PORION: The midpoint of the line connecting the most superior point of the radiopacity generated by each of the two ear rods of the cephalostat.
50	FPP	FUNCTIONAL OCCLUSAL PLANE POINT: This point is logically determined and is therefore not a traced landmark. It is used to define the posterior location of the functional occlusal plane and consequently its value is related to the presence (or absence) of landmark 48. (a) If landmark 48 is present and the individual is less than 9 years of age, landmark 50 takes on the same value as landmark 48. (b) In all other cases, landmark 50 takes on the value of landmark 23.
51	PB	POSTERIOR BORDER OF THE RAMUS: This is defined as the intersection of the FOP with the posterior border of the mandibular ramus.

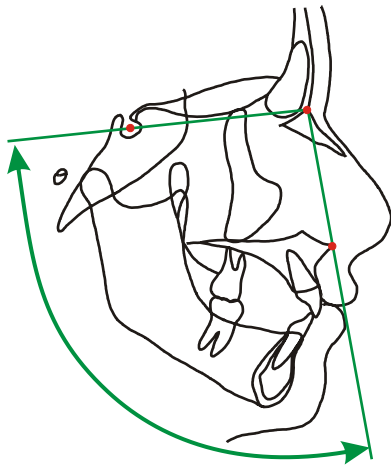
Number	Code	Definition
52	AB	ANTERIOR BORDER OF THE RAMUS: This is defined as the intersection of the FOP with the anterior border of the ramus.
53	LT	LINGUAL TUBEROSITY: The Lingual Tuberosity is derived by extending the distance between landmarks 51 and 52 anteriorly along the FOP from the intersection of the FOP and the RA Vertical Line.
54	LMC	LOWER MOLAR MESIAL CONTACT: The mesial contact (height of contour) of the mandibular first molar relative to the FOP.
55	UMC	UPPER MOLAR MESIAL CONTACT: The mesial contact (height of contour) of the maxillary first molar relative to the FOP.
56	ADP	ANTERIOR DOWNS POINT: The midpoint of the line connecting landmarks 6 and 7 (LIE and UIE). This represents the anterior point through which Downs Occlusal Plane passes.
57	PDP	POSTERIOR DOWNS POINT: The midpoint of the line connecting landmarks 18 and 19 (LMT and UMT). This represents the posterior point through which Downs Occlusal Plane passes.



**CEPHALOMETRIC LANDMARKS
(46-57)**



8. MEDIDAS ANGULARES
ANGULAR MEASUREMENTS
(Variables 1-74)



ANGULAR MEASUREMENT VARIABLE 1

Sella-Nasion-Anterior Nasal Spine

ANS-N-S

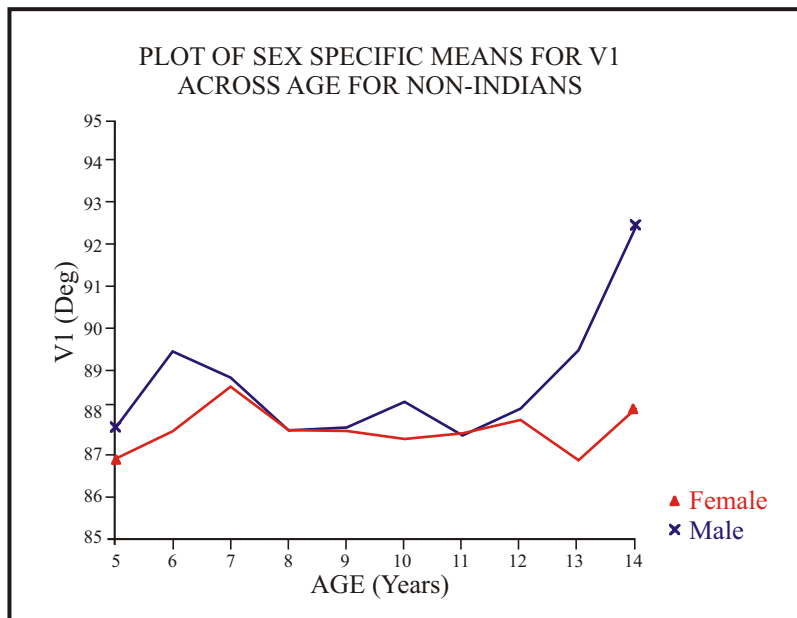
10-38-35

Male Non-Indian

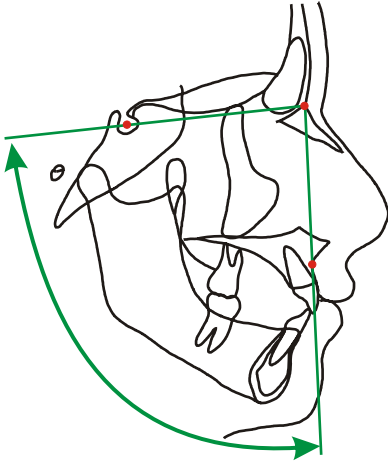
Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	5	83.409	91.177	87.639	2.8512	-.358	-.733
6	7	82.607	101.21	89.513	6.1451	.860	-.034
7	7	82.533	95.975	88.881	4.2273	.177	-.379
8	10	82.677	91.597	87.607	2.6942	-.698	-.336
9	9	83.151	92.552	87.676	3.5471	-.348	-1.349
10	7	83.391	91.908	88.296	2.9674	-.204	-.704
11	9	82.770	90.750	87.484	3.0489	-.541	-1.291
12	9	84.793	91.879	88.132	2.3283	.193	-.956
13	9	83.252	95.043	89.542	3.9828	-.199	-1.110
14	4	89.605	93.985	92.556	1.9924	-1.065	-.725 **

Female Non-Indian

Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	3	85.136	90.171	86.911	2.8269	.699	-1.500
6	7	84.346	91.973	87.585	2.6149	.423	-.794
7	13	84.498	92.407	88.662	2.7097	-.308	-1.198
8	12	80.660	90.615	87.613	2.9618	-1.015	.411
9	9	82.357	91.731	87.593	3.0600	-.274	-.951
10	13	81.656	91.303	87.399	3.2472	-.464	-1.165
11	13	84.342	90.575	87.536	2.0933	-.275	-1.121
12	12	82.787	92.031	87.859	3.2728	-.120	-1.559
13	11	81.912	91.438	86.886	3.4160	-.154	-1.469
14	10	84.716	91.504	88.149	2.4252	.131	-1.364



ANGULAR MEASUREMENT VARIABLE 2



Sella-Nasion-A Point Steiner Analysis

A-N-S

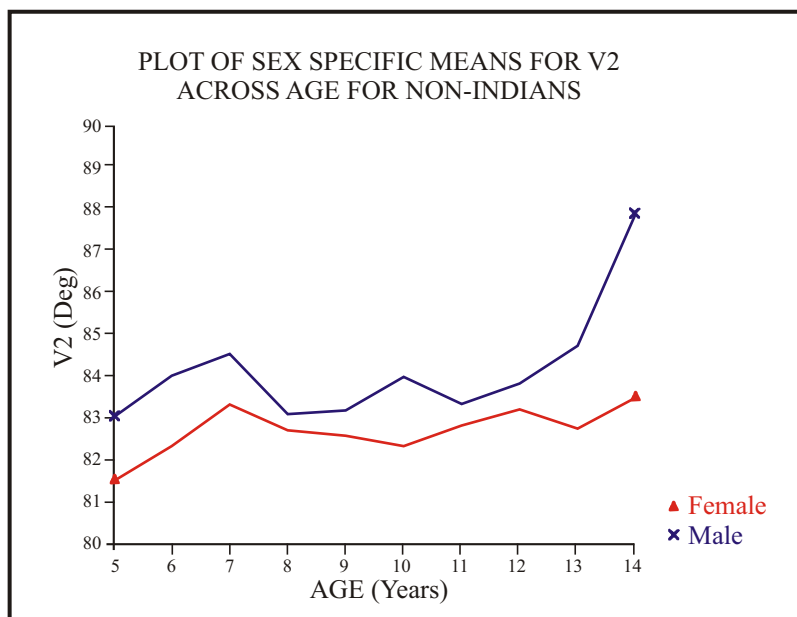
9-38-35

Male Non-Indian

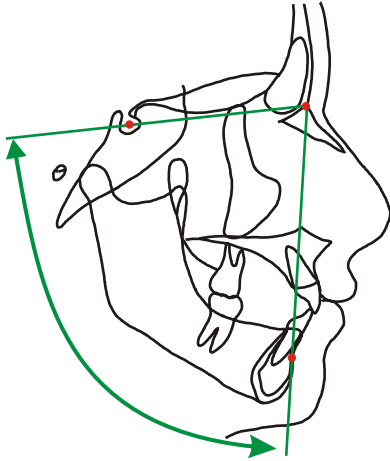
Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	78.975	86.693	83.023	2.7491	-.225	-.537
6	7	78.552	93.240	84.022	5.0440	.720	-.378
7	7	79.960	89.448	84.548	2.9393	.131	-.303
8	10	78.401	87.471	83.095	3.0258	-.307	-.990
9	9	77.617	86.709	83.184	3.2529	-.651	-1.156
10	7	78.266	87.934	83.994	2.9536	-.871	.381
11	9	78.300	86.320	83.340	2.8356	-.735	-1.016
12	9	79.537	86.117	83.834	2.2860	-.746	-.752
13	9	79.416	89.480	84.745	3.4302	-.121	-.984
14	4	86.538	89.524	87.931	1.2768	.225	-1.277 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	79.165	85.988	81.479	3.9059	.706	-1.500
6	7	79.670	86.604	82.323	2.4536	.663	-.772
7	13	77.644	88.358	83.327	3.0141	-.263	-.684
8	12	76.100	86.929	82.704	3.0133	-.725	.007
9	9	77.176	87.378	82.573	3.1299	-.219	-.676
10	13	77.721	86.985	82.322	2.8767	-.331	-1.155
11	13	78.848	86.838	82.820	2.2856	-.145	-.766
12	12	79.492	86.775	83.209	2.5562	.069	-1.437
13	11	76.682	87.364	82.745	3.4405	-.291	-1.040
14	10	80.502	87.729	83.493	2.7216	.697	-1.181



ANGULAR MEASUREMENT VARIABLE 3



Sella-Nasion-B Point Steiner Analysis

B-N-S

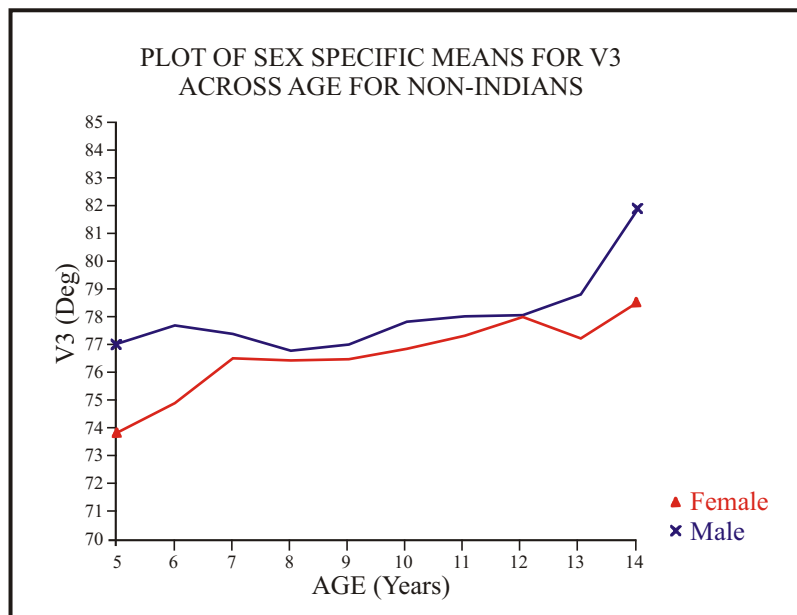
4-38-35

Male Non-Indian

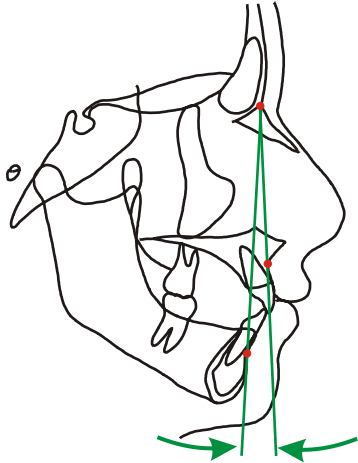
Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	74.761	79.005	77.067	1.6331	-.232	-1.063
6	7	73.410	82.654	77.734	2.7856	.295	.043
7	7	74.653	79.040	77.426	1.4051	-1.029	.366
8	10	72.116	80.483	76.818	2.3283	-.481	-.019
9	9	71.472	80.120	77.042	2.5038	-1.227	.867
10	7	72.331	82.396	77.868	3.1803	-.431	-.375
11	9	73.909	80.789	78.063	5.2675	-.589	-.665
12	9	74.320	81.834	78.106	2.1191	-.110	-.070
13	9	74.445	84.728	78.856	3.0505	.653	-.159
14	4	79.323	85.193	81.994	2.6904	.204	-1.589

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	72.119	76.885	73.845	2.6403	.688	-1.500
6	7	72.198	77.787	74.920	2.1719	.292	-1.359
7	13	72.245	82.565	76.543	3.1634	.413	-.808
8	12	72.204	80.480	76.466	2.9926	-.099	-1.511
9	9	72.220	81.792	76.510	3.3051	.125	-1.331
10	13	72.255	82.804	76.887	3.1029	.098	-.853
11	13	73.532	82.407	77.361	2.9656	.084	-1.283
12	12	74.226	82.757	78.040	2.7521	.067	-1.284
13	11	74.090	83.519	77.263	3.0194	.888	-.473
14	10	75.098	84.672	78.597	2.8625	.766	.045



ANGULAR MEASUREMENT VARIABLE 4



A Point-Nasion-B Point Steiner Analysis

A-N-B

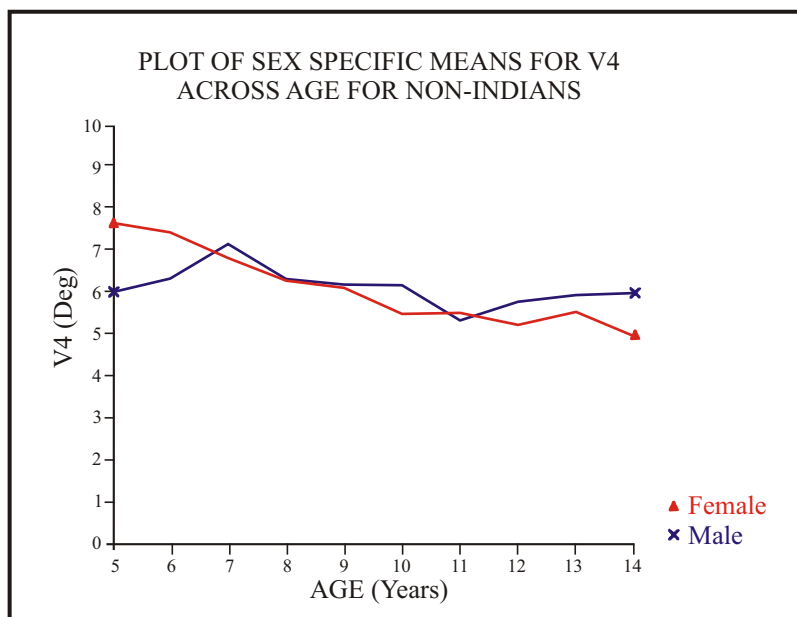
9-38-4

Male Non-Indian

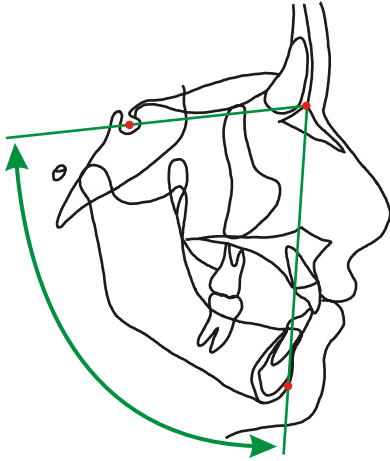
Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	2.2471	8.1743	5.9565	2.4658	-.669	-1.088
6	7	1.1194	10.586	6.2872	3.0659	-.313	-.595
7	7	2.4583	10.925	7.1214	2.5694	-.498	.061
8	10	1.9949	9.8203	6.2765	2.0641	-.303	.561
9	9	2.7224	8.0940	6.1423	1.6851	-.812	-.159
10	7	4.9214	7.6572	6.1265	.90361	.465	-.664
11	9	1.3843	7.9124	5.2767	1.9963	-.549	-.354
12	9	3.1370	7.9060	5.7278	1.1799	-.434	-.683
13	9	1.8794	8.6985	5.8889	2.0824	-.495	-.372
14	4	4.2078	7.9949	5.9373	1.9527	.077	-1.893

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	6.6331	9.1035	7.6333	1.3006	.577	-1.500
6	7	3.8044	9.9402	7.4032	2.0255	-.635	-.472
7	13	3.8381	10.387	6.7835	1.6739	.304	.127
8	12	2.7188	11.004	6.2377	2.1573	.549	.312
9	9	3.4307	9.5364	6.0626	1.8313	.566	-.317
10	13	2.5833	8.5962	5.4342	1.6654	-.029	-.461
11	13	1.2539	8.4414	5.4588	1.8846	-.463	.267
12	12	1.2925	8.4063	5.1690	1.7723	-.410	.486
13	11	1.5513	8.8474	5.4822	2.0661	-.299	-.536
14	10	.30908	8.0979	4.8963	2.3048	-.563	-.381



ANGULAR MEASUREMENT VARIABLE 5



Sella-Nasion-Pogonion

PG-N-S

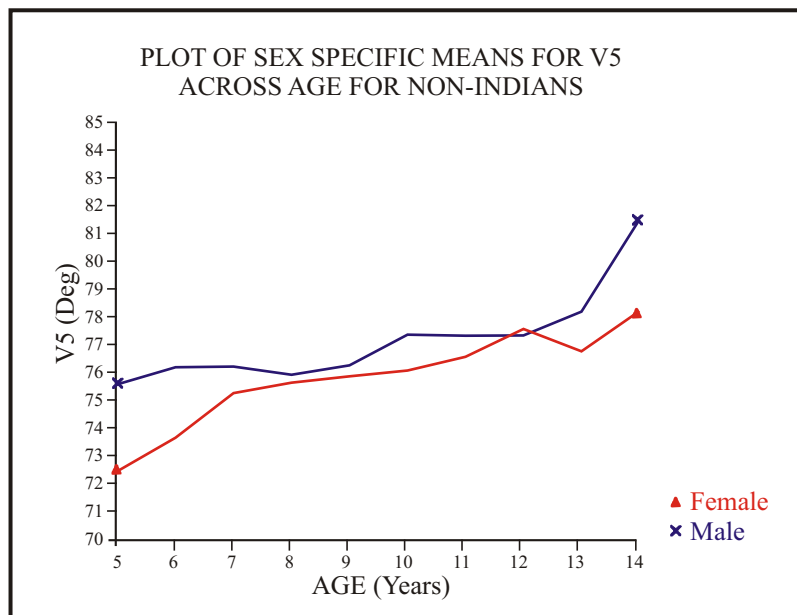
3-38-35

Male Non-Indian

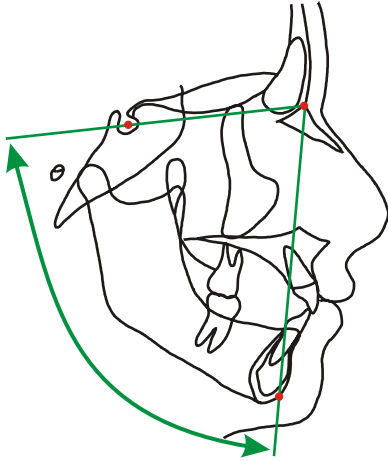
Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	73.141	77.444	75.677	1.7430	-.450	-1.127
6	7	71.470	81.242	76.293	2.8835	.065	.213
7	7	72.892	77.795	76.317	1.6849	-1.305	.497
8	10	70.961	80.571	76.021	2.6241	-.274	.013
9	9	70.630	80.354	76.362	2.6310	-.886	.934
10	7	71.751	82.896	77.473	3.4763	-.143	-.380
11	9	72.583	81.029	77.435	2.3841	-.536	.330
12	9	76.685	81.917	77.445	2.2166	.374	.562
13	9	73.404	84.724	78.307	3.4000	.595	-.260
14	4	79.105	84.925	81.640	2.9597	.136	-1.820

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	70.666	74.821	72.531	2.1100	.354	-1.500
6	7	70.468	77.686	73.741	2.3775	.483	-.651
7	13	70.087	80.911	75.356	3.2869	.122	-1.074
8	12	71.670	80.035	75.734	3.1378	.095	-1.607
9	9	72.089	81.412	75.964	3.4913	.206	-1.466
10	13	72.130	81.906	76.174	3.0676	.234	-1.089
11	13	72.885	81.639	76.671	3.0985	.139	-1.430
12	12	73.598	82.463	77.679	3.2140	.030	-1.542
13	11	73.724	83.335	76.870	3.2685	.870	-.667
14	10	74.694	84.708	78.329	3.1104	.686	-.227



ANGULAR MEASUREMENT VARIABLE 6



Sella-Nasion-Gnathion

GN-N-S

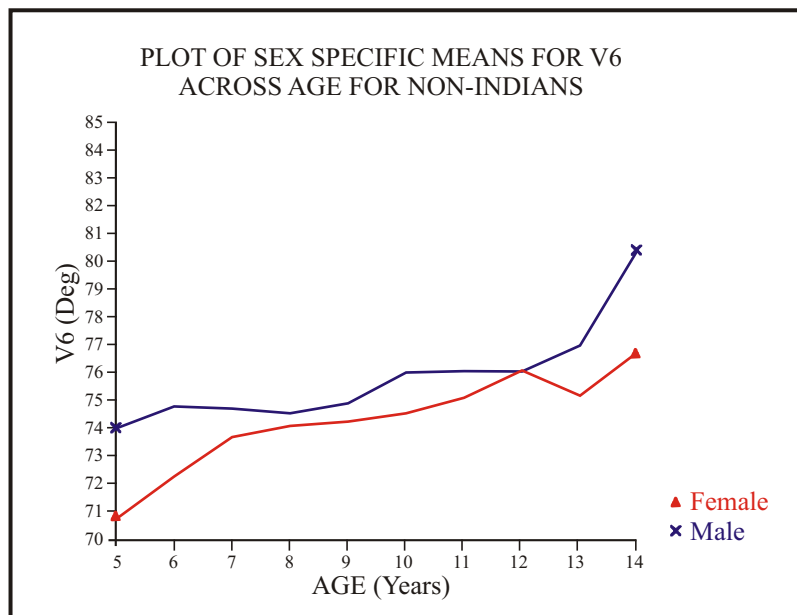
2-38-35

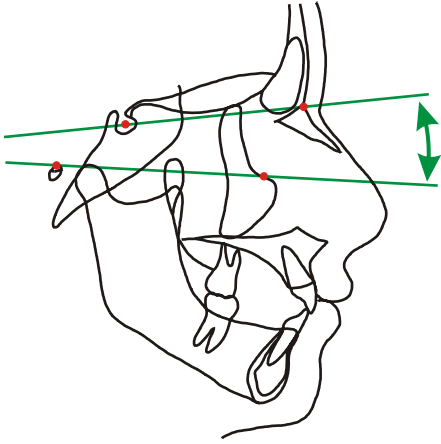
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	71.567	75.758	74.052	1.7459	-.484	-1.291
6	7	70.183	79.648	74.847	2.7956	.074	.203
7	7	71.383	76.239	74.769	1.6207	-1.440	.873
8	10	69.818	79.242	74.599	2.5633	-.172	.037
9	9	69.537	78.974	74.960	2.5353	-.754	.848
10	7	70.470	81.460	76.076	3.4625	-.109	-.474
11	9	71.437	79.878	76.126	2.3777	-.331	.224
12	9	72.466	80.537	76.113	2.2067	.349	.460
13	9	72.515	83.242	77.054	3.2220	.658	-.220
14	4	77.993	83.769	80.533	2.9778	.110	-1.854

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	69.002	72.867	70.769	1.9534	.302	-1.500
6	7	68.867	76.473	72.308	2.4796	.472	-.588
7	13	68.524	79.019	73.737	3.1782	.061	-1.059
8	12	69.778	78.319	74.141	3.1147	.021	-1.524
9	9	70.286	79.798	74.298	3.4070	.252	-1.354
10	13	70.715	80.077	74.598	2.9406	.247	-1.119
11	13	70.918	79.935	75.161	3.0787	.103	-1.462
12	12	72.406	80.474	76.150	3.0295	.106	-1.539
13	11	71.863	81.357	75.238	3.0847	.844	-.622
14	10	72.984	82.624	76.826	2.8661	.599	-.240





ANGULAR MEASUREMENT VARIABLE 7

Sella-Nasion/Frankfort Plane

N-S/OR-PO

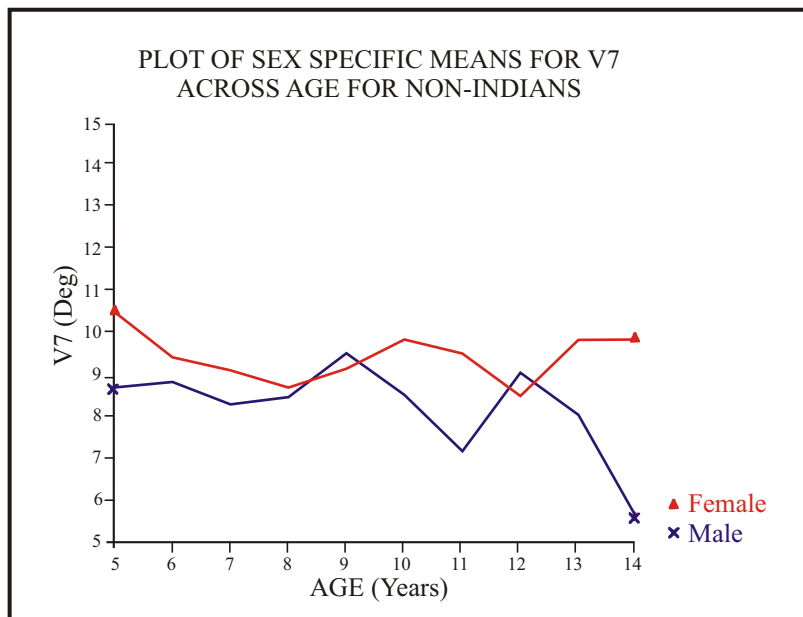
38-35/40-49

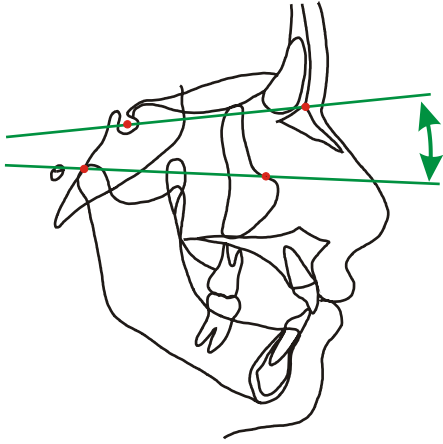
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	6.3511	11.274	8.6113	2.0641	.297	-1.515
6	7	7.8616	10.057	8.7441	.82048	.491	-1.165
7	7	4.0342	10.156	8.2030	2.0761	-1.203	.399
8	10	3.2661	12.504	8.3780	2.8737	-.348	-.675
9	9	6.3474	12.111	9.4368	2.0162	-.289	-1.234
10	7	6.4980	10.678	8.4316	1.5405	.334	-1.248
11	9	1.6892	9.3977	7.0726	2.5554	-1.168	.136 *
12	9	5.7292	13.658	8.9666	2.7519	.273	-1.153
13	9	2.0071	10.458	7.9502	2.6124	-1.410	.980
14	4	2.6052	10.138	5.4766	3.2606	.836	-.865 *

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	8.2686	12.573	10.435	2.1521	-.025	-1.500
6	7	4.5867	12.634	9.3393	3.2032	-.697	-1.155
7	13	4.8477	13.475	9.0249	2.0850	.067	.695
8	12	2.7834	11.257	8.6087	2.3202	-1.175	1.323
9	9	4.6677	11.680	9.0643	2.1433	-.959	.355
10	13	4.6023	15.070	9.7689	2.6705	.137	-.066
11	13	4.4036	13.510	9.4299	2.5451	-.421	-.533
12	12	2.0823	12.306	8.4054	2.7665	-.733	.449
13	11	4.9746	13.583	9.7599	2.7355	-.373	-.883
14	10	2.8240	14.038	9.7685	3.2828	-.617	-.149





ANGULAR MEASUREMENT VARIABLE 8

Sella-Nasion/Condylar Plane

N-S/OR-CO

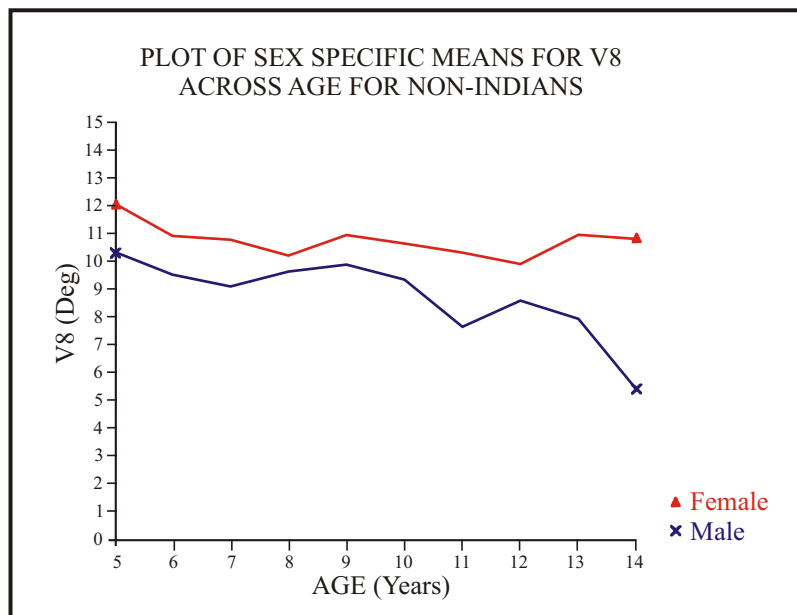
38-35/40-33

Male Non-Indian

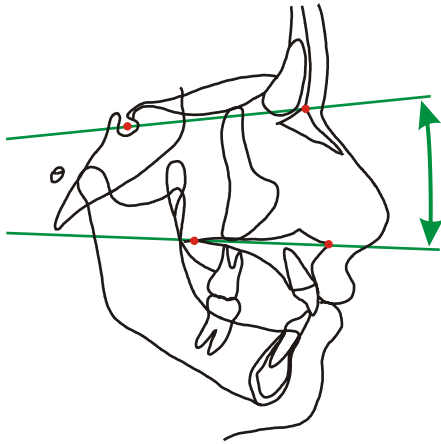
Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	7.6155	14.593	10.336	3.4078	.439	-1.742
6	7	7.6216	12.507	9.5097	1.8475	.710	-1.059
7	7	4.7983	11.646	9.0816	2.1264	-1.127	.626
8	10	4.7393	13.695	9.6214	2.7976	-.124	-.845
9	9	7.5735	11.776	9.8739	1.5612	-.489	-1.372
10	7	7.1003	12.976	9.3303	2.1609	.691	-.902
11	9	4.3499	10.399	7.6213	2.1548	-.301	-1.355 **
12	9	6.8958	12.345	8.5689	1.8501	.923	-.201
13	9	3.2891	10.710	7.9095	2.5129	-.636	-.893 *
14	4	3.5796	7.3708	5.3549	1.5628	.259	-1.028 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	8.7585	15.708	12.088	3.4841	.153	-1.500
6	7	4.3164	14.489	10.913	4.0717	-.876	-1.011
7	13	7.6050	12.663	10.775	1.6681	-.461	-.995
8	12	5.7949	13.230	10.201	2.1642	-.391	-.378
9	9	6.2917	12.711	10.945	1.9245	-1.672	1.987
10	13	4.6865	16.322	10.637	3.1148	-.2196	-.345
11	13	5.5305	14.336	10.308	2.5723	-.626	-.194
12	12	4.8542	14.571	9.8945	2.8905	-.151	-.833
13	11	6.9265	15.287	10.954	2.9767	-.063	-1.270
14	10	3.3313	15.173	10.803	3.4484	-.775	.297



ANGULAR MEASUREMENT VARIABLE 9



Sella-Nasion/Palatal Plane

N-S/ANS-PNS

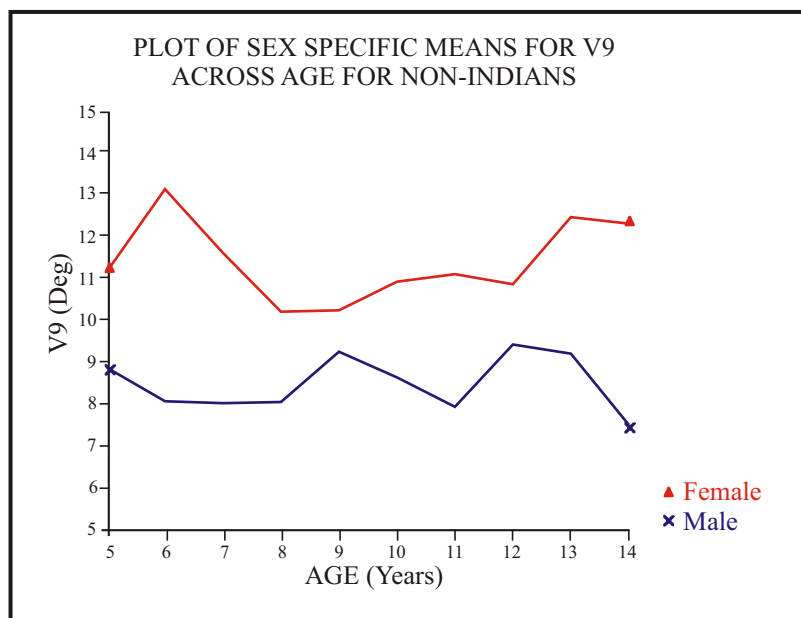
38-35/10-45

Male Non-Indian

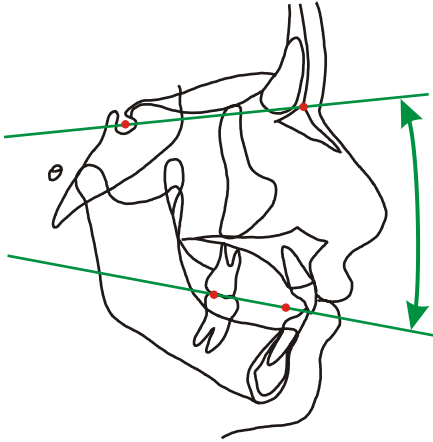
Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	4.6472	10.373	8.8657	2.3950	-1.390	.095
6	7	2.9167	12.984	8.0564	3.9582	.023	-1.581 *
7	7	4.3076	11.224	8.0100	2.7889	-.029	-1.549 *
8	10	4.0974	10.227	8.0381	2.1410	-.628	-.943
9	9	4.4475	11.321	9.2522	2.1753	-1.123	.658
10	7	4.2292	12.338	8.6324	3.4236	-.215	-1.556
11	9	3.8201	10.601	7.9221	2.6410	-.547	-1.095 *
12	9	5.6648	12.684	9.4265	2.3380	-.108	-1.064
13	9	4.9172	12.440	9.2054	2.6624	-.267	-1.233 *
14	4	4.4834	10.692	7.4840	3.3326	.017	-1.970 *

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	10.656	11.741	11.193	.54232	.037	-1.500
6	7	8.3005	20.766	13.178	4.1087	.800	-.258
7	13	5.0178	18.160	11.638	3.3866	.158	-.076
8	12	3.8694	16.563	10.219	4.4579	-.070	-1.296
9	9	4.7500	19.223	10.252	5.1940	.606	-1.107
10	13	6.1365	16.689	10.943	3.2588	.261	-.742
11	13	6.0349	17.987	11.125	4.0031	.400	-1.236
12	12	3.5969	17.979	10.882	4.4067	.096	-.919
13	11	4.7026	18.853	12.502	4.1442	-.373	-.531
14	10	6.6648	19.644	12.345	4.3876	.175	-1.221



ANGULAR MEASUREMENT VARIABLE 10



**Sella-Nasion/Functional
Occlusal Plane**

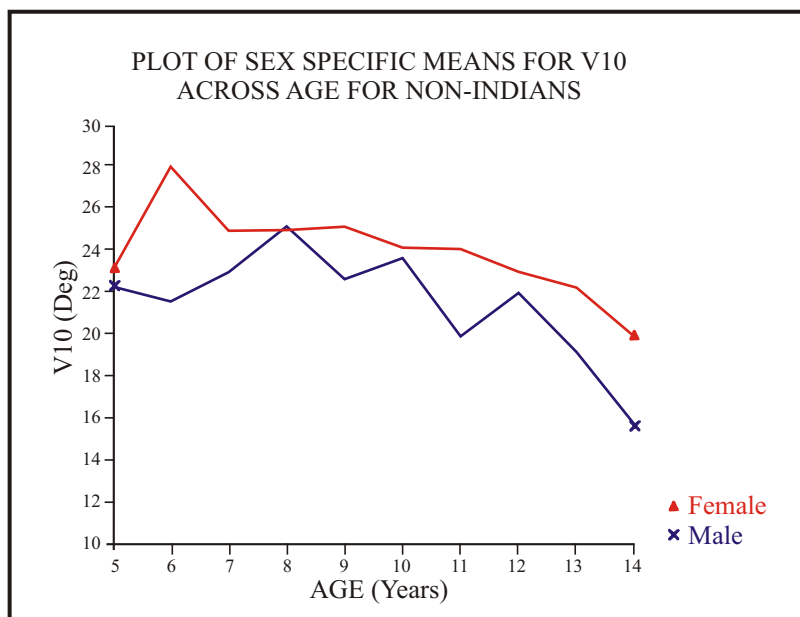
N-S/PMC-FPP 38-35/46-50

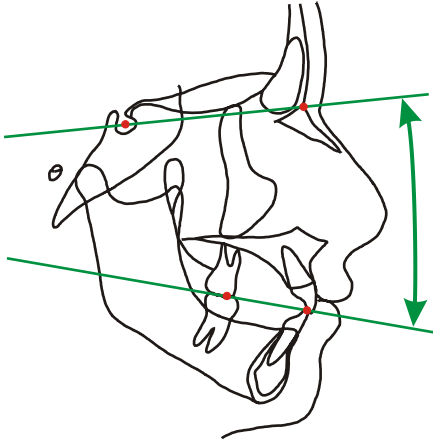
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	16.714	26.055	22.366	3.6559	-.651	-.809
6	7	16.732	27.654	21.647	3.5586	.321	-.625 **
7	7	18.489	30.352	23.061	4.2309	.540	-.751
8	10	20.304	33.713	25.272	4.1568	.601	-.318
9	9	20.244	25.855	22.724	1.9107	.333	-1.105
10	7	17.106	32.416	23.741	5.5576	.293	-1.019
11	9	15.728	25.645	19.963	3.2214	.371	-.768 *
12	9	18.194	28.662	22.060	3.0114	1.007	.773
13	9	11.998	26.208	19.204	4.5980	-.191	-.968
14	4	9.8804	21.163	15.701	4.9697	-.090	-1.475

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	21.629	25.841	23.139	2.3447	.692	-1.500
6	7	23.098	34.307	28.156	4.1489	.044	-1.269
7	13	14.451	34.290	25.062	5.0528	-.259	.011
8	12	19.448	31.645	25.095	3.9442	.011	-.981
9	9	18.667	31.200	25.260	4.9744	-.081	-1.501
10	13	19.698	30.284	24.246	3.1912	.413	.845
11	13	16.361	34.631	24.179	5.9146	.371	-.968
12	12	14.970	29.992	23.079	5.3962	-.130	-1.544
13	11	8.6472	32.286	22.316	6.1264	-.753	.636
14	10	13.086	25.826	19.944	4.1565	-.059	-1.016





ANGULAR MEASUREMENT VARIABLE 11

**Sella-Nasion/Downs Occlusal Plane
Steiner Analysis**

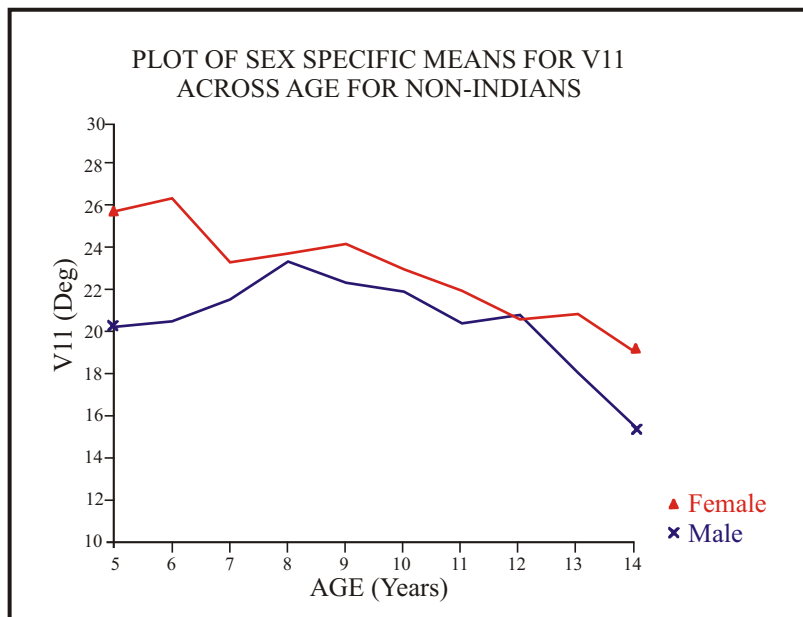
N-S/ADP-PDP 38-35/56-57

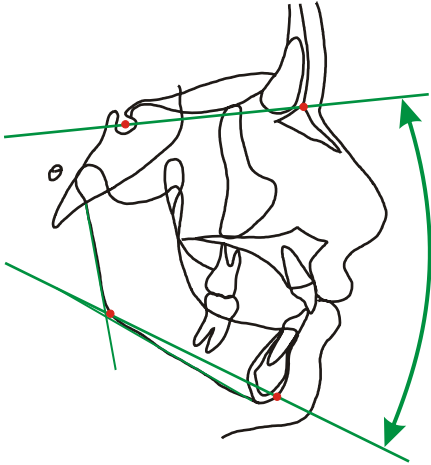
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	16.206	23.609	20.254	2.9832	-.303	-1.332 **
6	7	16.000	28.604	20.523	4.6459	.920	-.748
7	7	18.605	26.075	21.579	2.5938	.612	-.756
8	10	20.580	29.852	23.411	2.8019	1.280	.762
9	9	18.288	29.218	22.387	3.0180	1.143	1.219
10	7	16.211	27.700	21.957	4.1056	.107	-1.206
11	9	15.805	24.588	20.425	2.9198	-.259	-1.174
12	9	17.568	24.658	20.831	2.5934	.010	-1.257
13	9	12.620	21.732	18.041	3.3377	-.336	-1.333
14	4	11.018	20.657	15.403	4.5786	.161	-1.713

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	23.620	27.362	25.829	1.9607	-.558	-1.500
6	7	20.685	30.803	26.464	3.7619	-.269	-1.236
7	13	16.247	31.638	23.373	4.3185	.452	-.259
8	12	19.429	29.645	23.798	3.7862	.290	-1.515
9	9	17.717	31.275	24.260	4.3690	.297	-.999
10	13	18.705	27.905	23.035	3.4127	.185	-1.571
11	13	14.482	28.164	21.998	4.1971	.047	-.895
12	12	13.286	26.103	20.616	3.5394	-.519	-.198
13	11	11.386	25.823	20.876	3.9867	-1.071	1.033
14	10	13.349	23.833	19.008	3.8508	-.245	-1.378





ANGULAR MEASUREMENT VARIABLE 12

**Sella-Nasion/Gonion-Gnathion
Steiner Analysis**

N-S/GN-GO

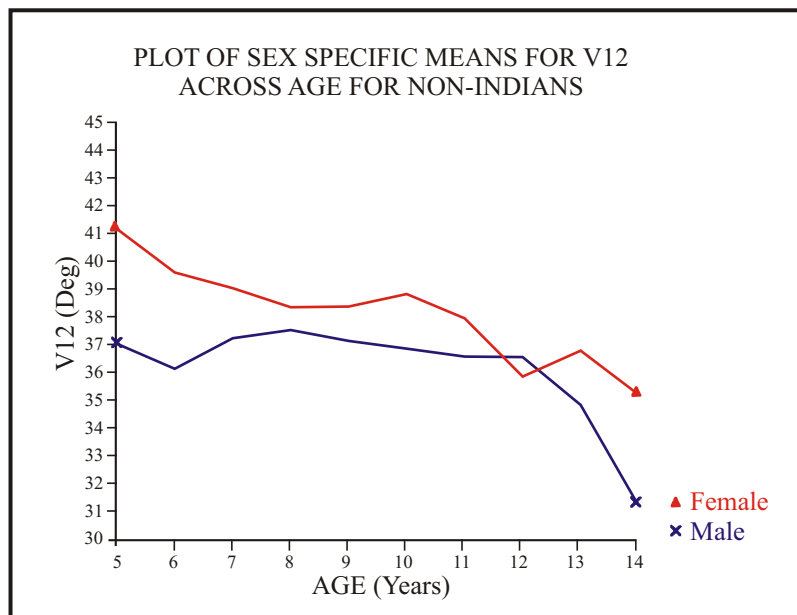
38-35/2-27

Male Non-Indian

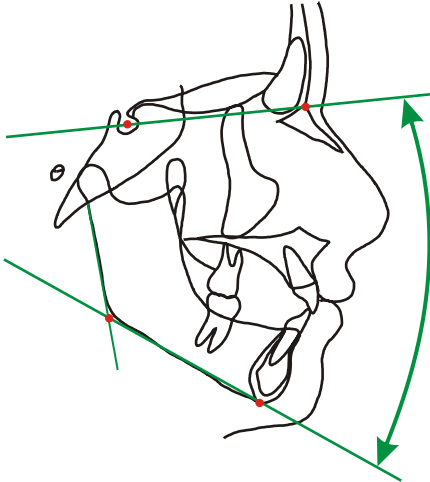
Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	32.780	41.916	37.051	3.5358	.147	-1.133
6	7	32.168	41.273	36.143	3.1416	.308	-.831
7	7	33.071	43.844	37.249	3.4538	.899	.042
8	10	34.273	43.741	37.546	3.4833	.766	-.919
9	9	34.128	42.203	37.152	2.9037	.486	-1.159
10	7	31.792	42.108	36.872	3.9357	.264	-1.258
11	9	31.325	40.555	36.585	2.9798	-.264	-.832
12	9	33.353	40.864	36.567	2.5624	.289	-1.181
13	9	28.708	39.961	34.833	3.7133	-.169	-1.138
14	4	27.163	33.006	31.180	2.7238	-1.043	-.763 *

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	36.349	44.929	41.212	4.4029	-.445	-1.500
6	7	31.460	46.011	39.632	4.9661	-.380	-.869
7	13	34.494	46.721	39.063	3.8721	.709	-.450
8	12	33.253	44.341	38.372	3.5557	.077	-1.127
9	9	33.948	44.928	38.397	3.7296	.502	-.884
10	13	33.250	44.707	38.850	3.8119	.223	-1.318
11	13	30.091	44.312	37.970	4.2093	-1.175	-.804
12	12	27.228	42.054	35.861	4.4019	-.120	-.508
13	11	30.806	42.860	36.799	4.1736	.013	-1.423
14	10	30.634	39.376	35.205	2.6572	-.107	-.838



ANGULAR MEASUREMENT VARIABLE 13



Sella-Nasion/Mandibular Plane

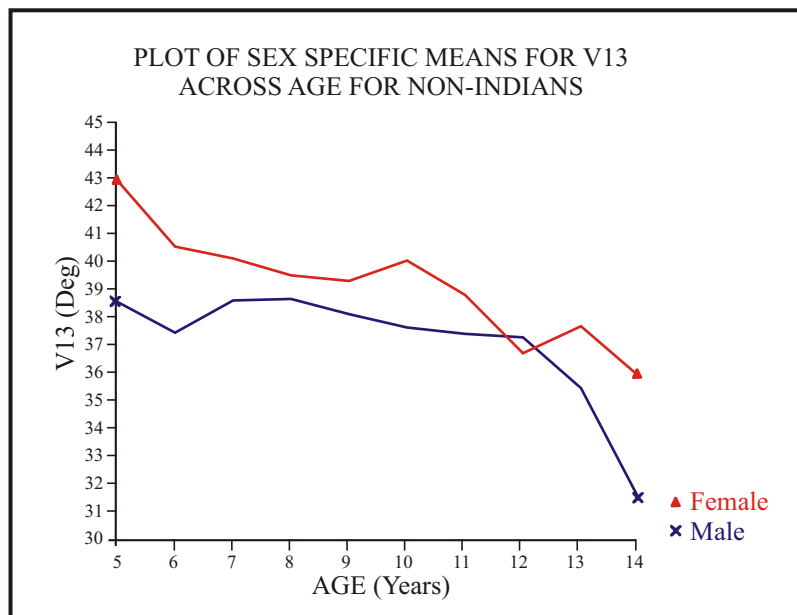
N-S/ME-GOI 38-35/1-28

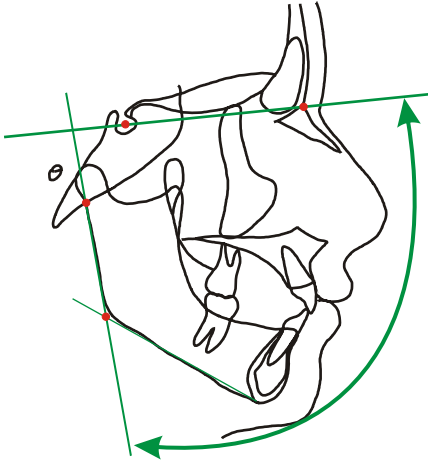
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	34.010	43.471	38.480	3.8494	.028	-1.378
6	7	33.363	41.988	37.358	3.2568	.095	-1.355
7	7	34.011	45.974	38.525	3.9597	.870	-.159
8	10	35.024	45.127	38.580	3.6357	.648	-1.044
9	9	34.634	43.109	38.030	3.1080	.371	-1.328
10	7	31.913	43.657	37.546	4.2749	.203	-1.207
11	9	32.042	41.791	37.316	3.2705	-.104	-1.167
12	9	33.610	42.839	37.189	2.8949	.682	-.468
13	9	29.238	40.499	35.350	3.8801	-.060	-1.266
14	4	27.538	33.173	31.344	2.5707	-1.064	-.729 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	37.235	46.445	42.884	4.9470	-.637	-1.500
6	7	30.614	47.798	40.476	5.8855	-.448	-.799
7	13	35.123	47.984	40.047	3.9345	.728	-.376
8	12	33.308	46.220	39.434	3.8514	.085	-.769
9	9	34.715	46.319	39.232	3.8708	.707	-.632
10	13	34.337	45.790	39.970	3.7601	.24	-1.252
11	13	29.508	45.155	38.727	4.4126	-.471	-.460
12	12	26.725	43.412	36.615	4.5893	-.370	.064
13	11	31.589	43.923	37.592	4.0944	.122	-1.257
14	10	32.123	39.152	35.783	2.5039	.059	-1.266





ANGULAR MEASUREMENT VARIABLE 14

**Sella-Nasion/Gonial Inter-
section-Articulare, Posterior**

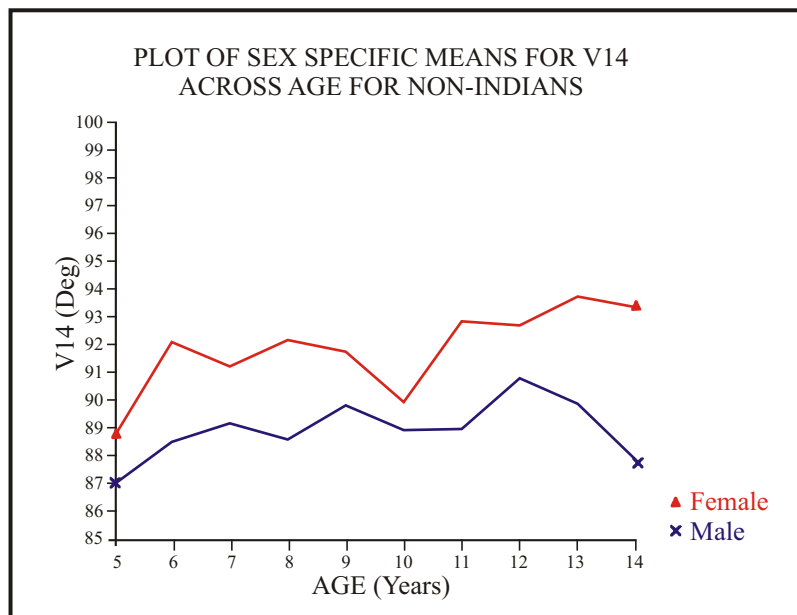
N-S/GOI-AR 38-35/28-31

Male Non-Indian

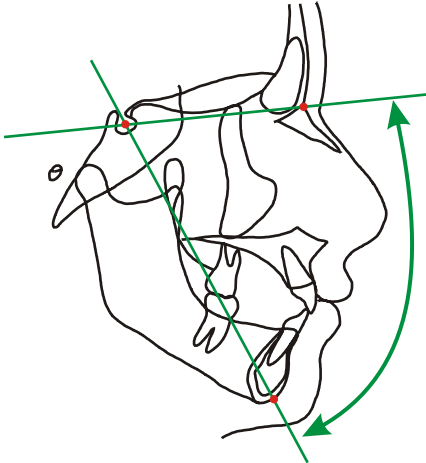
Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	83.276	89.613	87.045	2.4738	-.635	-.908
6	7	85.691	92.696	88.590	2.6017	.675	-1.048
7	7	86.272	95.214	89.263	3.1920	.902	-.312
8	10	84.045	93.911	88.677	3.7451	.271	-1.516 *
9	9	85.525	97.544	89.913	4.1816	.560	-.864
10	7	84.340	96.071	89.017	4.4496	.674	-1.094
11	9	85.423	92.179	89.058	2.3479	-.048	-1.319
12	9	86.304	100.60	90.895	4.6664	.913	-.003
13	9	83.351	98.420	89.971	5.0897	.220	-1.167
14	4	84.238	95.281	87.945	4.9731	1.038	-.741

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	84.789	91.343	88.753	3.4865	-.612	-1.500
6	7	87.678	101.75	92.206	4.9657	1.035	-.083
7	13	81.808	101.84	91.323	4.9220	.150	.375
8	12	85.217	103.16	92.280	5.0829	.712	-.144
9	9	86.298	99.127	91.857	4.5306	.408	-1.268
10	13	82.134	96.106	90.032	3.8206	-.377	-.241
11	13	86.448	103.85	92.957	5.3720	.821	-.384
12	12	86.124	103.99	92.810	5.1367	.754	-.120
13	11	87.585	104.00	93.855	5.3132	.516	-.653
14	10	87.248	101.44	93.469	4.7061	.239	-1.009



ANGULAR MEASUREMENT VARIABLE 15



Nasion-Sella/Gnathion

N-S-GN

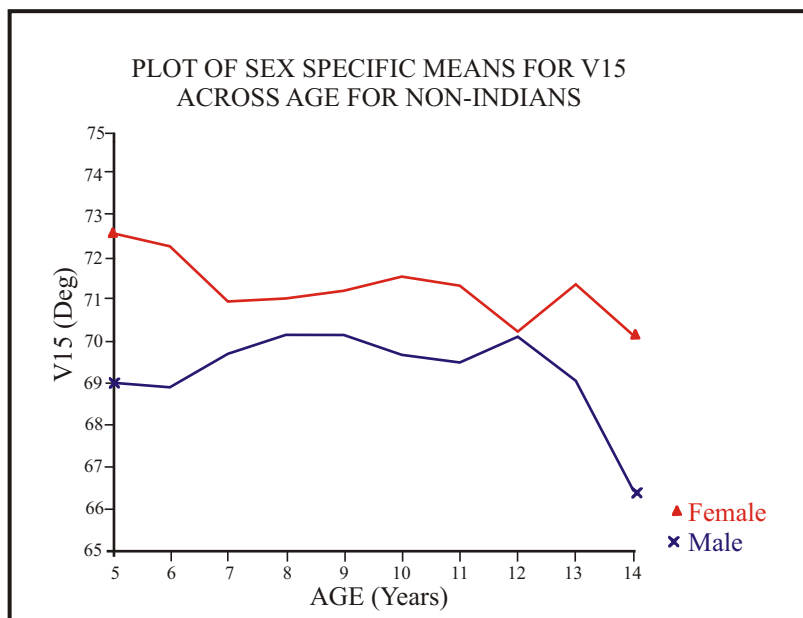
38-35-2

Male Non-Indian

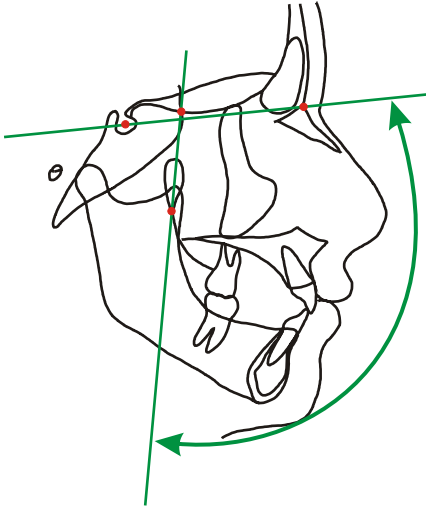
Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	67.359	72.336	69.040	1.9513	1.112	-.252
6	7	65.542	73.117	68.929	2.2744	.507	.207
7	7	68.052	73.638	69.737	1.8894	1.343	.750
8	10	66.403	74.214	70.195	2.5845	.293	-.820
9	9	67.408	74.428	70.192	2.1418	.519	-.046
10	7	65.102	74.889	69.712	3.3379	.256	-.917
11	9	66.441	73.623	69.528	2.2803	.342	-.694
12	9	66.505	73.796	70.150	2.2989	.043	-.746
13	9	64.184	73.212	69.086	3.1395	-.166	-1.061
14	4	63.905	69.905	66.420	2.8269	.321	-1.557 *

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	70.317	74.747	72.654	2.2251	-.199	-1.500
6	7	66.743	76.151	72.333	3.3829	-.479	-1.026
7	13	65.811	76.550	71.001	3.6201	-.046	-1.161
8	12	65.705	76.148	71.074	3.4889	-.177	-1.350
9	9	66.312	76.924	71.260	3.5562	.042	-1.053
10	13	67.226	76.229	71.602	3.2023	-.109	-1.398
11	13	66.252	76.467	71.382	3.3766	-.065	-1.136
12	12	65.723	75.252	70.274	3.4112	.126	-1.379
13	11	66.271	76.372	71.414	3.5239	-.331	-1.156
14	10	65.233	75.080	70.173	2.8776	-.008	-.584



ANGULAR MEASUREMENT VARIABLE 16



Sella-Nasion/PM Vertical

N-S/PTM-SE

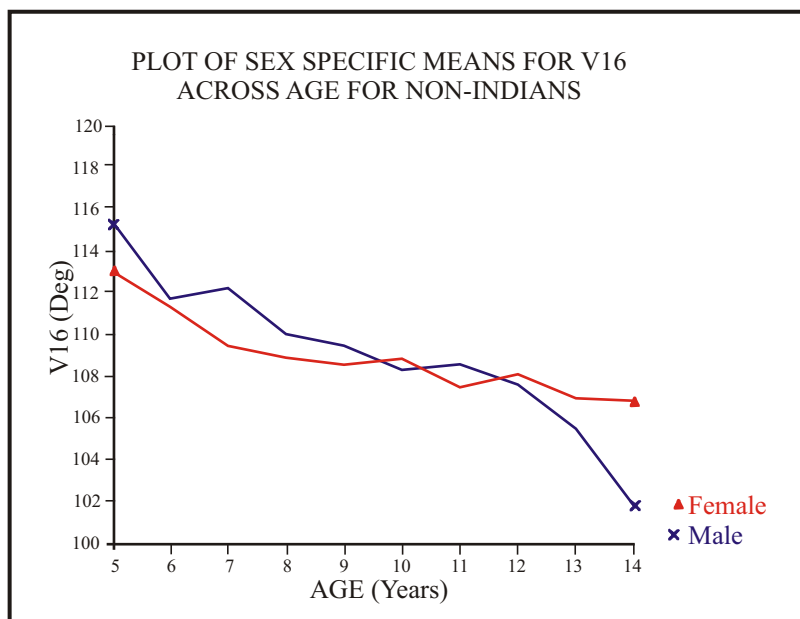
38-35/43-36

Male Non-Indian

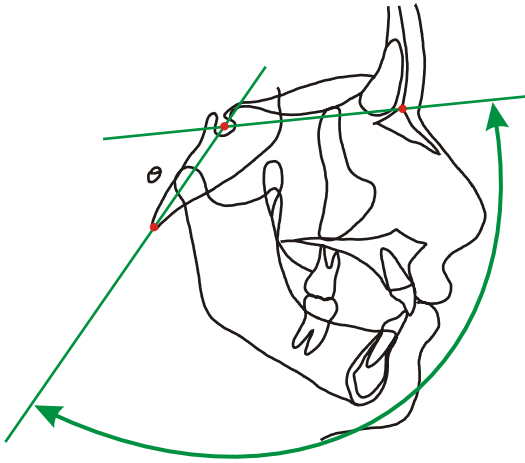
Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	105.38	125.21	115.40	7.5759	.013	-1.113
6	7	103.43	121.72	111.65	6.2683	.216	-.909
7	7	103.76	120.03	112.16	5.7240	-.036	-1.169
8	10	101.00	120.94	109.94	6.6378	.319	-1.039
9	9	101.12	120.74	109.38	6.0933	.576	-.530
10	7	100.10	115.24	108.21	5.6610	-.453	-1.157
11	9	100.11	116.72	108.48	5.9687	-.090	-1.317
12	9	99.764	117.43	107.50	6.6924	.259	-1.414
13	9	99.318	113.92	105.37	4.7238	.523	-.690
14	4	96.460	103.84	101.65	3.5139	-1.052	-.758 *

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	108.53	115.68	112.98	3.8832	-.659	-1.500
6	7	105.80	115.19	111.26	3.4887	-.464	-1.082
7	13	99.282	115.80	109.37	4.2258	-.629	.818
8	12	99.467	116.84	108.80	4.5630	-.207	.012
9	9	97.558	115.79	108.46	4.8177	-1.052	1.446
10	13	101.39	114.30	108.75	3.4158	-.264	-.004
11	13	101.06	114.25	107.37	3.7340	.399	-.533
12	12	99.767	113.95	108.00	4.1282	-.398	-.567
13	11	95.684	113.33	106.84	5.4857	-.731	-.378
14	10	98.138	111.63	106.72	4.1912	-.658	-.253



ANGULAR MEASUREMENT VARIABLE 17



Sella-Nasion-Basion

N-S-BA

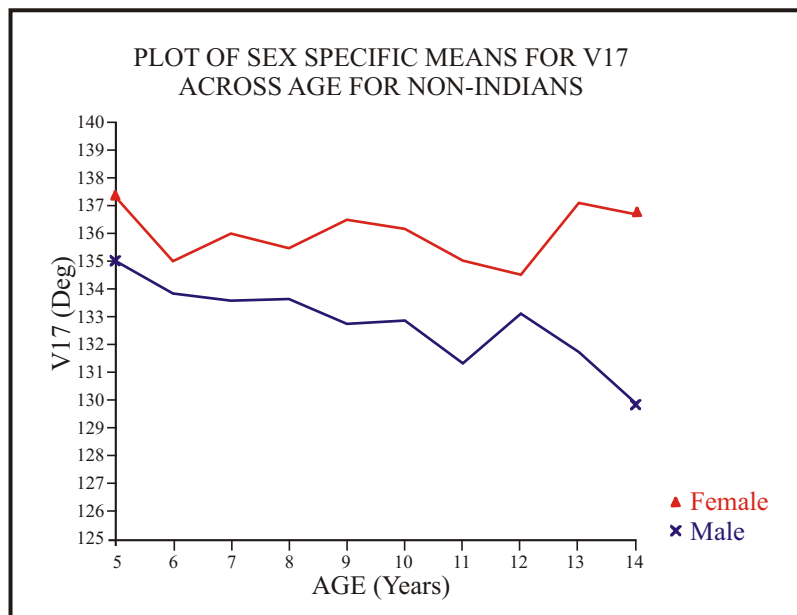
38-35-30

Male Non-Indian

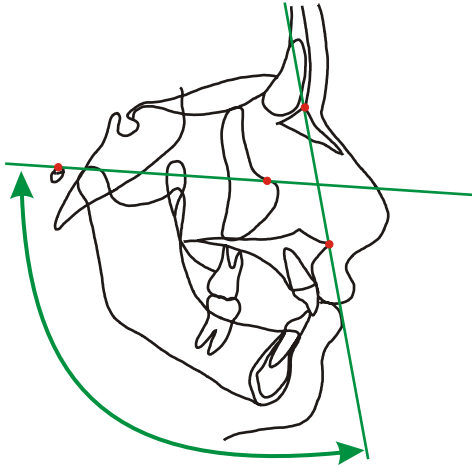
Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	130.53	138.46	135.03	2.9316	-.535	-.668
6	7	129.73	138.35	133.84	3.6175	.072	-1.588
7	7	127.47	136.55	133.58	3.4230	-.926	-.632
8	10	127.64	139.47	133.64	4.1268	-.051	-1.264
9	9	128.26	137.41	132.74	3.2842	-.024	-1.479 *
10	7	129.34	136.64	132.86	3.1089	.135	-1.701
11	9	126.98	135.74	131.31	3.5829	-.055	-1.612 *
12	9	129.33	137.42	133.11	2.7896	-.092	-1.134
13	9	127.06	136.21	131.72	2.9978	.152	-.882 **
14	4	125.31	134.00	129.83	4.3416	-.046	-1.878 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	136.48	138.23	137.36	.87453	-.015	-1.500
6	7	128.74	140.13	135.01	4.1336	-.426	-1.153
7	13	128.87	140.11	136.01	3.2648	-.895	-.206
8	12	129.14	140.26	135.48	3.8883	-.155	-1.539
9	9	129.81	140.85	136.51	3.8560	-.701	-1.074
10	13	129.51	140.21	136.18	3.3758	-.706	-.670
11	13	126.35	141.05	135.03	4.2507	-.475	-.536
12	12	128.08	138.90	134.52	3.2194	-.662	-.646
13	11	129.94	144.40	137.12	4.9140	-.101	-1.182
14	10	130.72	142.38	136.70	3.6509	.144	-.863



ANGULAR MEASUREMENT VARIABLE 18



Frankfort Plane/Anterior Nasal Spine-Nasion

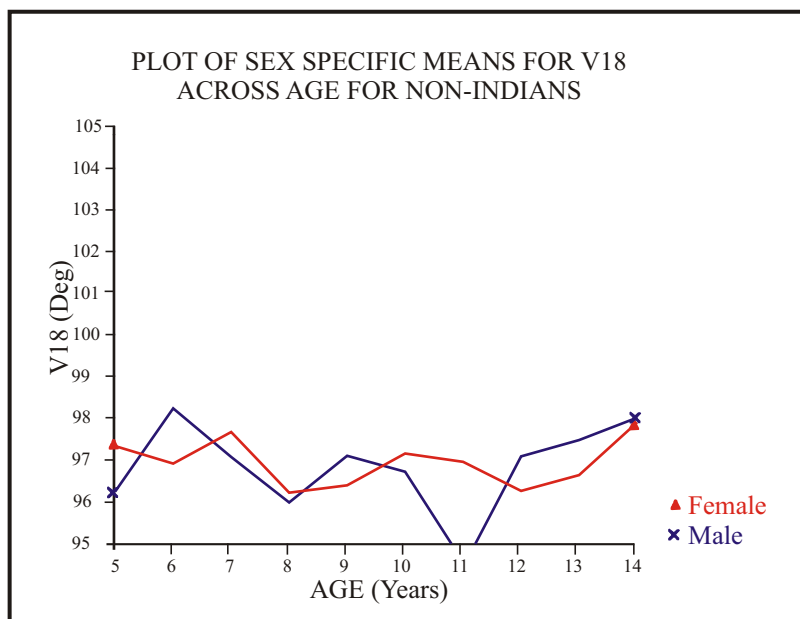
ANS-N/PO-OR 10-38/49-40

Male Non-Indian

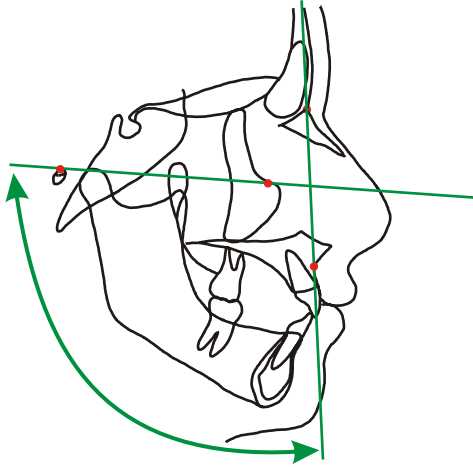
Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	94.306	98.037	96.250	1.6774	-.196	-1.690
6	7	92.663	109.33	98.257	5.8501	.884	-.167
7	7	91.292	106.13	97.084	4.8652	.840	-.194
8	10	91.507	104.10	95.985	4.0835	.665	-.557
9	9	93.208	104.66	97.112	3.4506	1.079	.583
10	7	94.069	100.75	96.727	2.5240	.420	-1.239
11	9	91.321	98.992	94.556	3.1854	.254	-1.752
12	9	93.765	103.16	97.098	3.1688	.952	-.412
13	9	92.394	103.82	97.492	4.0836	.381	-1.245
14	4	92.210	103.47	98.032	4.6025	-.144	-.996

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	95.600	98.440	97.346	1.5285	-.642	-1.500
6	7	92.548	99.887	96.924	2.4201	-.733	-.399
7	13	93.582	100.31	97.686	1.8693	-.918	.133
8	12	89.179	100.47	96.221	3.0789	-.884	.400
9	8	92.019	99.819	96.399	2.5257	-.203	-.585
10	13	92.104	100.77	97.167	2.7019	-.363	-1.071
11	13	94.421	101.04	96.966	2.5392	.520	-1.395
12	12	91.986	102.74	96.264	3.4814	.532	-.942
13	11	92.896	100.69	96.646	2.2236	.200	-.588
14	10	93.455	103.91	97.917	3.6756	.239	-1.326



ANGULAR MEASUREMENT VARIABLE 19



Frankfort Plane/Nasion-A Point

A-N/PO-OR

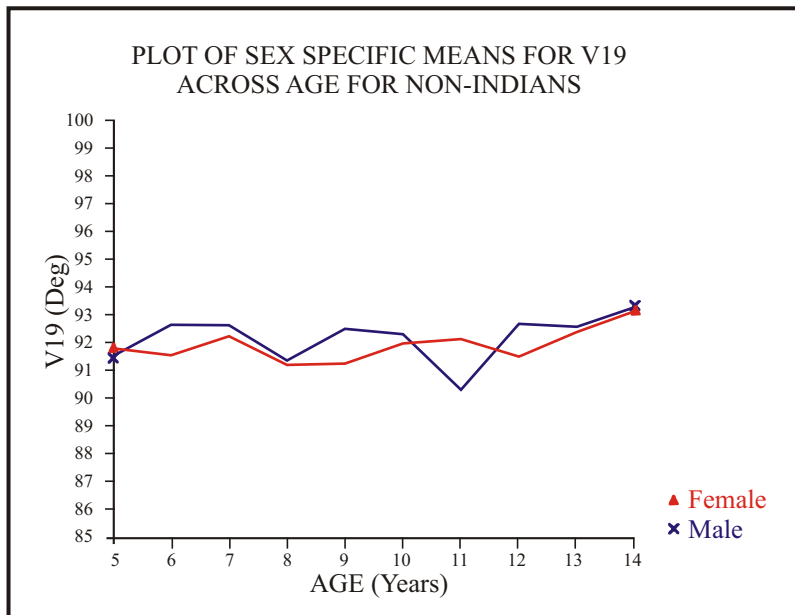
9-38/49-40

Male Non-Indian

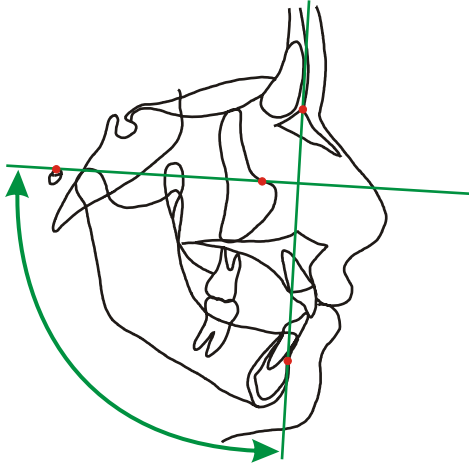
Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	90.249	93.183	91.634	1.3771	.297	-1.756
6	7	87.734	101.36	92.766	4.7293	.738	-.463
7	7	88.720	99.604	92.750	3.6692	.701	-.065
8	10	86.388	99.974	91.472	4.1998	.637	-.368
9	9	87.607	98.819	92.620	3.2513	.400	-.222
10	7	88.944	94.570	92.425	2.0391	-.595	-.835
11	9	86.851	94.917	90.412	3.1431	.271	-1.530
12	9	89.805	97.397	92.800	2.7297	.842	-.699
13	9	88.899	98.256	92.694	3.2944	.490	-1.085
14	4	89.143	98.412	93.407	3.8471	.316	-1.054

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	89.746	94.257	91.913	2.2603	.142	-1.500
6	7	85.918	95.142	91.662	2.9911	-.847	.145
7	13	87.884	95.147	92.351	1.9316	-.810	.285
8	12	84.619	95.847	91.313	2.8202	-.698	1.109
9	8	86.837	94.391	91.361	2.5489	-.498	-.769
10	13	87.022	95.018	92.090	2.5145	-.521	-.867
11	13	88.681	95.676	92.249	2.6070	.237	-1.559
12	12	87.189	97.927	91.614	3.1518	.601	-.411
13	11	88.702	97.827	92.505	2.5105	.561	.032
14	10	89.025	100.38	93.261	3.7485	.613	-.870



ANGULAR MEASUREMENT VARIABLE 20



Frankfort Plane/Nasion-B Point

B-N/PO-OR

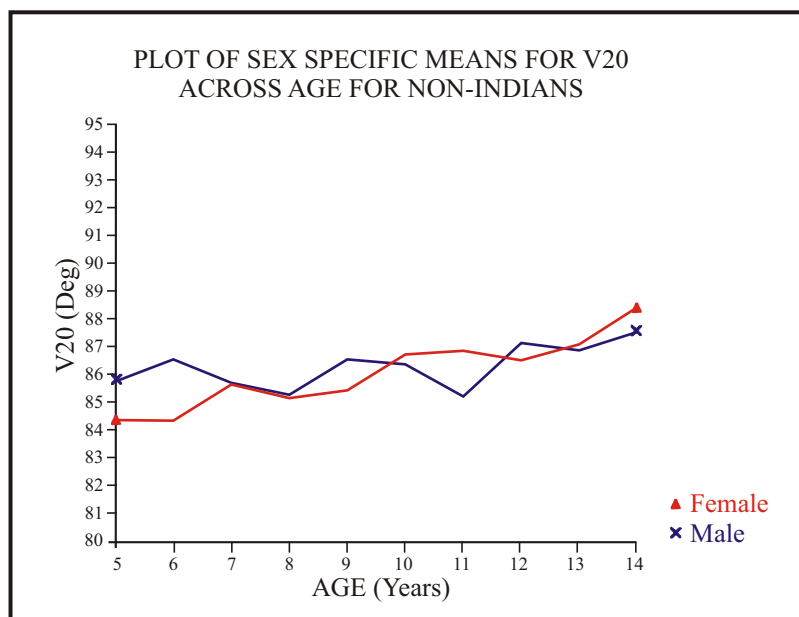
4-38/49-40

Male Non-Indian

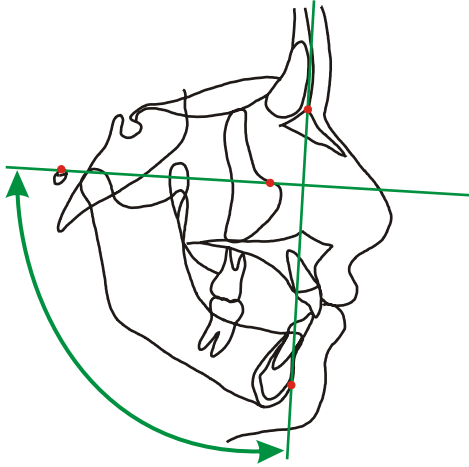
Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	84.018	88.001	85.678	1.4842	.657	-.620
6	7	81.962	90.776	86.478	2.7910	-.171	-.485
7	7	81.008	88.679	85.629	2.4683	-.800	-.107
8	10	80.103	90.153	85.196	3.1698	-.238	-.930
9	9	81.462	90.725	86.478	2.6808	-.378	-.232
10	7	83.009	88.894	86.299	2.1491	-.423	-1.099
11	9	79.349	89.675	85.135	3.6853	-.298	-1.461
12	9	84.074	90.811	87.072	2.6567	.220	-1.661
13	9	83.928	91.081	86.805	2.4249	.366	-1.005
14	4	81.928	90.417	87.470	3.8083	-.958	-.819

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	82.583	85.153	84.280	1.4699	-.706	-1.500
6	7	78.550	87.588	84.259	2.9569	-1.036	.074
7	13	82.825	88.358	85.568	1.8591	-.156	-1.309
8	12	80.723	89.318	85.075	2.2873	.168	-.072
9	8	81.882	87.673	85.357	1.9331	-.634	-.713
10	13	82.001	91.979	86.656	3.0050	-.003	-.925
11	13	83.006	91.985	86.790	2.7883	.274	-1.015
12	12	81.810	91.599	86.445	2.9248	-.005	-.811
13	11	81.686	90.604	87.023	2.4736	-.797	.089
14	10	83.300	92.279	88.365	3.3115	-.270	-1.411



ANGULAR MEASUREMENT VARIABLE 21



**Frankfort Plane/Nasion-Pogonion
Ricketts Analysis**

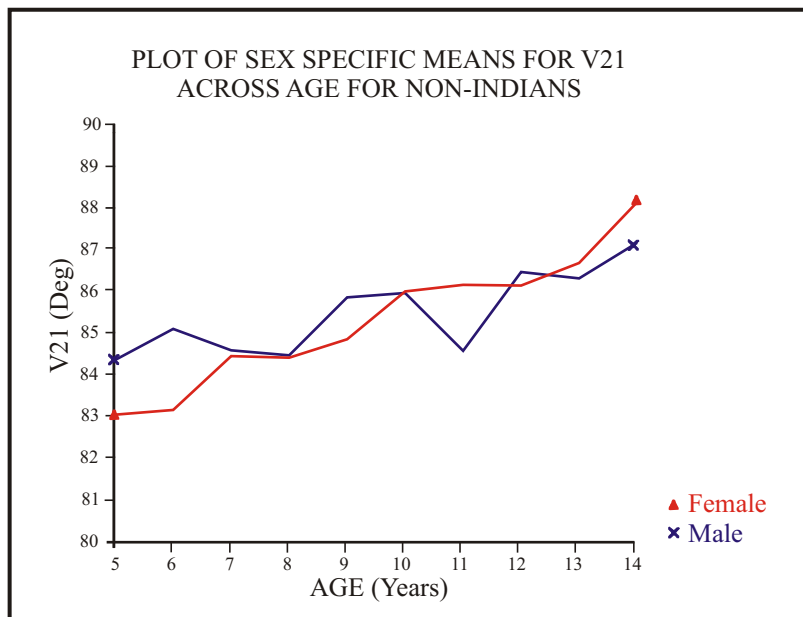
PG-N/PO-OR 3-38/49-40

Male Non-Indian

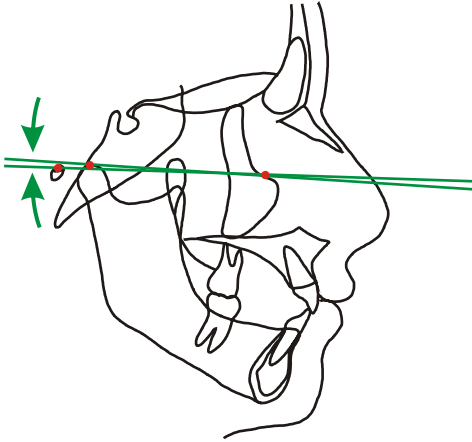
Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	83.213	86.167	84.288	1.2331	.707	-1.024
6	7	80.022	89.365	85.037	2.8280	-.368	.007
7	7	81.168	87.516	84.520	2.2342	-.120	-1.132
8	10	78.948	88.602	84.399	2.9936	-.391	-.752
9	9	80.621	89.338	85.798	2.5563	-.723	.034
10	7	82.429	89.394	85.904	2.2977	.057	-.780
11	9	78.792	89.915	84.508	3.6089	-.182	-1.136
12	9	83.747	89.298	86.411	2.3906	.056	-1.806
13	9	82.886	91.018	86.257	2.3815	.591	-.053
14	4	81.711	89.307	87.117	3.6279	-1.110	-.704

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	82.571	83.238	82.966	.35015	-.566	-1.500
6	7	78.185	87.637	83.080	3.0083	-.219	-.510
7	13	81.149	86.941	84.380	1.9671	-.355	-1.135
8	12	80.189	88.301	84.342	2.5109	.264	-.873
9	8	81.750	87.748	84.787	2.0384	-.044	-1.170
10	13	80.472	89.901	85.942	3.1122	-.456	-1.176
11	13	81.840	90.512	86.101	2.9852	-.017	-1.419
12	12	81.183	92.181	86.084	3.0463	.334	-.472
13	11	81.270	91.159	86.629	2.8183	-.351	-.524
14	10	83.027	92.468	88.097	3.4166	-.268	-1.252



ANGULAR MEASUREMENT VARIABLE 22



Frankfort Plane/Condylar Plane

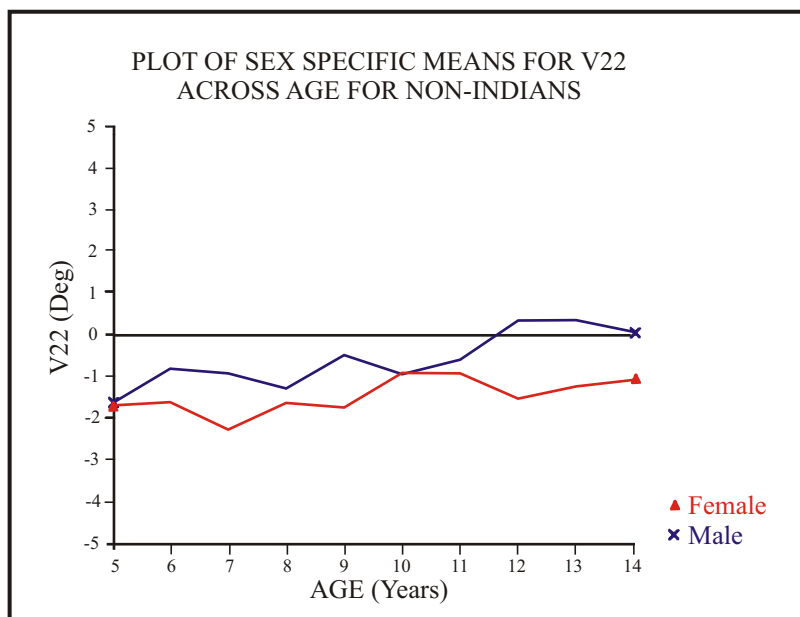
CO-OR/PO-OR 33-40/49-40

Male Non-Indian

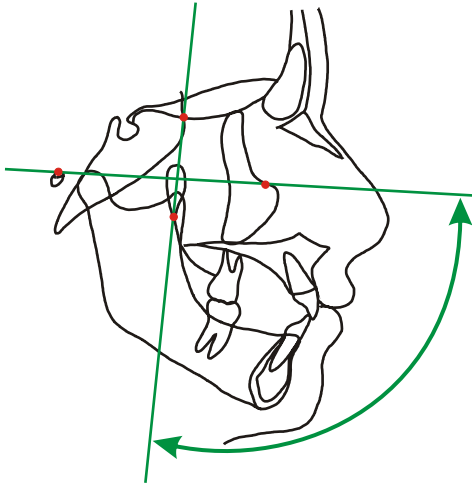
Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	-4.3447	-.35474	-1.7250	1.6442	-.840	-.718
6	7	-2.9949	.50098	-.76559	1.3412	-.575	-1.102
7	7	-2.4788	.56421	-.87856	1.0857	-.054	-1.062 **
8	10	-3.3213	1.0171	-1.2434	1.1773	.256	.039
9	9	-1.7424	.69507	-.43712	.76662	-.124	-.832 **
10	7	-2.8350	.64111	-.89865	1.2737	-.415	-1.088
11	9	-3.3701	2.3032	-.54867	1.5270	.025	.388
12	9	-1.9819	2.5781	.39771	1.5515	-.371	-1.005 **
13	9	-1.7190	3.1169	.40717	1.5008	.843	-.051
14	4	-.97437	2.7671	.12164	1.7774	1.103	-.710

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	-3.1360	-.48999	-1.6528	1.3518	-.411	-1.500
6	7	-2.9717	.77954	-1.5739	1.4401	.674	-1.097
7	13	-4.0239	.34814	-2.2364	1.3785	.475	-.993
8	12	-3.0115	.84106	-1.5920	1.1246	.812	-.184
9	8	-2.6345	-.66382	-1.7029	.72188	.030	-1.310
10	13	-2.7683	2.5508	-.86764	1.5529	.755	-.169
11	13	-2.6492	.76050	-.87829	1.0813	.008	-1.133
12	12	-2.9370	.95557	-1.4891	1.3261	.668	-.927
13	11	-3.8328	.84106	-1.1940	1.3015	-.558	-.150
14	10	-2.5239	.17822	-1.0350	.76598	-.607	-.503



ANGULAR MEASUREMENT VARIABLE 23



Frankfort Plane/PM Vertical

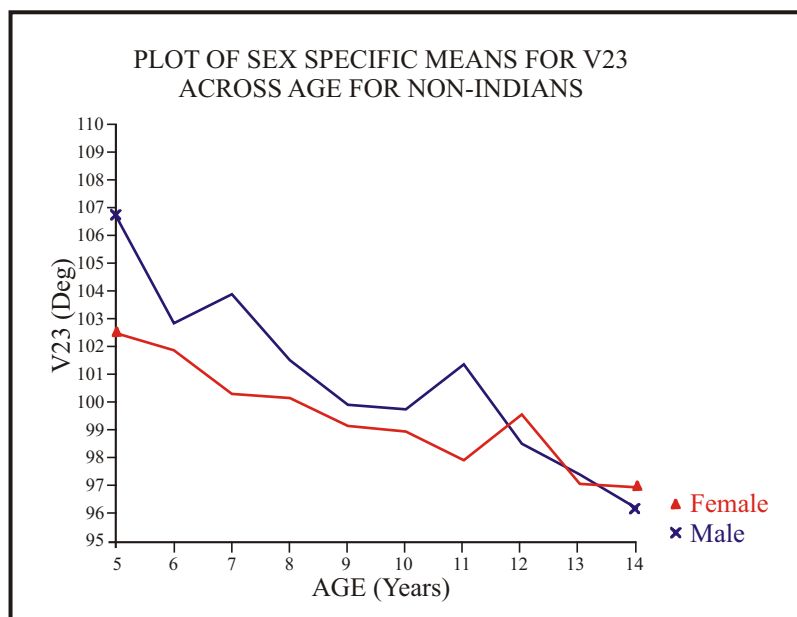
OR-PO/PTM-SE 40-49/43-36

Male Non-Indian

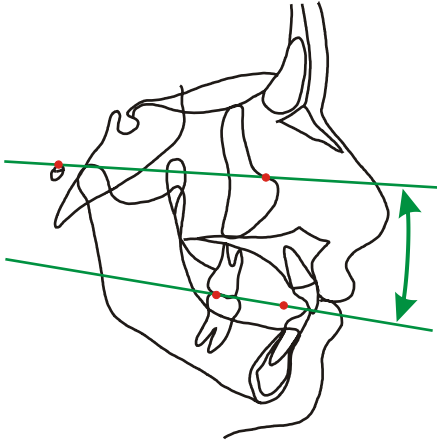
Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	99.029	113.93	106.79	5.5700	-.123	-.945
6	7	95.568	111.66	102.90	5.5411	.175	-.947
7	7	95.945	110.25	103.95	5.7435	-.374	-1.511
8	10	90.980	111.73	101.56	6.0413	-.202	-.426
9	9	93.468	109.31	99.946	5.1835	.614	-.735
10	7	93.306	105.10	99.781	4.6501	-.505	-1.208
11	9	91.473	113.09	101.41	6.9105	-.007	-.669
12	9	90.654	107.08	98.536	5.8276	.121	-1.362
13	9	90.888	104.78	97.420	4.3492	-.073	-.505
14	4	92.278	101.19	96.171	4.5488	.128	-1.830

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	98.063	106.45	102.54	4.2230	-.243	-1.500
6	7	99.398	103.84	101.92	1.5189	-.470	-.891
7	13	94.434	105.56	100.34	3.0753	-.168	-.540
8	12	96.268	108.32	100.19	3.7586	.861	-.306
9	8	92.890	106.13	99.180	3.6552	.255	.574
10	13	93.919	106.05	98.977	3.6191	.482	-.862
11	13	93.873	104.42	97.937	3.2910	.618	-.750
12	12	92.524	107.97	99.595	4.6448	.327	-.801
13	11	88.958	103.04	97.081	4.1936	-.684	-.266
14	10	92.124	103.43	96.954	3.8177	.738	-.764



ANGULAR MEASUREMENT VARIABLE 24



**Frankfort Plane/Functional
Occlusal Plane**

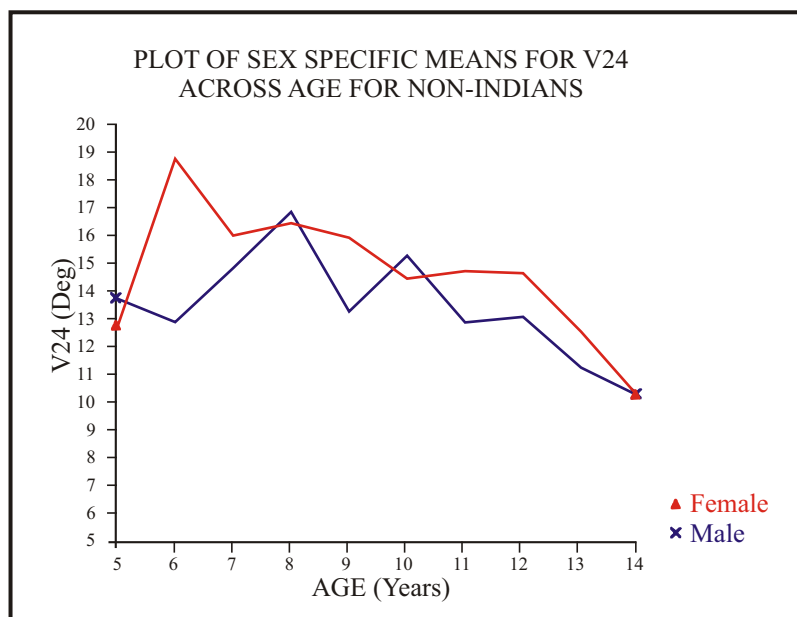
OR-PO/PMC-FPP 40-49/46-50

Male Non-Indian

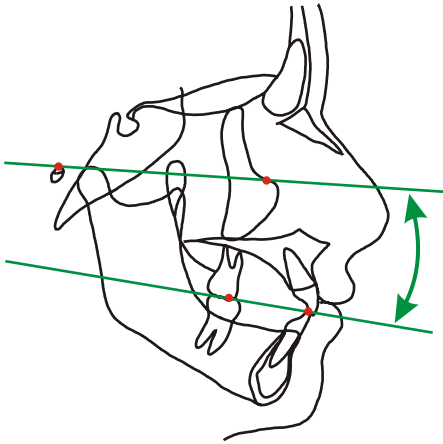
Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	9.3301	16.386	13.754	2.6702	-.975	-.338
6	7	8.6099	19.102	12.903	3.4983	.653	-.536 *
7	7	10.675	20.575	14.858	3.7084	.303	-1.114
8	10	12.243	22.101	16.894	3.0528	.141	-.844
9	9	10.931	15.864	13.287	1.9162	-.037	-1.476
10	7	8.7798	22.275	15.309	4.5576	-.030	-.862
11	9	7.2900	17.502	12.891	3.4587	-.202	-1.036
12	9	9.6460	16.137	13.093	2.2389	-.208	-1.300
13	9	4.7698	16.725	11.254	3.6144	-.077	-.435
14	4	4.8994	15.545	10.224	4.3948	-.001	-1.086

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	9.3765	15.376	12.704	3.0533	-.376	-1.500
6	7	13.146	23.432	18.817	3.1467	-.473	-.018
7	13	8.1262	25.645	16.037	4.4470	.454	.175
8	12	11.729	20.888	16.486	3.2648	-.334	-1.191
9	8	10.736	20.441	15.959	3.7660	-.037	-1.412
10	13	10.798	18.829	14.477	2.8096	.375	-1.346
11	13	6.4504	24.743	14.749	5.1301	.555	-.197
12	12	6.1392	20.617	14.674	4.7699	-.296	-.993
13	11	3.6726	22.394	12.556	5.2402	-.015	-.331
14	10	5.8083	15.314	10.175	3.3995	.265	-1.377



ANGULAR MEASUREMENT VARIABLE 25



**Frankfort Plane/Downs Occlusal Plane
Downs Analysis**

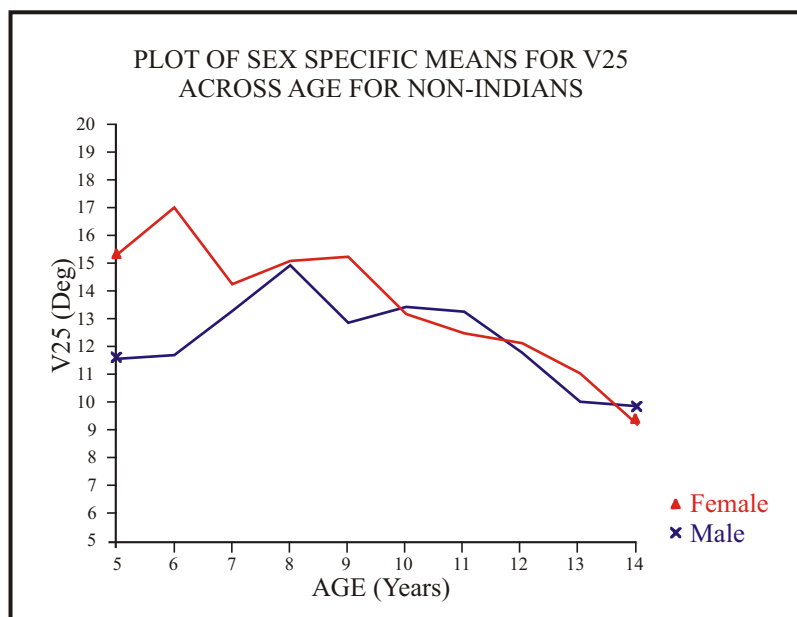
OR-PO/ADP-PDP 40-49/56-57

Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	8.8223	17.258	11.642	3.2467	1.242	-.018
6	7	7.9226	20.051	11.779	4.9156	.959	-.907
7	7	10.118	19.380	13.376	3.5296	.665	-.972
8	10	10.089	21.865	15.033	3.5462	.288	-.327
9	9	8.6716	19.227	12.950	3.1645	.533	-.116
10	7	9.7126	17.022	13.525	2.9091	-.209	-1.469
11	9	8.3367	18.419	13.352	3.8748	-.142	-1.418
12	9	7.0930	16.642	11.865	2.7486	.074	-.274
13	9	3.8435	14.659	10.090	3.4199	-.614	-.659
14	4	6.0369	18.052	9.9261	5.4833	1.070	-.723

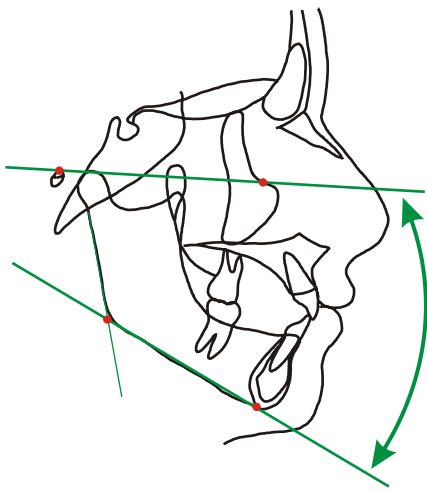
Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	13.156	18.237	15.394	2.5942	.405	-1.500
6	7	10.733	19.928	17.125	3.2387	-1.208	.162
7	13	9.1594	22.993	14.348	4.3276	.843	-.257
8	12	9.4731	19.095	15.190	3.4124	-.236	-1.365
9	8	12.750	19.595	15.341	2.9340	.566	-1.551
10	13	6.3171	19.894	13.266	4.2441	.191	-1.108
11	13	6.6868	19.610	12.569	4.2721	.195	-1.213
12	12	6.8218	18.237	12.211	3.0280	-.006	.013
13	11	5.5444	15.533	11.116	3.5099	-.181	-1.175
14	10	1.7705	14.362	9.2394	4.2796	-.560	-.775



ANGULAR MEASUREMENT

VARIABLE 26



Frankfort Plane/Mandibular Plane
Downs Analysis/Tweed Analysis

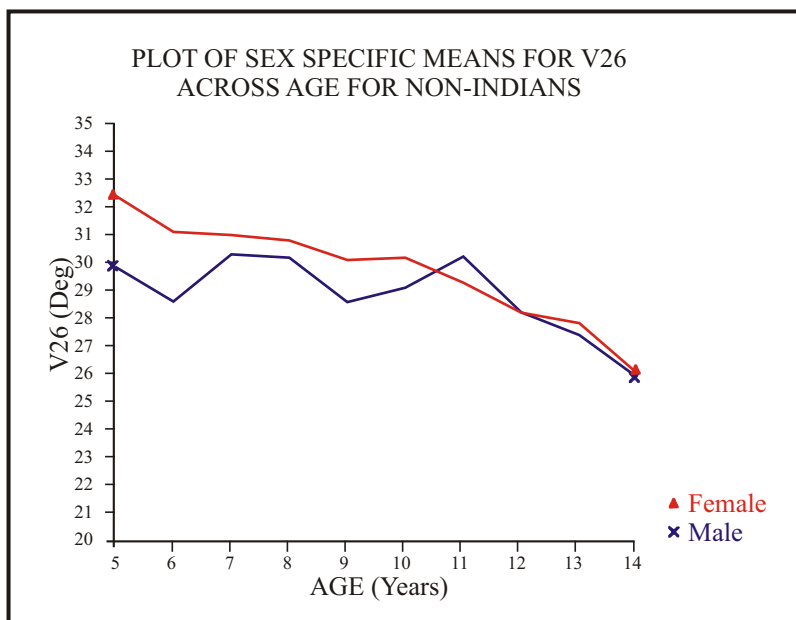
OR-PO/ME-GOI 40-49/1-28

Male Non-Indian

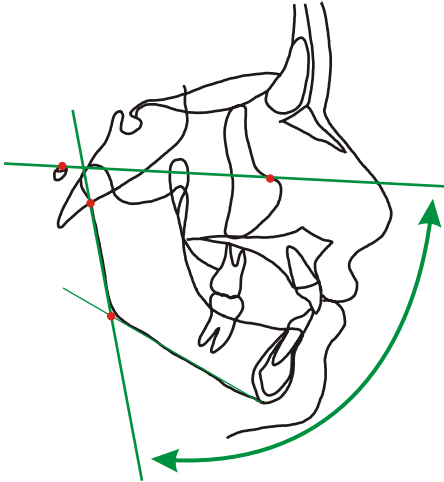
Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	26.210	33.385	29.869	3.2601	.179	-1.679
6	7	24.337	33.436	28.613	3.3209	.298	-1.167
7	7	24.673	36.197	30.322	3.7874	.048	-.800
8	10	24.532	34.967	30.202	3.9922	-.131	-1.565
9	9	24.685	33.118	28.593	3.2396	.017	-1.408
10	7	23.023	33.516	29.114	3.4106	-.582	-.400
11	9	25.389	34.448	30.243	3.1867	-.319	-1.281
12	9	23.665	31.790	28.222	2.6733	-.743	-.545
13	9	20.461	31.016	27.400	3.6190	-.829	-.609
14	4	22.557	29.867	25.868	3.6318	.119	-1.821

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	26.771	36.702	32.449	5.1164	-.472	-1.500
6	7	20.662	36.490	31.136	5.5851	-.938	-.278
7	13	25.779	39.040	31.022	3.5956	.529	-.006
8	12	25.589	36.154	30.825	3.9695	.210	-1.451
9	8	26.172	35.442	30.118	3.4216	.664	-1.023
10	13	25.400	38.126	30.201	3.8672	.837	-.191
11	13	22.059	36.601	29.297	4.2252	.236	-.289
12	12	21.536	33.541	28.210	3.1460	-.512	.082
13	11	21.935	34.031	27.832	3.6880	-.027	-.975
14	10	20.170	30.629	26.015	3.1329	-.367	-.548



ANGULAR MEASUREMENT VARIABLE 27



Frankfort Plane/Gonial Inter-section -Articulare Posterior

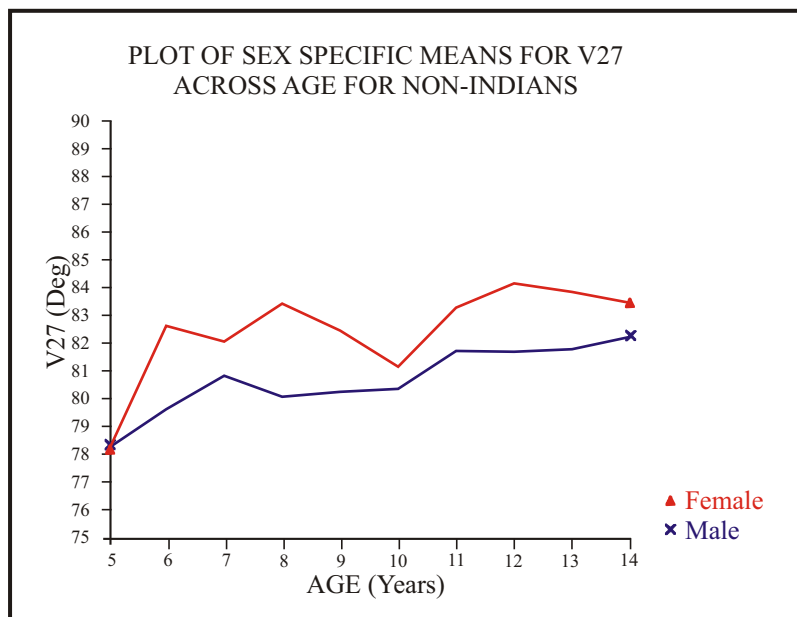
OR-PO/GOI-AR 40-49/28-31

Male Non-Indian

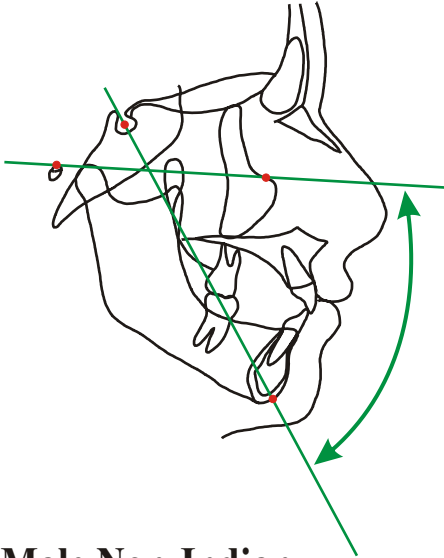
Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	5	73.028	83.262	78.434	3.9006	-.192	-1.066
6	7	75.634	83.183	79.846	2.6397	-.038	-.767
7	7	76.532	87.672	81.060	3.4276	.848	.308
8	10	74.527	85.467	80.299	3.3436	.031	-.551 **
9	9	75.190	87.927	80.477	4.0962	.427	-.687
10	7	76.093	87.013	80.585	4.1533	.602	-1.190
11	9	76.825	89.659	81.985	3.8903	.551	-.239
12	9	73.668	94.578	81.929	5.8643	.891	.700
13	9	74.574	89.429	82.021	4.3393	-.226	-.254
14	4	80.056	85.144	82.468	2.2507	.143	-1.481

Female Non-Indian

Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	3	74.325	81.858	78.318	3.7872	-.217	-1.500
6	7	79.717	90.870	82.867	3.8749	1.355	.732
7	13	75.292	92.519	82.298	4.5721	.373	.292
8	12	76.133	92.322	83.672	4.5856	.042	-.426
9	8	76.359	87.448	82.695	4.4626	-.128	-1.652
10	13	73.127	94.275	81.387	5.9208	.520	-.254
11	13	75.732	92.677	83.527	5.1544	.291	-.642
12	12	74.386	93.408	84.405	5.1022	-.263	-.275
13	11	77.370	92.769	84.095	4.6589	.436	-.491
14	10	77.414	92.912	83.700	5.1003	.293	-.802



ANGULAR MEASUREMENT VARIABLE 28



**Frankfort Plane/Sella-Gnathion
Downs Analysis**

OR-PO/GN-S

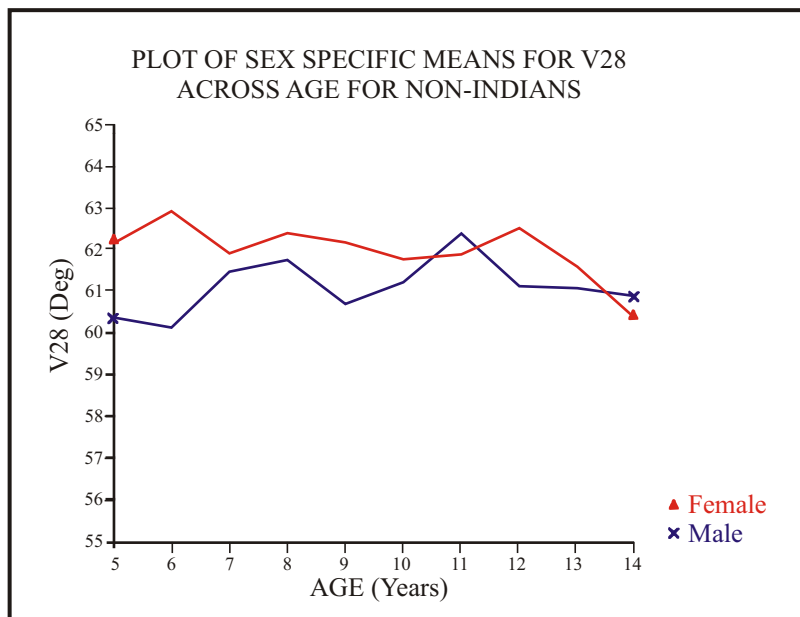
40-49/2-35

Male Non-Indian

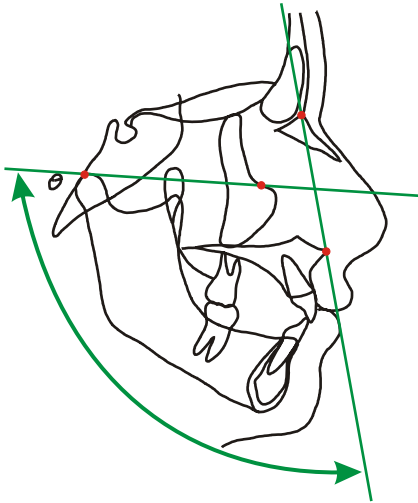
Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	5	57.835	62.088	60.429	1.7328	-.627	-1.078
6	7	57.419	64.565	60.185	2.3424	.806	-.166
7	7	58.715	64.188	61.534	2.0721	.060	-1.360
8	10	59.006	66.227	61.817	2.4736	.451	-.994
9	9	58.665	64.437	60.755	1.9594	.614	-.704
10	7	58.107	64.211	61.280	2.2615	-.286	-1.229
11	9	58.016	69.627	62.456	3.4622	.846	.108
12	9	58.975	65.117	61.184	2.1932	.619	-1.010
13	9	56.508	64.069	61.136	2.2509	-.669	.189
14	4	59.368	64.917	60.944	2.6550	1.139	-.678

Female Non-Indian

Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	3	59.853	64.629	62.219	2.3884	.034	-1.500
6	7	56.791	65.800	62.994	3.0423	-1.289	.573
7	13	56.648	67.511	61.977	2.7910	.103	-.134
8	12	57.987	66.294	62.465	2.9024	-.156	-1.444
9	8	57.770	66.048	62.241	2.5246	-.178	-.325
10	13	57.065	68.193	61.833	3.2256	.750	-.437
11	13	55.551	67.913	61.952	3.1923	.067	-.019
12	11	59.609	65.381	62.586	1.9412	.073	-1.457
13	11	56.013	66.481	61.655	2.9902	-.168	-.515
14	10	54.844	66.557	60.405	3.2199	.153	-.105



ANGULAR MEASUREMENT VARIABLE 29



**Condylar Plane/Nasion-Anterior
Nasal Spine**

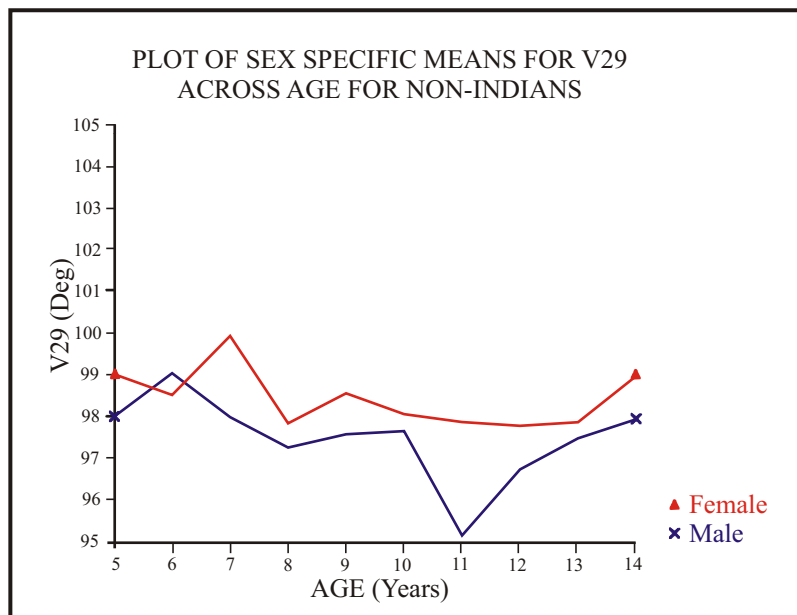
ANS-N/CO-OR 10-38/33-40

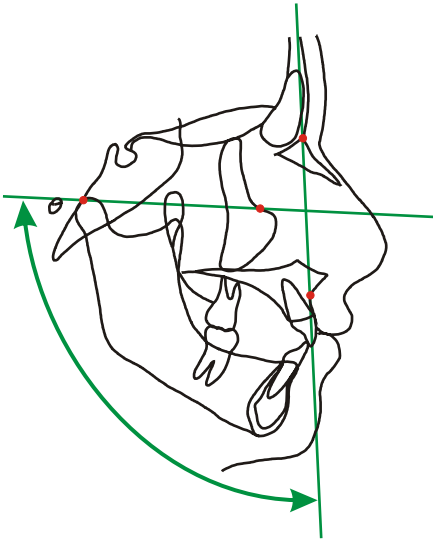
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	94.757	102.38	97.975	2.8490	.613	-.691
6	7	92.964	108.83	99.023	5.7905	.540	-.910
7	7	92.323	105.82	97.963	4.2934	.612	-.147
8	10	93.052	104.19	97.228	3.8999	.616	-1.037
9	9	93.542	104.33	97.549	3.4491	.580	-.316
10	7	94.841	101.30	97.625	2.5208	.317	-1.456
11	9	91.742	100.02	95.105	2.7092	.455	-.742 *
12	9	93.468	101.71	96.700	2.7431	.600	-.606
13	9	92.509	101.84	97.451	3.6330	-.164	-1.395
14	4	93.184	100.70	97.910	3.2681	-.903	-.812

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	96.932	101.14	98.999	2.1025	.060	-1.500
6	7	91.768	102.46	98.498	3.4535	-.969	.207
7	13	95.508	104.33	99.923	2.3638	-.123	-.329
8	12	91.384	102.42	97.813	2.9951	-.796	.234
9	9	94.653	102.03	98.538	2.4233	-.070	-.944
10	13	91.944	102.93	98.035	3.1659	-.324	-.727
11	13	93.660	102.50	97.844	2.8898	.106	-1.257
12	12	93.028	104.01	97.753	3.4974	.602	-.844
13	11	93.853	102.95	97.840	2.8043	.321	-.942
14	10	93.962	106.43	98.952	4.0455	.452	-.887





ANGULAR MEASUREMENT VARIABLE 30

Condylar Plane/Nasion-A Point

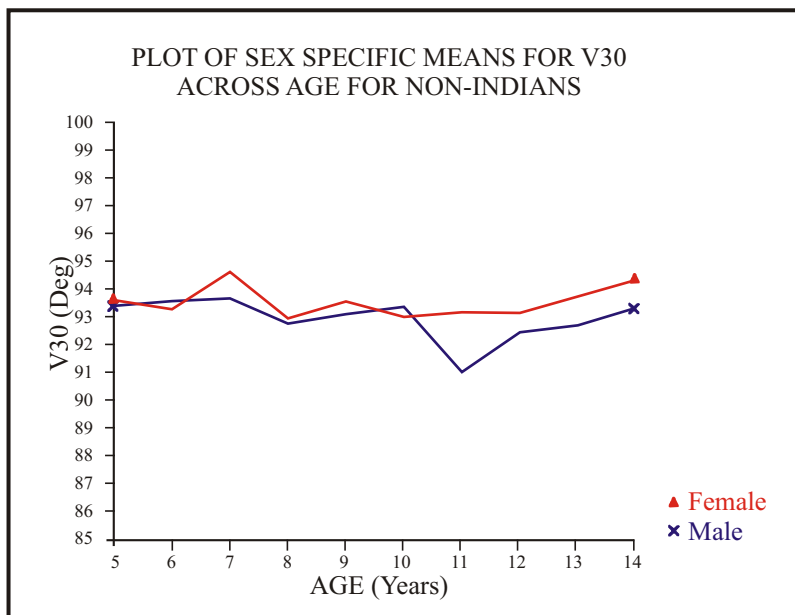
A-N/CO-OR 9-38/33-40

Male Non-Indian

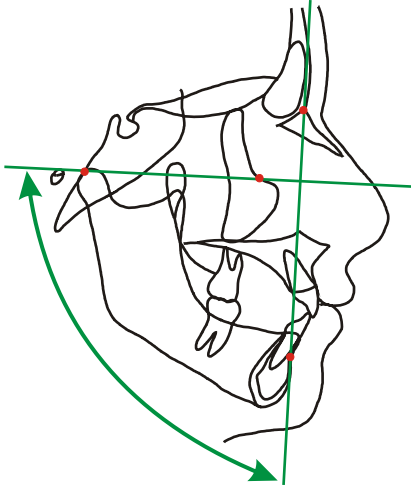
Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	91.053	97.528	93.359	2.6484	.802	-.808
6	7	87.573	100.86	93.531	4.9263	.342	-1.334
7	7	89.484	99.293	93.629	3.4271	.255	-.797
8	10	87.933	100.06	92.716	4.1457	.534	-1.081
9	9	88.216	98.484	93.058	3.1953	.190	-.823
10	7	89.716	97.405	93.324	2.5034	.226	-.682
11	9	87.506	95.941	90.961	2.9026	.401	-1.005
12	9	88.211	95.951	92.402	2.7131	-.387	-.721
13	9	88.655	95.843	92.654	2.8177	-.259	-1.474
14	4	90.117	95.645	93.286	2.4104	-.459	-1.231

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	91.079	94.874	93.566	2.1554	-.704	-1.500
6	7	85.139	97.785	93.236	4.1422	-.971	.257
7	13	88.654	99.171	94.588	2.7327	-.342	.017
8	12	86.824	97.796	92.905	2.8844	-.395	.121
9	9	89.472	97.149	93.518	2.4460	-.318	-.752
10	13	86.862	97.311	92.958	3.0116	-.413	-.558
11	13	87.921	97.538	93.127	3.0197	-.128	-1.093
12	12	89.883	99.197	93.103	3.3169	.724	-.921
13	11	89.658	100.08	93.699	3.2898	.701	-.634
14	10	90.068	102.90	94.296	4.1401	.853	-.276



ANGULAR MEASUREMENT VARIABLE 31



Condylar Plane/Nasion-B Point

B-N/CO-OR

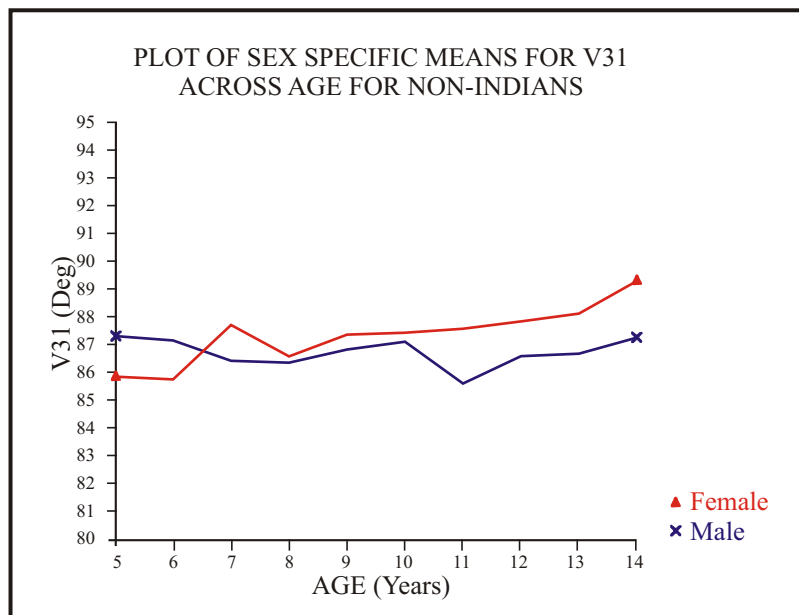
4-38/33-40

Male Non-Indian

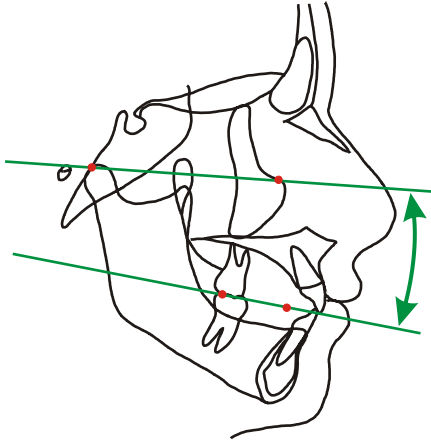
Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	5	84.469	90.212	87.403	2.3456	.059	-1.426
6	7	81.801	90.275	87.244	3.1091	-.762	-.722
7	7	81.772	88.368	86.507	2.2026	-1.623	1.285
8	10	81.648	91.109	86.439	3.2093	-.032	-1.241
9	9	82.071	90.390	86.915	2.4289	-.640	-.094
10	7	83.781	89.748	87.198	2.3195	-.373	-1.303
11	9	82.400	89.386	85.684	3.0413	.187	-1.746
12	9	82.995	89.498	86.675	2.4663	-.419	-1.122
13	9	83.203	88.686	86.765	1.8954	-.921	-.611
14	4	82.902	90.225	87.348	3.1487	-.765	-.911

Female Non-Indian

Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	3	83.915	88.240	85.933	2.1771	.240	-1.500
6	7	77.771	89.852	85.833	4.1651	-1.066	-.018
7	13	84.753	92.382	87.804	2.4364	.455	-1.070
8	12	82.928	91.267	86.667	2.4963	.250	-.476
9	9	84.516	90.623	87.455	2.2955	-.084	-1.520
10	13	81.842	92.163	87.524	3.4510	-.218	-1.287
11	13	82.605	91.738	87.668	3.1148	-.191	-1.305
12	12	84.278	92.868	87.934	2.7527	.261	-.959
13	11	82.643	92.858	88.217	3.0232	-.202	-.673
14	10	84.502	94.803	89.400	3.3907	.008	-1.171



ANGULAR MEASUREMENT VARIABLE 32



**Condylar Plane/Functional
Occlusal Plane**

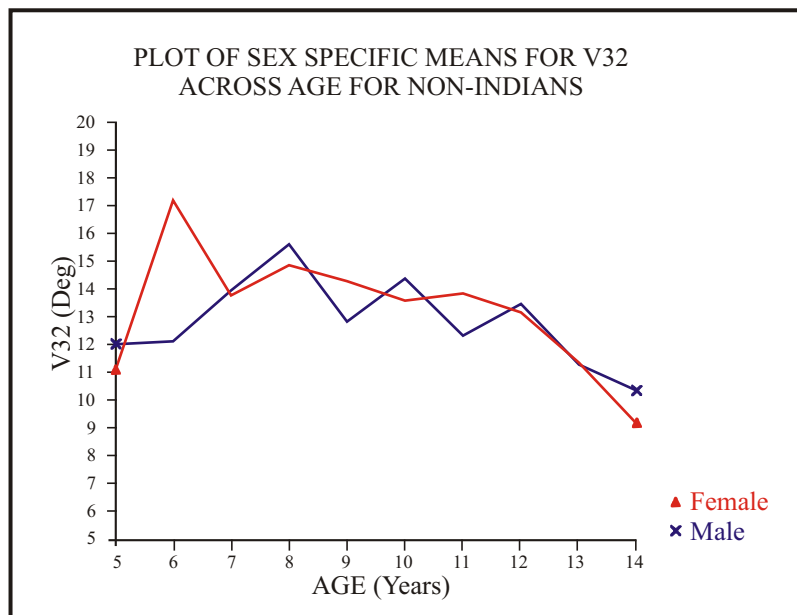
OR-CO/PMC-FPP 40-33/46-50

Male Non-Indian

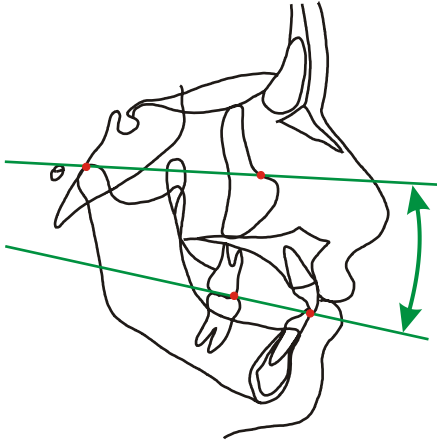
Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	8.8799	15.122	12.029	2.4441	-.085	-1.254
6	7	9.1108	19.263	12.137	3.4215	1.464	.809 *
7	7	9.7908	18.707	13.980	2.9633	.099	-.736
8	10	11.607	20.018	15.651	2.5090	.261	-.619
9	9	10.266	15.256	12.850	1.6676	.032	-1.053
10	7	9.4209	19.440	14.410	3.7444	-.147	-1.268
11	9	7.5786	16.439	12.342	2.6583	-.298	-.494
12	9	11.299	16.318	13.491	1.5592	.376	-.677
13	9	7.8867	16.349	11.294	3.0074	.418	-1.202
14	4	4.4434	14.571	10.346	4.7504	-.340	-1.531

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	6.2405	14.044	11.052	4.2077	-.646	-1.500
6	7	10.883	21.372	17.243	3.3948	-.711	-.021
7	13	5.3113	22.080	13.800	4.6064	-.150	-.570
8	12	9.7603	18.798	14.894	2.8941	-.286	-.892
9	9	8.1653	19.519	14.315	3.8266	-.159	-1.024
10	13	8.0457	17.958	13.610	3.1448	-.251	-1.111
11	13	4.3472	23.512	13.871	5.4888	.245	-.560
12	12	4.8694	18.617	13.184	4.4386	-.350	-1.011
13	11	1.0132	21.211	11.362	5.5515	-.332	-.087
14	10	4.8223	13.782	9.1405	3.4687	.092	-1.615



ANGULAR MEASUREMENT VARIABLE 33



Condylar Plane/Downs Occlusal Plane

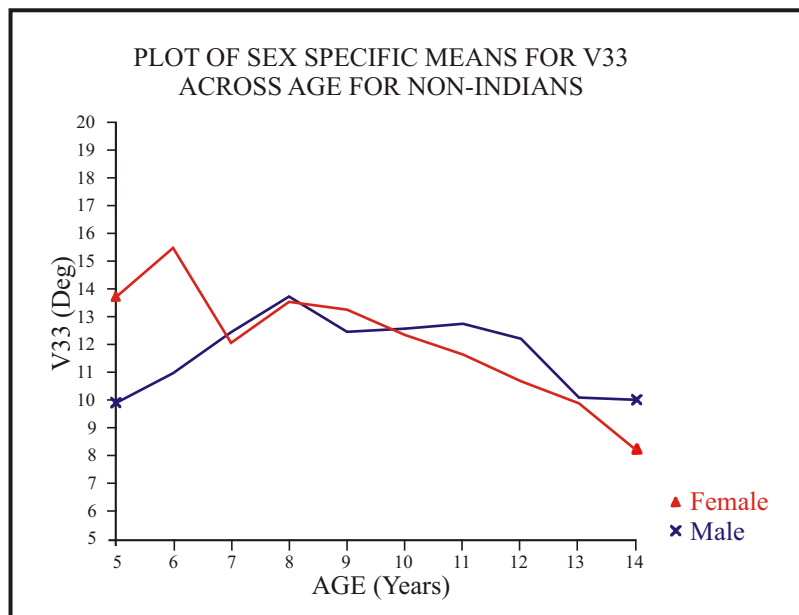
OR-CO/ADP-PDP 40-33/56-57

Male Non-Indian

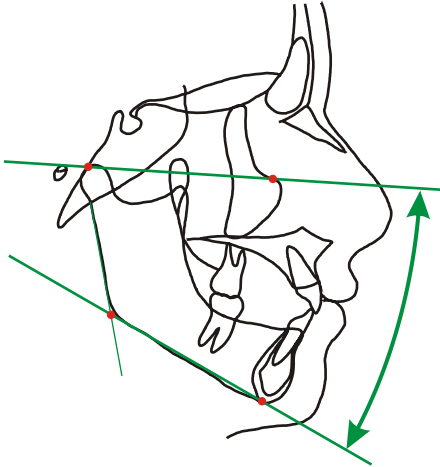
Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	6.4131	15.994	9.9175	3.6476	1.012	-.313
6	7	5.9688	20.212	11.014	5.1642	.889	-.640
7	7	8.5845	18.616	12.498	3.3779	.748	-.480
8	10	10.080	20.320	13.790	3.2574	.621	-.444
9	9	7.5608	18.618	12.513	3.0884	.405	.188
10	7	9.1104	16.249	12.627	2.6816	-.034	-1.453
11	9	7.6606	16.958	12.804	3.0960	-.489	-.895
12	9	7.7400	15.137	12.262	2.5005	-.506	-.888
13	9	4.4688	13.490	10.131	2.9644	-.843	-.609
14	4	5.5808	17.078	10.048	5.0982	.679	-1.084

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	11.654	17.747	13.741	3.4703	.705	-1.500
6	7	8.4695	19.349	15.551	3.5259	-1.145	.496
7	13	7.1074	19.428	12.112	4.2325	.414	-.992
8	12	9.2947	17.353	13.598	2.9222	-.028	-1.585
9	9	10.728	18.564	13.315	3.1293	.750	-1.222
10	13	5.0647	19.809	12.398	4.5428	.043	-1.044
11	13	4.3835	18.677	11.690	4.7593	.101	-1.256
12	12	5.5520	16.236	10.722	3.1494	-.157	-.448
13	11	3.7517	15.038	9.9219	3.8540	-.136	-1.340
14	10	1.0503	13.260	8.2044	4.3046	-.470	-1.130



ANGULAR MEASUREMENT VARIABLE 34



Condylar Plane/Mandibular Plane

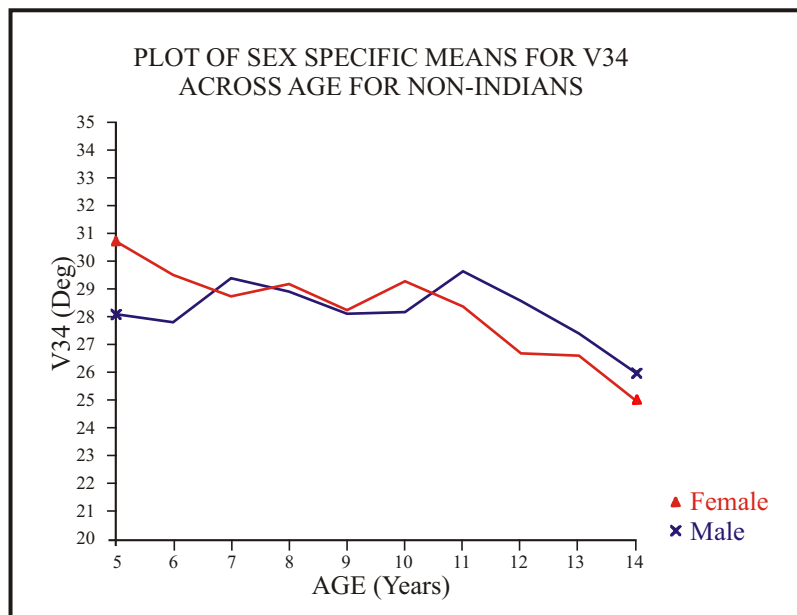
OR-CO/ME-GOI 40-33/1-28

Male Non-Indian

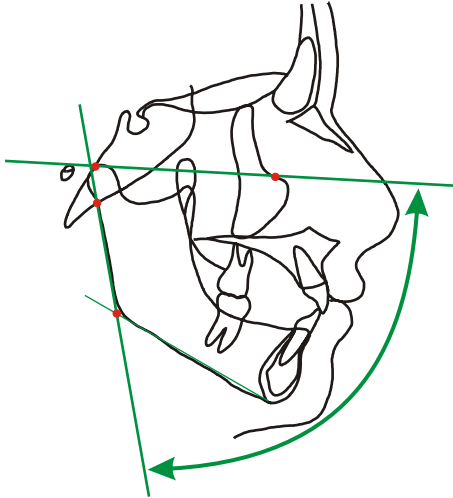
Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	5	25.855	32.120	28.144	2.4968	.830	-.702
6	7	24.520	33.597	27.848	3.2634	.729	-.655
7	7	25.237	34.328	29.443	3.2677	.119	-1.206
8	10	24.079	33.421	28.958	3.4932	-.068	-1.574
9	9	23.906	32.510	28.156	3.0879	.064	-1.403
10	7	23.665	31.296	28.216	2.8039	-.339	-1.098
11	9	26.673	32.169	29.694	2.0501	-.299	-1.486
12	9	25.111	31.498	28.620	2.0070	-.238	-.775
13	9	23.578	30.640	27.440	2.5143	-.188	-1.338
14	4	22.101	28.893	25.989	2.8842	-.525	-1.063

Female Non-Indian

Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	3	25.439	36.212	30.796	5.3871	.020	-1.500
6	7	18.398	35.211	29.563	6.1157	-.875	-.479
7	13	22.459	35.474	28.786	3.6283	.238	-.644
8	12	24.690	35.941	29.233	3.7515	.595	-1.046
9	9	24.313	34.779	28.287	3.4378	.913	-.460
10	13	22.632	38.042	29.333	4.3930	.455	-.637
11	13	19.409	37.070	28.418	4.7837	-.149	-.233
12	12	20.266	31.010	26.721	3.3468	-.639	-.614
13	11	19.680	32.848	26.638	4.0528	-.309	-.797
14	10	17.646	29.586	24.980	3.3555	-.771	.506



ANGULAR MEASUREMENT VARIABLE 35



**Condylar Plane/Articulare,
Posterior-Gonial Intersection**

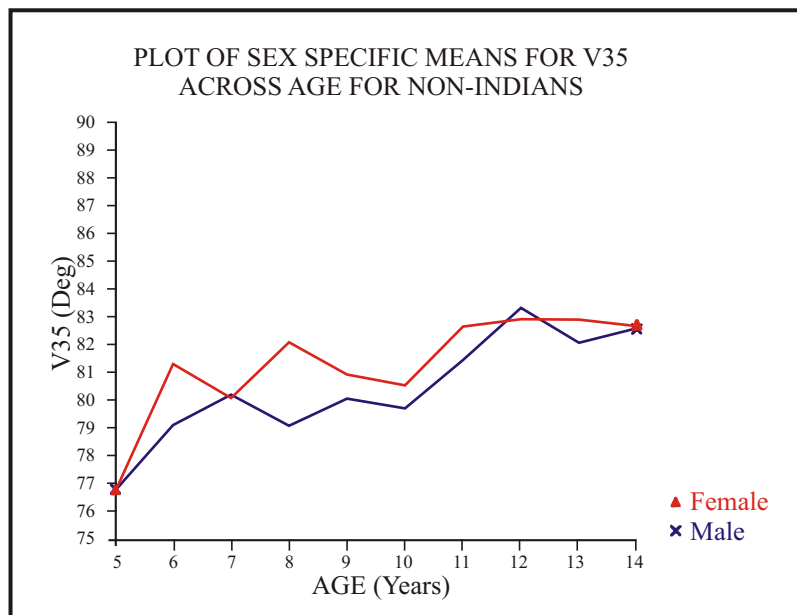
OR-CO/GOI-AR 40-33/28-31

Male Non-Indian

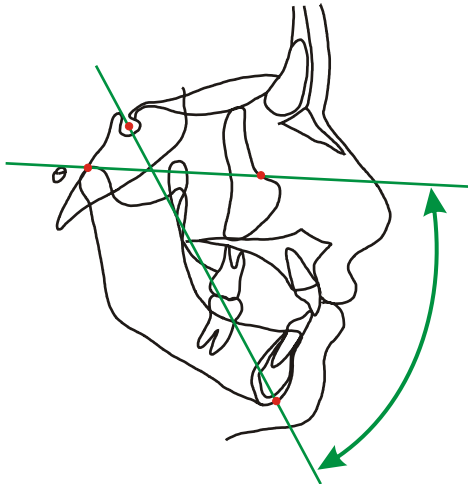
Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	5	68.683	81.998	76.709	5.3109	-.620	-.985
6	7	74.117	83.296	79.081	2.7490	-.404	.150
7	7	74.664	85.193	80.182	3.2852	-.238	-.356
8	10	72.444	83.922	79.056	3.2993	-.577	-.202 *
9	9	74.921	86.816	80.039	3.8856	.289	-.842
10	7	73.258	84.687	79.686	4.2050	-.104	-1.130
11	9	75.802	86.289	81.437	3.3042	-.437	-.845
12	9	74.981	92.778	82.326	5.3026	.534	-.202
13	9	76.589	87.710	82.062	3.6071	-.108	-.983
14	4	79.206	87.911	82.590	3.7804	.758	-.950

Female Non-Indian

Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	3	72.992	81.368	76.665	4.2821	.416	-1.500
6	7	77.250	87.899	81.293	3.6816	.627	-.450
7	13	72.668	90.546	80.061	4.9635	.392	-.288
8	12	74.949	89.926	82.080	4.1936	.150	-.524
9	9	75.214	86.417	80.912	4.0170	.020	-1.519
10	13	73.418	92.596	80.520	5.7873	.504	-.587
11	13	74.906	92.773	82.649	5.6513	.469	-.472
12	12	73.116	94.364	82.916	5.4692	.151	.215
13	11	75.115	92.199	82.901	5.0274	.483	-.504
14	10	75.012	91.869	82.665	5.4396	.059	-.972



ANGULAR MEASUREMENT VARIABLE 36



Condylar Plane/Sella-Gnathion

OR-CO/GN-S

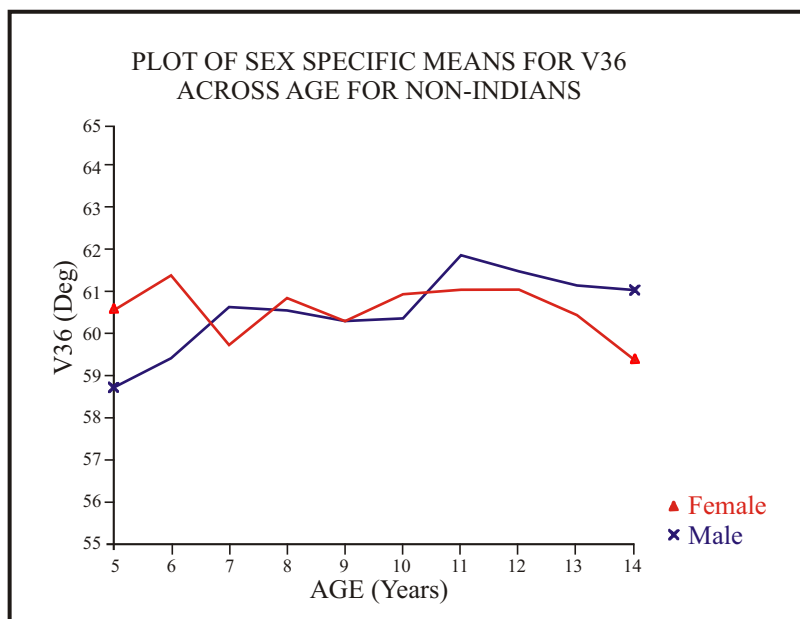
40-33/2-35

Male Non-Indian

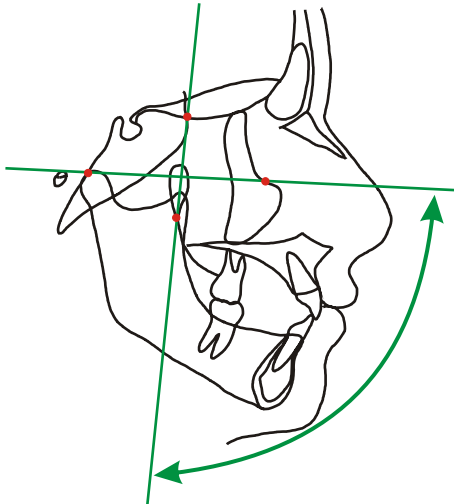
Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	5	55.624	60.610	58.704	2.0592	-.598	-1.067
6	7	57.058	64.726	59.420	2.6560	1.167	.354
7	7	59.279	63.424	60.656	1.4885	1.068	-.358
8	10	57.497	64.682	60.574	2.1830	.483	-.595
9	9	59.000	63.829	60.318	1.6608	1.217	.095
10	7	58.001	63.438	60.382	1.7789	.375	-.521
11	9	58.304	66.257	61.907	2.4470	.243	-.511
12	9	59.610	64.176	61.581	1.7255	.227	-1.490
13	9	59.625	63.353	61.177	1.1412	.664	-.423
14	4	58.873	63.943	61.065	2.5744	.146	-1.808

Female Non-Indian

Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	3	58.521	64.139	60.566	3.1053	.685	-1.500
6	7	54.527	65.720	61.420	3.8148	-.716	-.491
7	13	53.329	63.946	59.740	3.0811	-.344	-.481
8	12	57.088	66.081	60.873	2.8211	.262	-.786
9	9	55.911	65.384	60.315	2.7987	.278	-.449
10	13	54.297	68.108	60.965	3.7523	.120	-.537
11	13	53.447	66.743	61.074	3.6557	-.296	-.273
12	11	58.571	65.317	61.077	1.9613	.745	-.026
13	11	53.759	65.298	60.461	3.3369	-.398	-.415
14	10	52.321	65.515	59.370	3.4685	-.317	.410



ANGULAR MEASUREMENT VARIABLE 37



Condylar Plane/PM Vertical

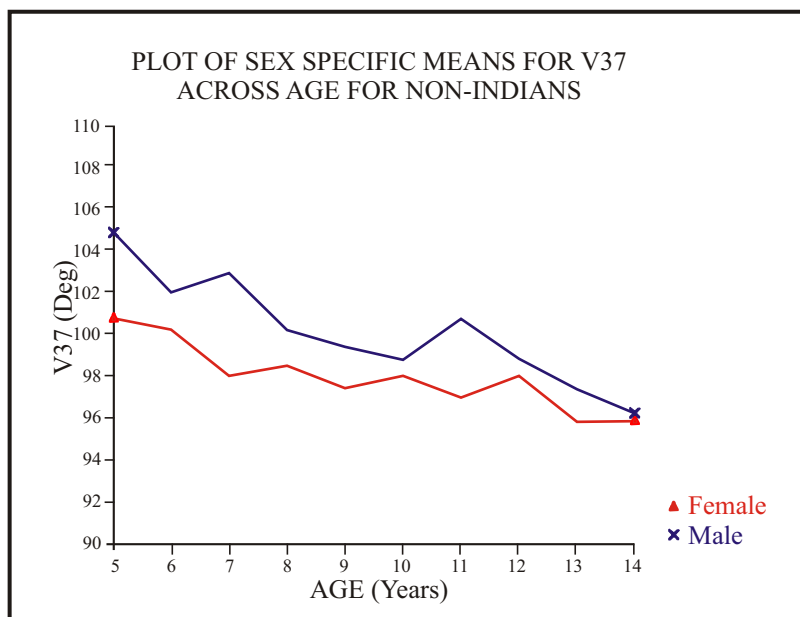
OR-CO/PTM-SE 40-33/43-36

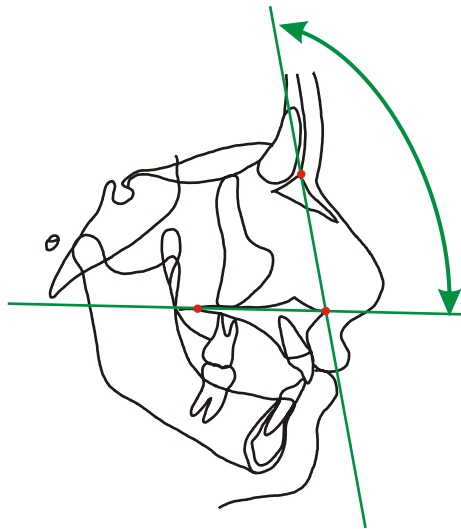
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	97.765	111.72	105.06	4.9464	-.216	-.493
6	7	93.803	110.14	102.14	5.3940	-.060	-.772
7	7	95.061	108.38	103.07	5.0920	-.548	-1.197 *
8	10	90.895	110.13	100.32	5.5968	-.129	-.395
9	9	93.150	109.53	99.509	5.2278	.750	-.476
10	7	92.996	102.27	98.882	3.8767	-.854	-1.115
11	9	91.503	109.72	100.86	5.9196	-.370	-.673
12	9	92.100	105.51	98.933	5.5640	.023	-1.576
13	9	91.167	104.66	97.461	4.2992	.019	-.773
14	4	91.428	100.21	96.293	3.8666	-.313	-1.373

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	96.730	105.96	100.89	4.6830	.345	-1.500
6	7	96.756	102.48	100.34	1.9694	-.859	-.445
7	13	91.677	104.79	98.107	3.5260	.094	-.399
8	12	93.672	106.12	98.597	3.9483	.514	-.891
9	9	91.266	103.49	97.512	3.1403	-.131	1.056
10	13	92.030	106.21	98.109	4.0820	.323	-.668
11	13	91.837	105.18	97.059	3.7103	.767	-.080
12	12	91.254	106.24	98.106	4.8905	.497	-1.001
13	11	86.704	102.54	95.887	4.8707	-.713	-.332
14	10	89.600	102.22	95.919	4.0720	.327	-.809





ANGULAR MEASUREMENT VARIABLE 38

**Palatal Plane/Nasion-Anterior
Nasal Spine**

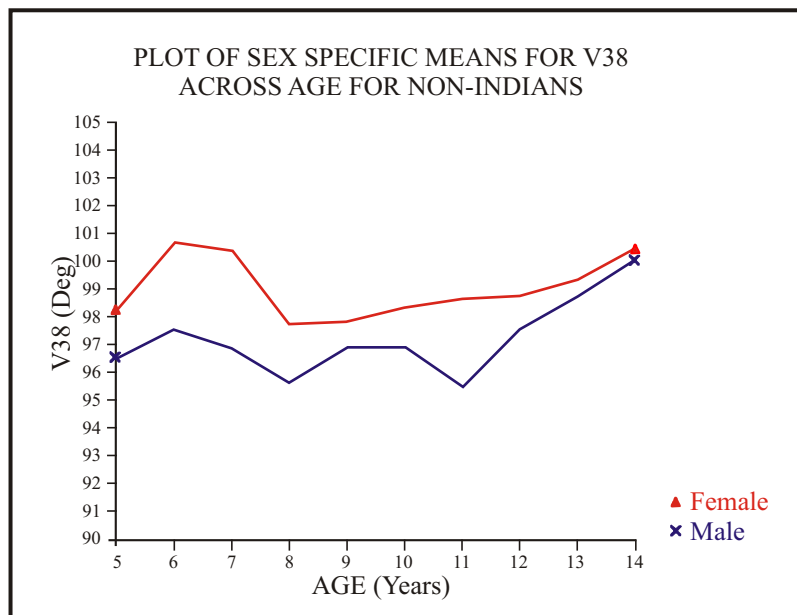
N-ANS/ANS-PNS 38-10/10-45

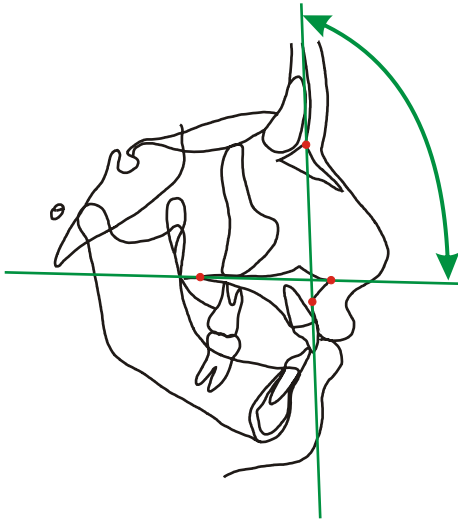
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	93.542	101.04	96.504	3.1213	.460	-1.161
6	7	90.120	104.12	97.570	4.6783	-.022	-.717
7	7	88.357	101.72	96.891	4.4134	-.932	.134
8	10	88.330	99.422	95.645	3.4985	-.775	-.184
9	9	91.532	100.98	96.928	3.5921	-.244	-1.518
10	7	91.645	99.098	96.928	2.6438	-1.229	.285
11	9	90.182	99.047	95.406	3.0151	-.201	-.993 *
12	9	92.684	101.36	97.558	2.9121	-.420	-1.024
13	9	92.094	101.80	98.748	3.2177	-.913	-.085
14	4	98.035	103.36	100.04	2.4202	.669	-1.139

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	95.792	101.91	98.105	3.3228	.659	-1.500
6	7	96.523	107.21	100.76	3.8665	.483	-1.005
7	13	96.272	104.30	100.30	2.3369	-.033	-.786
8	12	92.598	101.95	97.832	3.3047	.055	-1.429
9	9	92.835	104.58	97.846	4.1423	.720	-.728
10	13	93.349	105.04	98.342	3.5101	.192	-.806
11	13	93.248	106.17	98.661	3.6143	.492	-.258
12	12	92.216	104.66	98.741	4.2859	.053	-1.446
13	11	93.847	104.30	99.389	3.6602	-.001	-1.397
14	10	91.381	106.78	100.49	4.3826	-.598	-.001





ANGULAR MEASUREMENT VARIABLE 39

Palatal Plane/Nasion-A Point

N-A/ANS-PNS

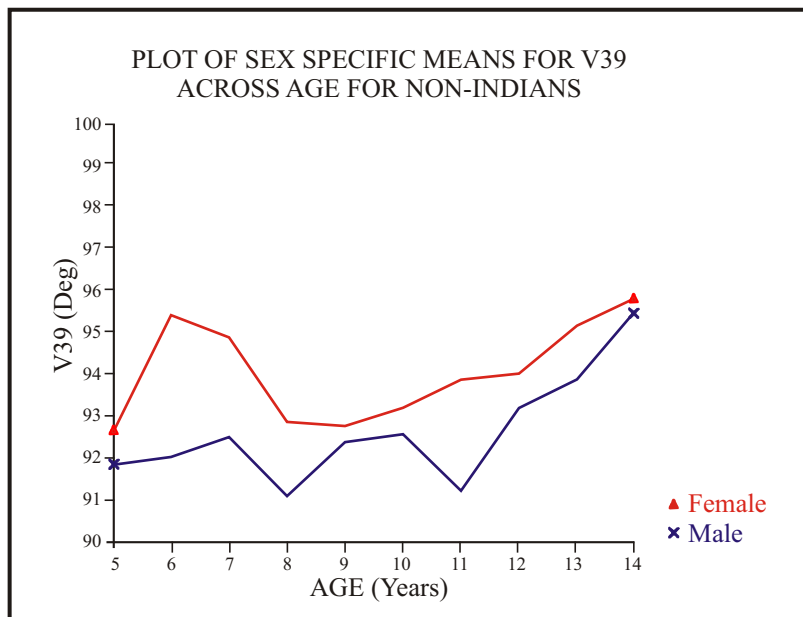
38-9/10-45

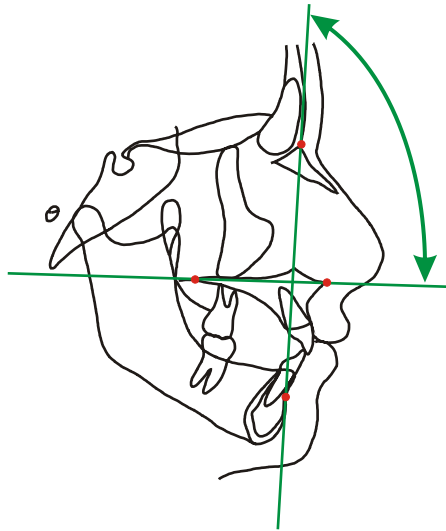
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	87.546	96.553	91.889	3.5203	.038	-1.221
6	7	86.064	98.209	92.078	4.1882	.091	-1.015
7	7	85.785	95.910	92.558	4.0385	-.871	-.929
8	10	84.314	95.160	91.133	3.7656	-.431	-1.106
9	9	88.151	96.879	92.436	3.1590	-.039	-1.477
10	7	88.924	95.814	92.627	3.0258	-.303	-1.699
11	9	87.060	95.349	91.262	3.1693	.213	-1.556
12	9	89.512	96.425	93.260	2.6385	-.107	-1.594
13	9	89.446	97.589	93.950	2.7497	-.272	-1.148
14	4	92.122	98.301	95.415	2.8548	-.140	-1.650

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	89.939	97.729	92.672	4.3846	.700	-1.500
6	7	89.741	104.06	95.502	4.9561	.490	-.734
7	13	90.950	100.30	94.965	2.7663	.415	-.618
8	12	87.295	98.440	92.924	3.3588	.055	-.963
9	9	87.759	100.66	92.825	4.4258	.772	-.714
10	13	88.176	99.811	93.265	3.3707	.400	-.560
11	13	88.263	101.38	93.944	3.6824	.453	-.260
12	12	88.704	100.65	94.091	3.9025	.240	-1.101
13	11	88.616	101.82	95.248	3.9669	.053	-.964
14	10	87.824	101.78	95.838	4.0351	-.423	-.159





ANGULAR MEASUREMENT VARIABLE 40

Palatal Plane/Nasion-B Point

N-B/ANS-PNS

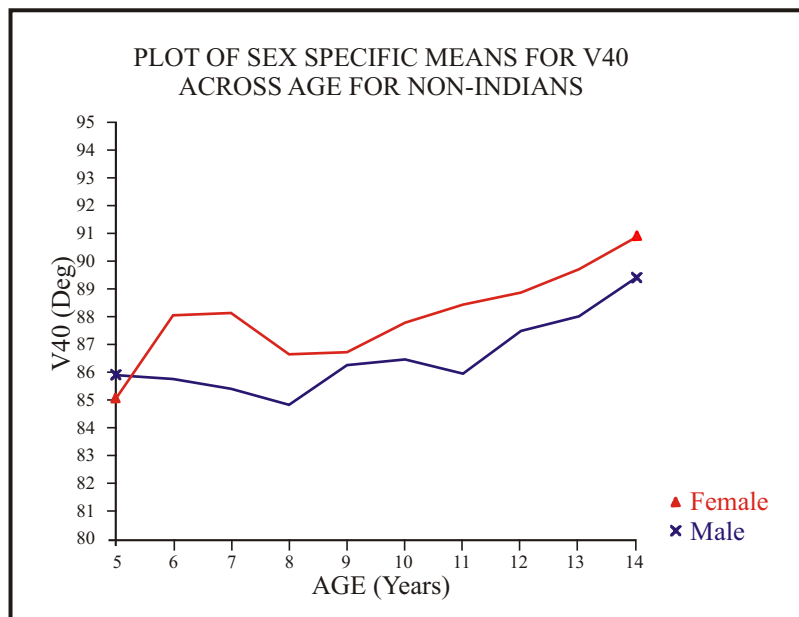
38-4/10-45

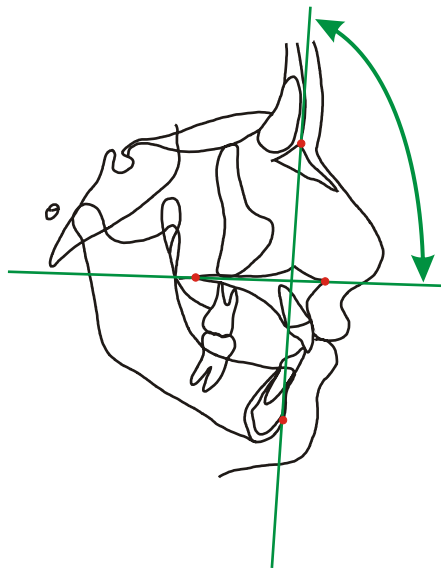
Male Non-Indian

Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	5	82.852	88.865	85.933	2.2604	-.082	-1.003
6	7	82.087	90.192	85.791	2.5496	.352	-.350
7	7	82.090	88.688	85.436	2.4294	.089	-1.230
8	10	81.693	88.660	84.856	2.6525	.230	-1.404
9	9	82.274	89.659	86.294	2.5209	-.379	-.897
10	7	83.230	89.509	86.500	2.5746	-.041	-1.643
11	9	81.480	89.130	85.985	2.4714	-.393	-.836 *
12	9	84.168	89.838	87.532	2.0727	-.236	-1.271
13	9	83.309	91.286	88.061	2.6308	-.230	-.694
14	4	87.914	90.306	89.478	1.0738	-.961	-.815

Female Non-Indian

Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	3	82.775	88.626	85.039	3.1419	.637	-1.500
6	7	83.713	94.122	88.098	3.6211	.358	-.877
7	13	82.711	93.793	88.182	3.0354	.103	-.307
8	12	81.610	90.266	86.686	2.7442	-.262	-1.086
9	9	82.953	92.650	86.762	3.0453	.611	-.431
10	13	84.147	92.798	87.830	2.4230	.244	-.501
11	13	82.116	92.942	88.485	2.6596	-.705	.880
12	12	83.968	95.656	88.922	3.3615	.248	-.456
13	11	85.465	95.083	89.766	2.9596	.224	-.884
14	10	85.621	96.451	90.942	3.2257	-.049	-.706





ANGULAR MEASUREMENT VARIABLE 41

Palatal Plane/Nasion-Pogonion

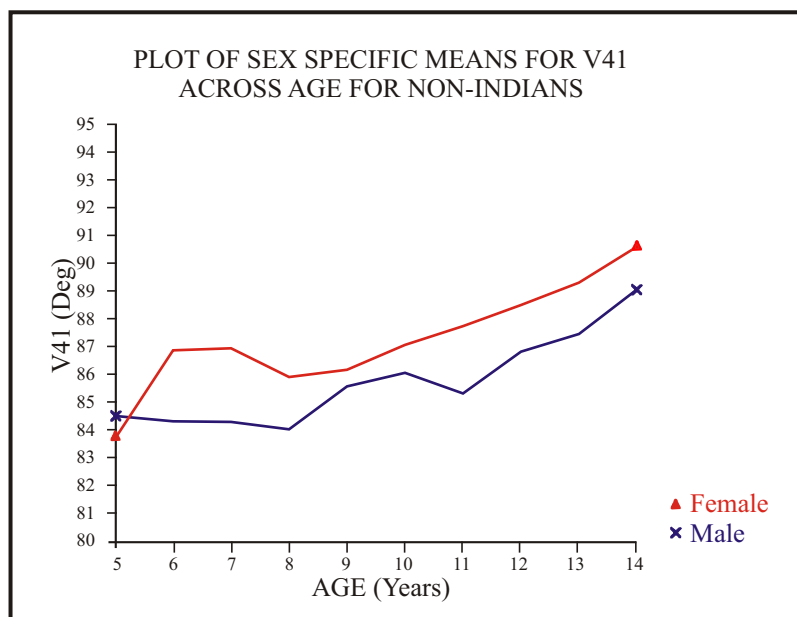
N-PG/ANS-PNS 38-3/10-45

Male Non-Indian

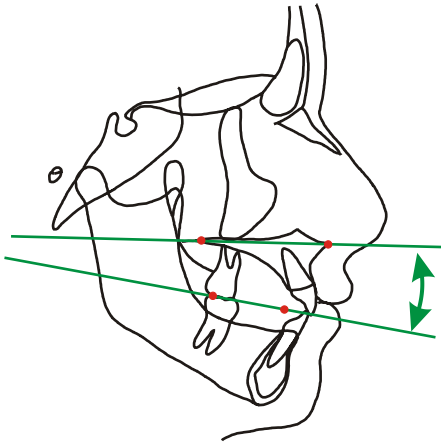
Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	5	81.724	87.304	84.543	2.1152	-.077	-1.066
6	7	80.982	88.860	84.349	2.6501	.532	-.700
7	7	81.498	88.359	84.327	2.6804	.472	-1.184
8	10	80.701	88.748	84.059	3.0797	.402	-1.339
9	9	81.759	89.305	85.614	2.6961	-.165	-1.081
10	7	82.553	89.646	86.105	2.9239	.127	-1.710
11	9	80.923	88.419	85.358	2.5295	-.296	-.946 *
12	9	83.392	89.830	86.872	2.1603	-.002	-.988
13	9	82.117	91.256	87.512	2.9298	-.398	-.681
14	4	88.096	89.797	89.125	.72919	-.753	-.912

Female Non-Indian

Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	3	81.848	86.562	83.725	2.4997	.602	-1.500
6	7	82.899	93.454	86.920	3.6171	.684	-.414
7	13	81.658	92.802	86.994	3.0375	.048	-.262
8	12	81.465	90.143	85.953	2.6791	.098	-1.037
9	9	82.502	92.136	86.216	2.9170	.733	-.106
10	13	84.022	91.921	87.117	2.2249	.576	-.267
11	13	81.934	92.355	87.796	2.5276	-.498	.778
12	12	83.838	95.207	88.561	3.2317	.394	-.388
13	11	85.049	94.617	89.372	3.1666	.209	-1.048
14	10	85.438	95.647	90.674	3.1819	-.128	-.932



ANGULAR MEASUREMENT VARIABLE 42



**Palatal Plane/Functional
Occlusal Plane**

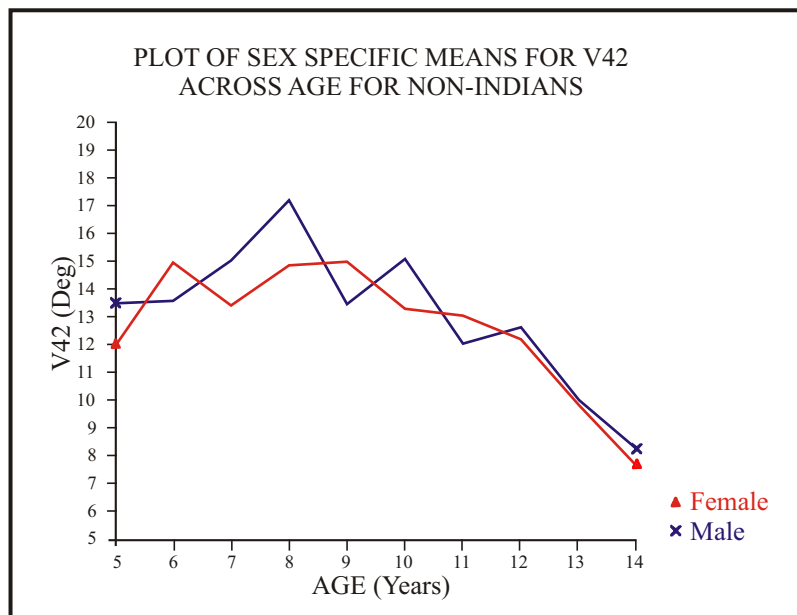
ANS-PNS/PMC-FPP 10-45/46-50

Male Non-Indian

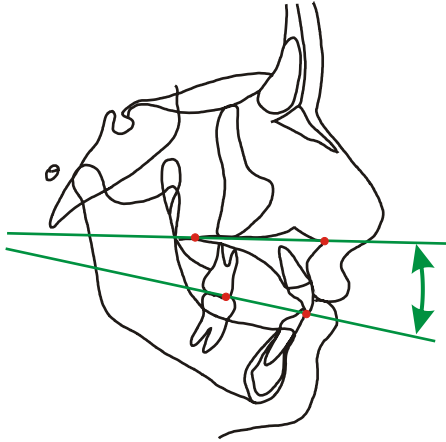
Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	5	7.4451	16.710	13.500	3.6663	-1.002	-.448
6	7	8.0271	18.594	13.590	3.2546	-.294	-.204
7	7	7.5195	19.176	15.051	4.8798	-.771	-1.177
8	10	10.428	23.804	17.234	4.9263	-.136	-1.452
9	9	10.826	16.581	13.472	2.2419	.230	-1.415
10	7	10.183	22.646	15.108	4.6614	.474	-1.077
11	9	8.0103	15.371	12.041	2.6365	-.295	-1.231
12	9	9.7834	15.978	12.633	2.4947	.405	-1.465
13	9	5.4661	14.556	9.9984	3.0141	-.003	-1.005
14	4	5.1460	11.137	8.2165	2.5400	-.088	-1.264

Female Non-Indian

Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	3	9.8879	15.184	11.946	2.8383	.632	-1.500
6	7	9.9946	18.434	14.978	2.9682	-.578	-.851
7	13	1.4272	20.897	13.423	4.9647	-.982	.847
8	12	9.8843	21.188	14.876	2.9296	.469	.282
9	9	11.977	18.986	15.008	2.0664	.468	-.235
10	13	10.221	16.643	13.303	1.6261	.111	.149
11	13	5.6060	18.582	13.054	4.1022	-.089	-1.080
12	12	6.8635	21.976	12.197	4.3126	.965	.291
13	11	3.9446	17.236	9.8132	4.4977	.434	-1.045
14	10	1.1575	17.242	7.5988	4.1068	1.035	1.530



ANGULAR MEASUREMENT VARIABLE 43



**Palatal Plane/Downs Occlusal
Plane**

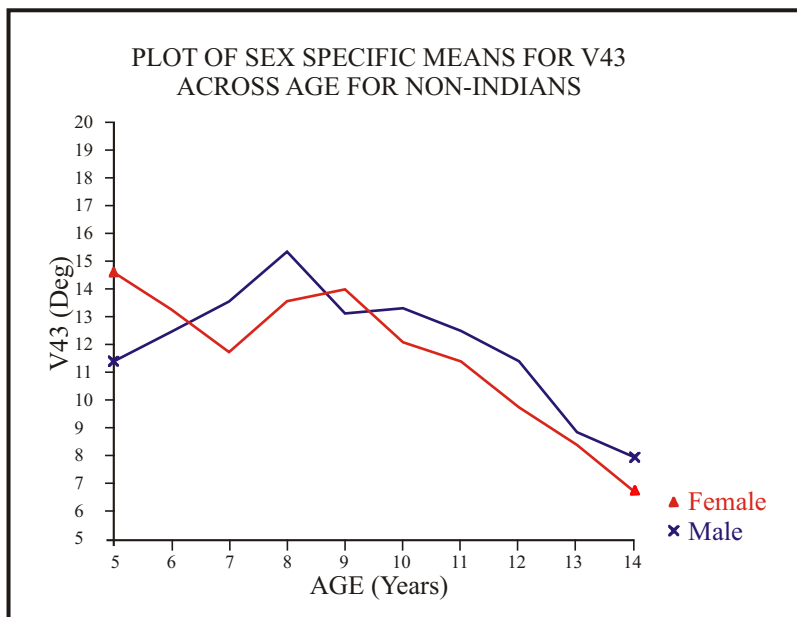
ANS-PNS/ADP-PDP 10-45/56-57

Male Non-Indian

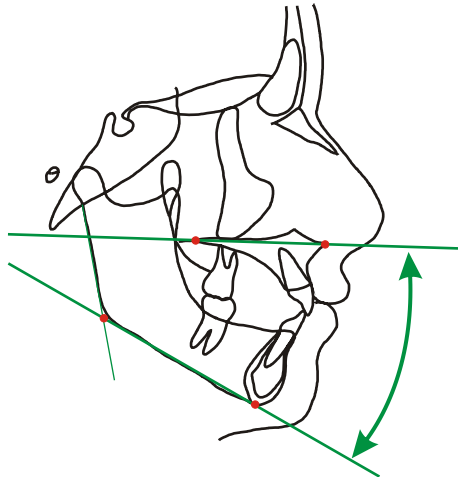
Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	6.9373	13.749	11.388	2.7832	-.823	-.656
6	7	4.9707	15.620	12.467	3.6158	-1.381	.788
7	7	10.461	15.148	13.569	1.7675	-.778	-.817
8	10	10.816	20.112	15.373	2.8704	-.071	-.756
9	9	10.605	17.897	13.135	2.1302	1.179	0.909
10	7	9.4602	16.446	13.325	2.6922	-.275	-1.525
11	9	9.8330	15.669	12.503	1.7362	.355	-.491
12	9	10.301	11.974	11.405	.61790	-.807	-.981
13	9	7.7031	11.756	8.8353	1.2966	1.441	.894
14	4	6.2834	9.9658	7.9187	1.5222	.457	-.954

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	12.963	16.180	14.636	1.6120	-.146	-1.500
6	7	9.6646	15.277	13.286	1.9324	-.849	-.237
7	13	3.2234	18.245	11.735	3.7863	-.457	.384
8	12	8.5342	16.709	13.579	2.4267	-.500	-.400
9	9	11.663	16.542	14.008	1.6689	.112	-1.112
10	13	8.9324	14.702	12.092	1.8504	-.191	-1.076
11	12	9.0313	13.252	11.397	1.6501	-.399	-1.466
12	12	6.5376	15.469	9.7348	2.5766	.811	.023
13	11	4.2712	13.857	8.3734	2.9789	.298	-.9692
14	10	3.3232	13.934	6.6627	3.0791	1.233	1.231



ANGULAR MEASUREMENT VARIABLE 44



Palatal Plane/Mandibular Plane

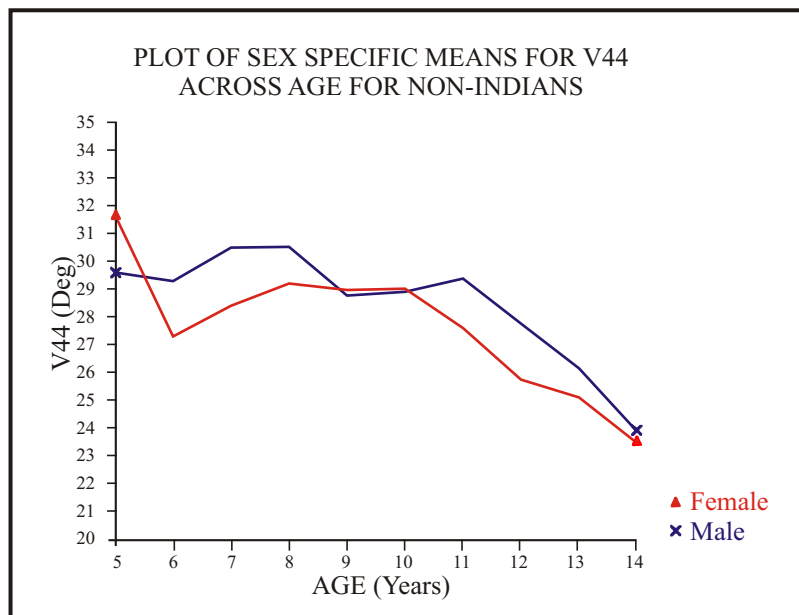
ANS-PNS/ME-GOI 10-45/1-28

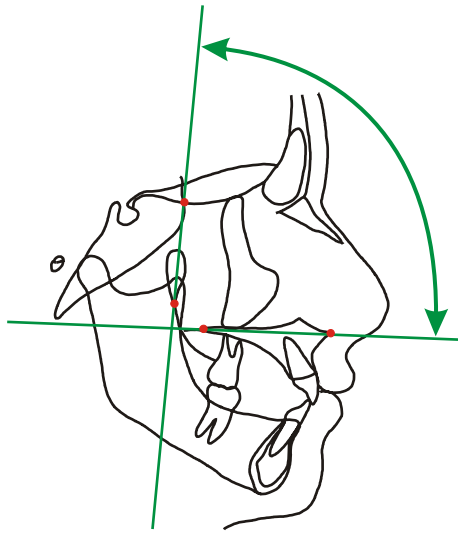
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	25.954	33.291	29.615	2.6006	.010	-.524
6	7	24.855	32.487	29.301	2.6210	-.420	-.788
7	7	24.683	34.798	30.515	3.4161	-.481	-.699
8	10	25.697	36.276	30.542	3.6106	.2237	-1.128
9	9	24.750	32.517	28.778	2.6741	-.081	-1.211
10	7	23.957	33.886	28.914	3.3531	.112	-.927
11	9	25.222	33.138	29.393	2.9139	-.071	-1.348
12	9	24.267	32.052	27.762	2.7561	.075	-1.264
13	9	21.820	30.327	26.144	3.1933	.032	-1.338
14	4	21.781	27.709	23.860	2.6309	.983	-.776

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	26.579	35.263	31.691	4.5421	-.551	-1.500
6	7	18.490	35.366	27.297	5.8088	-.128	-1.021
7	13	20.528	35.375	28.409	5.0400	-.080	-1.413
8	12	22.894	34.053	29.215	4.2852	-.255	-1.435
9	9	20.623	35.939	28.980	4.5496	-.556	-.278
10	13	22.633	34.218	29.027	3.9508	-.250	-1.268
11	13	19.618	33.454	27.602	4.6208	-.384	-1.158
12	12	17.943	33.095	25.734	4.0647	-.054	-.368
13	11	17.306	32.660	25.089	5.2732	-.121	-1.470
14	10	17.000	30.309	23.438	4.4662	.047	-1.333





ANGULAR MEASUREMENT VARIABLE 45

PM Vertical/Palatal Plane

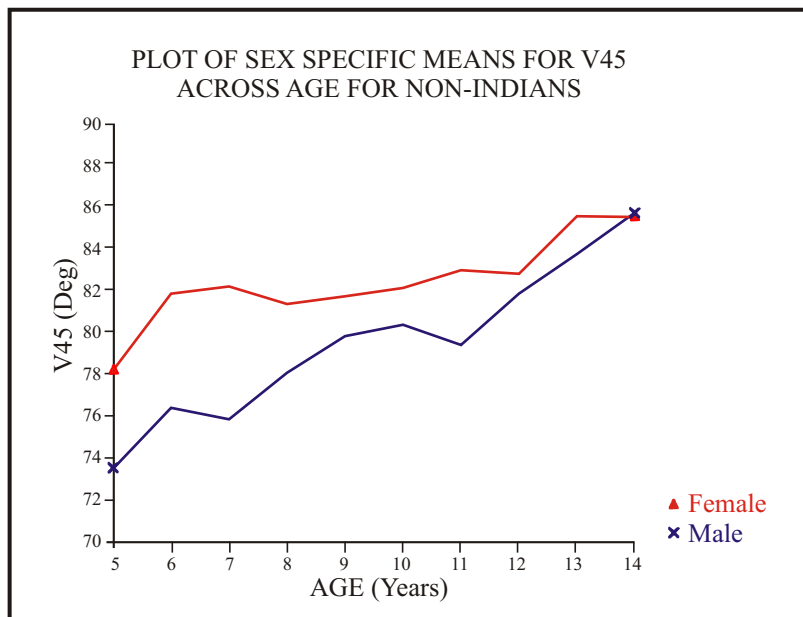
SE-PTM/ANS-PNS 36-43/10-45

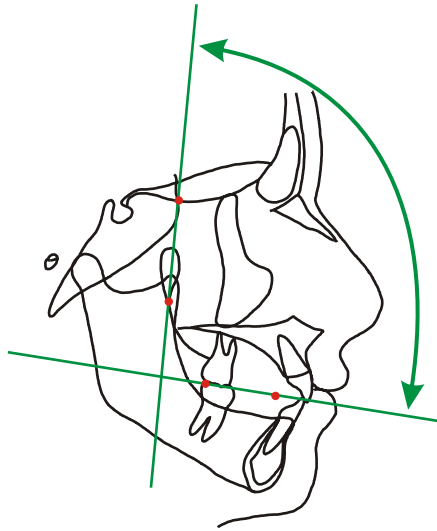
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	65.166	84.479	73.465	7.3325	.523	-.871
6	7	65.795	88.514	76.408	7.5776	.162	-.802
7	7	68.482	85.889	75.854	6.0535	.482	-.933 *
8	10	64.709	87.177	78.101	7.7152	-.389	-1.163
9	9	67.646	87.834	79.869	6.2174	-.579	-.142
10	7	73.194	89.194	80.420	6.3105	.204	-1.488
11	9	69.036	90.237	79.444	7.1091	-.093	-1.003
12	9	71.573	89.336	81.924	6.9827	-.506	-1.399
13	9	74.921	91.433	83.835	5.3252	-.227	-1.070
14	4	80.896	88.023	85.836	3.3258	-1.089	-.718

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	75.500	82.130	78.217	3.4726	.558	-1.500
6	7	75.695	89.521	81.921	4.6343	.213	-.737
7	13	76.338	90.581	82.269	3.6191	.491	.622
8	12	77.999	88.074	81.421	3.5581	.995	-.377
9	9	76.901	89.007	81.794	4.7041	.571	-1.278
10	13	77.219	88.491	82.197	3.0855	.256	-.477
11	12	79.308	86.904	83.054	2.2932	.253	-.997
12	12	73.549	90.627	82.881	4.7209	-.345	-.477
13	11	80.509	92.022	85.661	3.5229	.236	-.942
14	10	81.820	90.291	85.623	3.1288	.120	-1.393





ANGULAR MEASUREMENT VARIABLE 46

**PM Vertical/ Functional Occlusal
Plane**

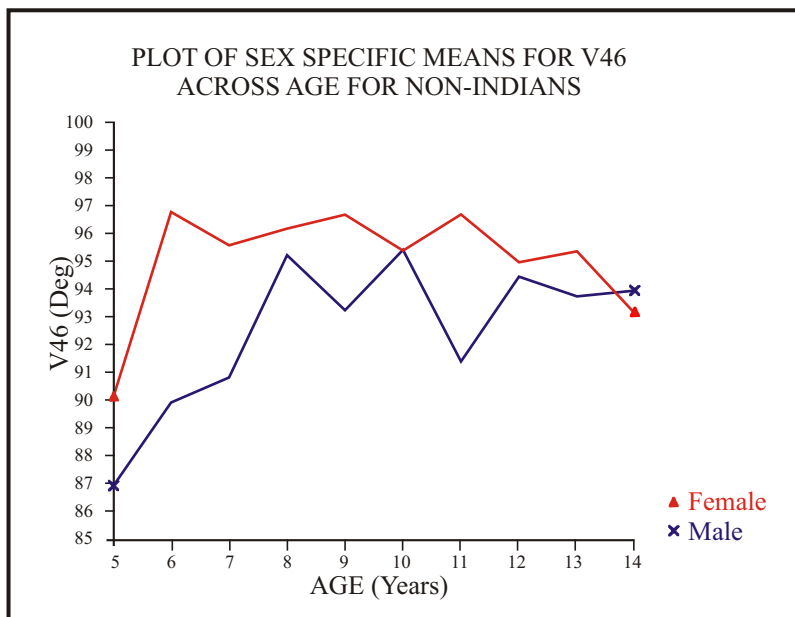
SE-PTM/PMC-FPP 36-43/46-50

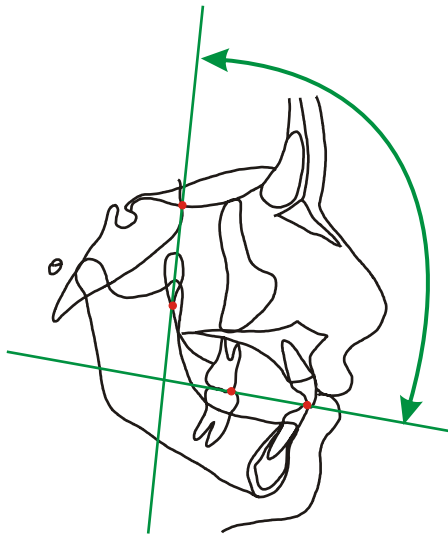
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	80.848	97.357	86.965	6.3474	.932	-.462
6	7	80.327	99.839	89.999	5.8581	.048	.005 **
7	7	86.887	94.730	90.905	2.7769	-.099	-1.150 *
8	10	87.128	102.55	95.335	4.6904	.003	-.705
9	9	84.227	99.128	93.341	4.7799	-.676	-.398
10	7	88.607	102.90	95.528	4.4768	.093	-.407
11	9	83.305	103.13	91.485	5.8786	.479	.020 *
12	9	87.550	101.10	94.557	4.9844	-.171	-1.300
13	9	84.478	101.40	93.834	5.7105	-.091	-.979
14	4	86.042	98.665	94.053	5.6310	-.833	-.939

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	86.268	97.314	90.164	6.2007	.699	-1.500
6	7	90.493	99.884	96.899	3.4408	-.920	-.381
7	13	85.878	103.49	95.693	5.5071	-.259	-.961
8	12	89.351	103.16	96.297	4.6544	.172	-1.343
9	9	91.193	101.98	96.803	3.8829	.002	-1.321
10	13	90.155	102.09	95.500	3.3614	.009	-.283
11	13	91.011	102.85	96.811	4.1385	.104	-1.482
12	12	84.922	101.28	95.078	5.6778	-.568	-.810
13	11	90.961	105.94	95.475	4.3681	1.187	.952
14	10	88.579	99.204	93.222	3.3449	.324	-.987





ANGULAR MEASUREMENT VARIABLE 47

**PM Vertical/Downs Occlusal
Plane**

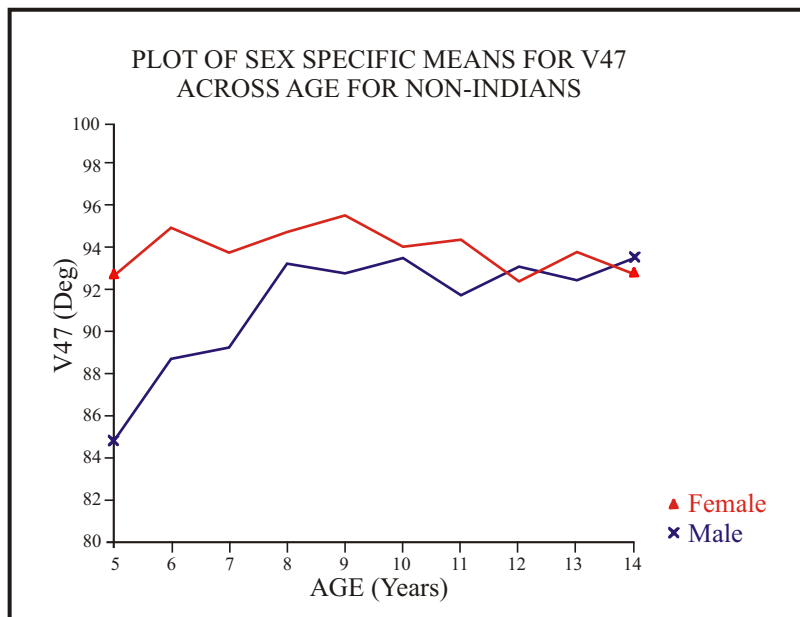
SE-PTM/ADP-PDP36-43/56-57

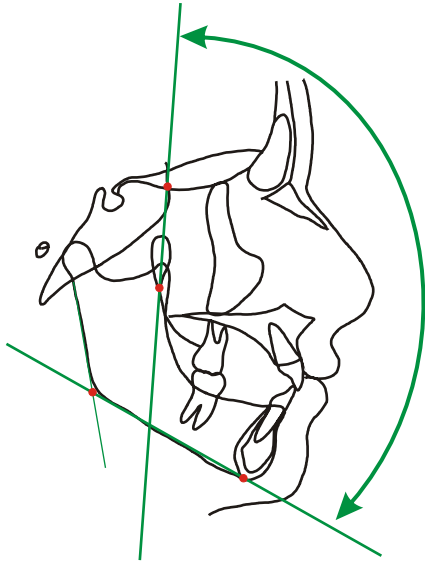
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	76.940	98.229	84.853	8.0623	.976	-.323
6	7	77.391	102.06	88.875	7.9993	.263	-.661
7	7	83.187	98.805	89.423	5.7882	.358	-1.065
8	10	82.258	101.07	93.474	6.4006	-.446	-1.193
9	9	80.265	100.52	93.004	6.1310	-.937	.141
10	7	88.572	100.41	93.745	4.1438	.252	-1.016
11	9	81.338	101.65	91.947	6.2377	-.264	-.667
12	9	82.226	101.06	93.329	6.9148	-.568	-1.249
13	9	83.297	100.10	92.671	5.7981	-.162	-1.151
14	4	87.179	96.864	93.755	4.4352	-1.074	-.722

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	91.681	95.093	92.853	1.9405	.705	-1.500
6	7	88.080	99.185	95.207	3.7500	-1.009	-.113
7	13	87.674	102.97	94.004	5.2360	.469	-1.144
8	12	87.826	102.13	95.000	4.4332	.277	-.979
9	9	92.880	101.06	95.803	3.3028	.600	-1.324
10	13	88.866	99.516	94.289	3.5885	-.072	-1.213
11	13	86.738	101.75	94.631	3.9844	-.126	-.365
12	12	83.239	98.751	92.616	4.5459	-.668	-.403
13	11	87.756	100.17	94.035	3.7863	.175	-.858
14	10	85.665	95.895	92.286	3.4145	-.651	-.687





ANGULAR MEASUREMENT VARIABLE 48

PM Vertical/Mandibular Plane

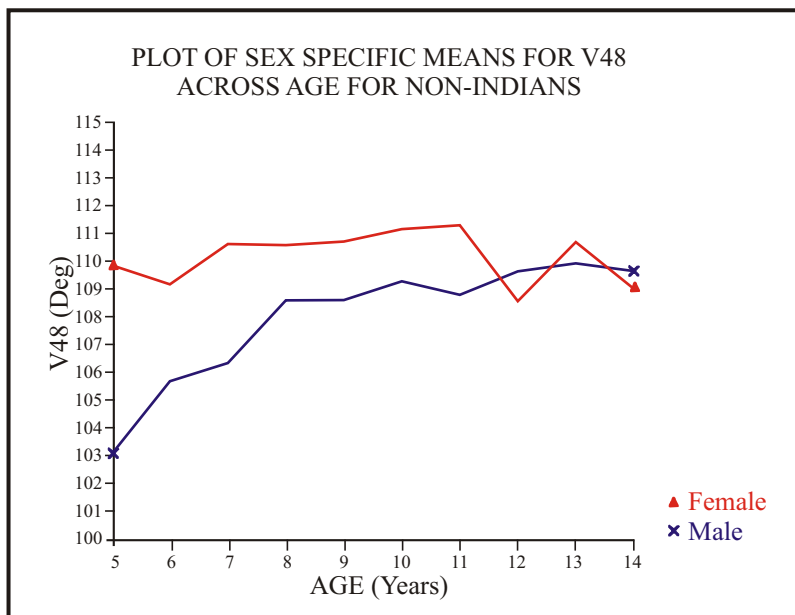
SE-PTM/ME-GOI 36-43/1-28

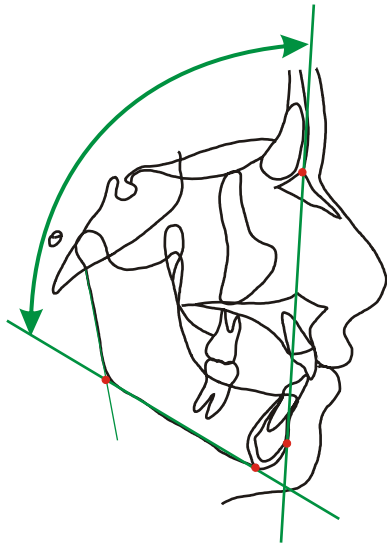
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	94.756	114.36	103.08	7.1223	.652	-.450
6	7	97.459	116.80	105.71	6.1799	.545	-.303
7	7	100.79	116.89	106.37	5.5434	.986	-.144
8	10	100.99	116.05	108.64	5.6025	-.004	-1.193
9	9	100.16	115.44	108.65	4.8160	-.130	-.617
10	7	102.85	117.69	109.33	4.9984	.461	-.745
11	9	101.35	119.44	108.84	5.5591	.539	-.315
12	9	102.57	118.46	109.69	5.3562	.203	-1.060
13	9	103.82	118.44	109.98	4.4808	.408	-.438
14	4	103.70	115.73	109.70	4.9797	.013	-1.104

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	108.71	110.76	109.91	1.0697	-.529	-1.500
6	7	98.009	113.99	109.22	5.5027	-1.277	.562
7	13	102.76	119.38	110.68	4.9682	-.017	-.772
8	12	102.19	118.80	110.64	5.4797	-.033	-1.048
9	9	103.11	118.07	110.77	4.7052	.098	-.825
10	13	102.84	116.13	111.22	4.2857	-.849	-.162
11	13	101.76	118.07	111.36	4.4182	-.780	.062
12	12	96.677	115.94	108.61	5.6707	-.733	-.326
13	11	101.65	119.06	110.75	5.3941	-.152	-.918
14	10	103.68	113.98	109.06	3.1696	.024	-.850





ANGULAR MEASUREMENT VARIABLE 49

Nasion-Pogonion/Mandibular Plane

GOI-ME/N-PG

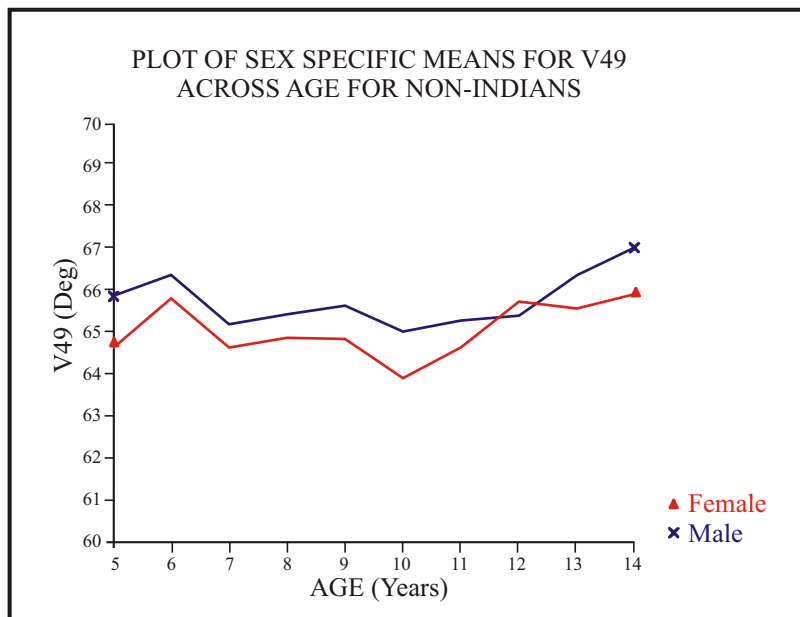
28-1/38-3

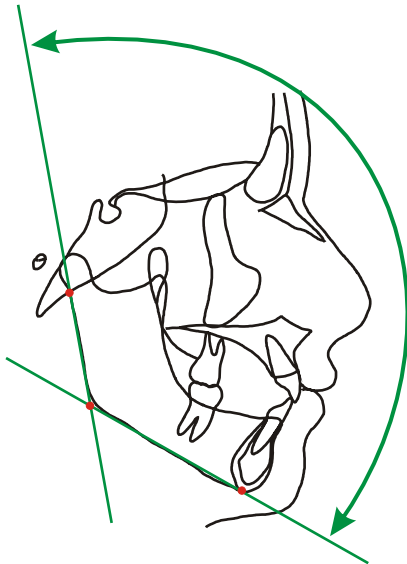
Male Non-Indian

Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	5	62.820	68.948	65.843	2.9461	.176	-1.748
6	7	62.854	69.664	66.350	2.2834	.014	-.855
7	7	61.134	68.723	65.158	2.9350	-.315	-1.309
8	10	61.504	69.601	65.399	2.6179	.176	-.982
9	9	62.980	68.757	65.608	2.3008	.126	-1.614
10	7	61.031	69.072	64.982	2.8157	.035	-1.155
11	9	60.440	69.665	65.249	2.9691	-.155	-1.068
12	9	61.251	69.761	65.366	2.7121	.118	-1.161
13	9	62.792	69.652	66.343	2.6758	-.319	-1.484
14	4	62.883	69.100	67.016	2.8173	-1.006	-.781

Female Non-Indian

Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	3	60.208	70.658	64.585	5.4274	.518	-1.500
6	7	61.415	71.701	65.783	4.4034	.382	-1.580
7	13	59.748	69.822	64.597	3.4423	.136	-1.366
8	12	60.785	69.742	64.832	3.0878	.164	-1.447
9	9	59.831	69.395	64.804	3.3879	.016	-1.303
10	13	59.164	69.356	63.857	3.2729	.423	-1.030
11	13	59.761	71.767	64.602	3.7537	.499	-.893
12	12	61.051	71.813	65.706	3.5779	.367	-1.057
13	11	61.918	71.302	65.539	3.2202	.330	-1.167
14	10	62.509	69.868	65.888	2.4793	-.027	-1.272





ANGULAR MEASUREMENT VARIABLE 50

**Menton-Gonial Intersection-
Articulare, Posterior**

AR-GOI -ME

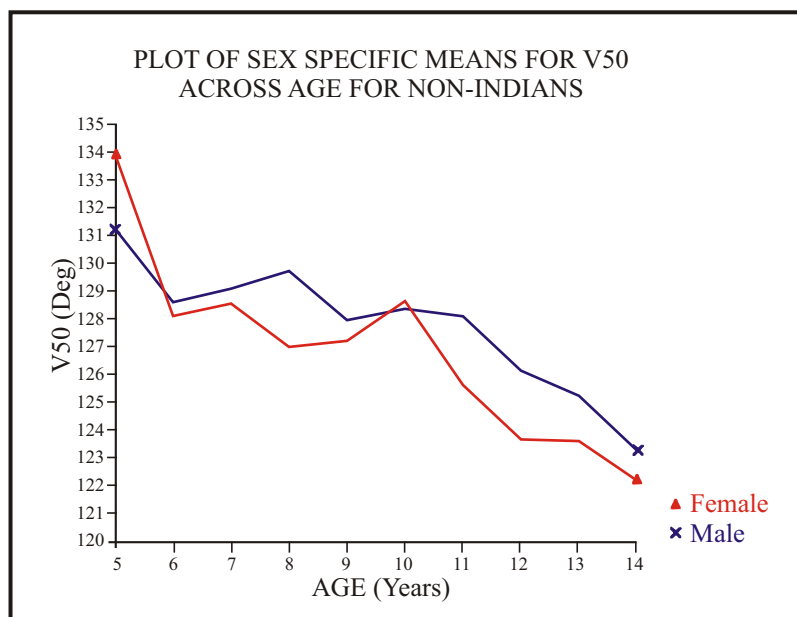
31-28-1

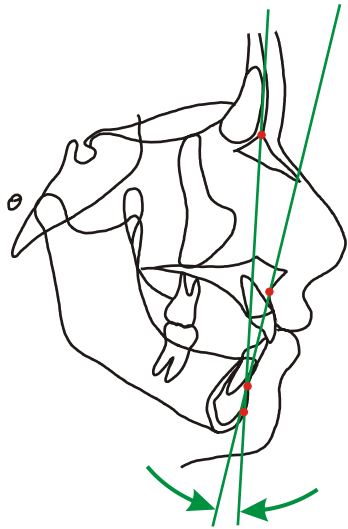
Male Non-Indian

Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	5	125.56	140.19	131.43	5.4396	.793	-.465
6	7	124.33	133.49	128.77	3.5577	.056	-1.450
7	7	120.98	139.66	129.26	6.1504	.350	-.651
8	10	122.34	138.99	129.90	5.2173	.129	-.908
9	9	117.09	135.41	128.12	5.4578	-.627	.057
10	7	122.18	137.42	128.53	4.9614	.553	-.368
11	9	124.12	136.37	128.26	3.7846	1.003	.395
12	9	115.08	135.51	126.29	6.1265	-.379	-.480
13	9	118.63	133.32	125.38	4.6385	-.034	-.722
14	4	117.89	127.95	123.40	4.6603	-.201	-1.622

Female Non-Indian

Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	3	132.45	135.10	134.13	1.4644	-.682	-1.500
6	7	120.95	135.50	128.27	6.2818	-.030	-1.674
7	13	118.69	136.43	128.72	5.2788	-.382	-.848
8	12	117.62	134.15	127.15	5.0619	-.364	-.928
9	9	120.72	136.72	127.37	4.7965	.486	-.142
10	13	118.70	137.36	128.81	5.8839	-.276	-1.004
11	13	117.09	134.34	125.77	5.7533	-.214	-1.130
12	12	116.65	131.48	123.80	4.5781	-.0057	-.962
13	11	114.08	131.48	123.74	5.5241	-.460	-.888
14	10	117.72	128.19	122.31	4.0827	.199	-1.420





ANGULAR MEASUREMENT VARIABLE 51

**A Point-B Point/Nasion-
Pogonion
Downs Analysis**

A-B/N-PG

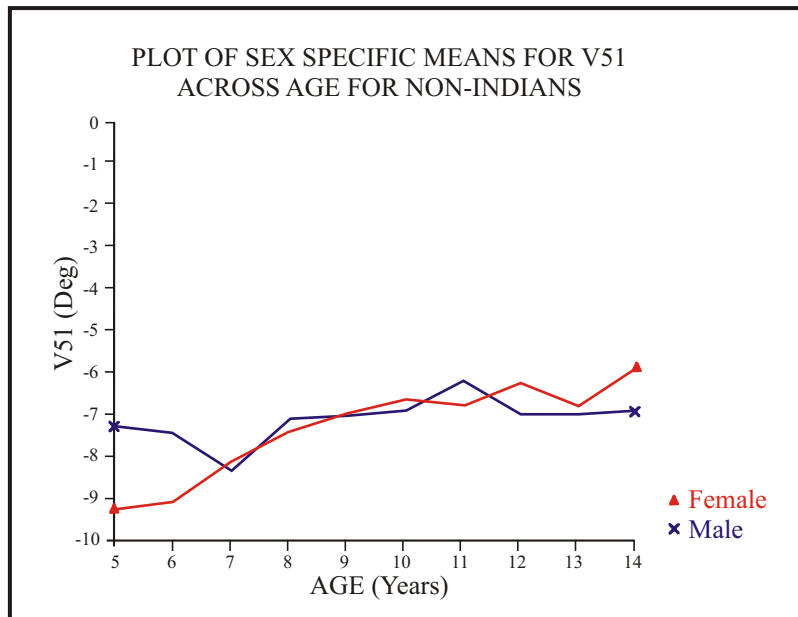
9-4/38-3

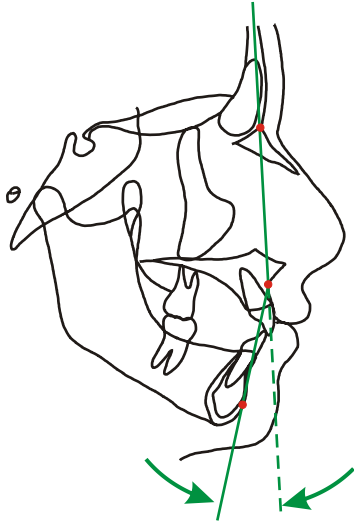
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	-10.341	-4.0669	-7.3212	2.4754	.137	-1.282
6	7	-11.010	-2.9895	-7.4578	2.7137	.297	-.848
7	7	-11.066	-4.2903	-8.3382	2.6685	.303	-1.327
8	10	-11.315	-3.3923	-7.0899	2.4518	-.501	-.516
9	9	-10.066	-4.5337	-7.0505	2.0915	-.153	-1.302
10	7	-10.358	-5.0576	-6.8583	1.7554	-1.121	.396
11	9	-9.6003	-2.6113	-6.1895	2.4019	-.059	-1.351
12	9	-9.8699	-4.1648	-6.9954	2.1202	.037	-1.422
13	9	-10.542	-3.4097	-6.9903	2.5171	-.119	-1.116
14	4	-10.190	-4.1489	-6.9019	2.9658	-.123	-1.802

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	-11.276	-7.8958	-9.3311	1.7471	-.491	-1.500
6	7	-11.477	-4.1704	-9.0518	2.6443	.857	-.399
7	13	-11.842	-5.1563	-8.1599	2.0545	-.246	-1.091
8	12	-12.581	-2.6458	-7.3968	2.6287	-.212	-.171
9	9	-12.110	-3.8679	-6.9975	2.3670	-1.037	.603
10	13	-11.203	-2.7344	-6.6035	2.2083	-.508	.037
11	13	-11.159	-1.1917	-6.7559	2.4441	-.263	.831
12	12	-11.138	-1.2258	-6.1987	2.4538	-.012	.458
13	11	-11.765	-1.5566	-6.7665	2.7833	.132	-.313
14	10	-9.1785	.83008	-5.8267	2.8012	.887	-.082





ANGULAR MEASUREMENT VARIABLE 52

Nasion-A Point-Pogonion Downs Analysis

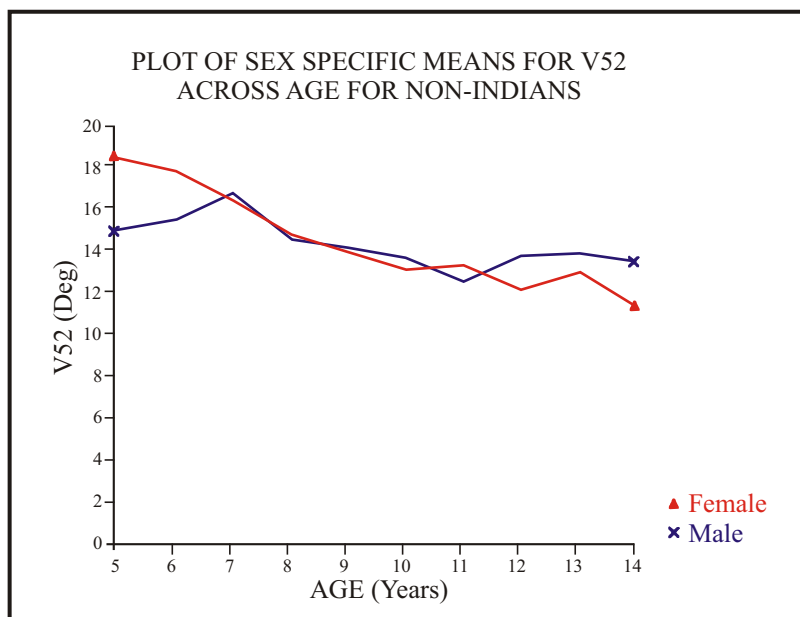
N-A-PG 180 deg - (38-9-3)

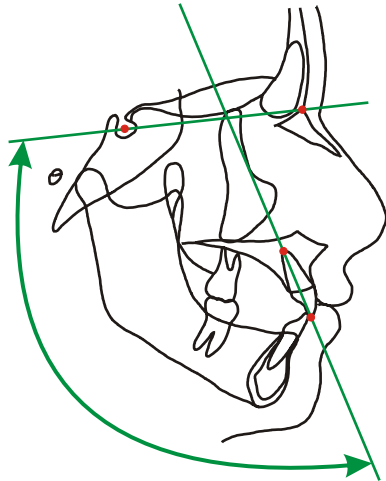
Male Non-Indian

Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	5	8.1489	20.135	14.668	4.8498	-.254	-1.348
6	7	6.0701	23.007	15.187	5.5869	-.232	-.772
7	7	8.5770	23.154	16.569	5.1103	-.267	-1.073
8	10	6.9021	22.687	14.163	4.7434	.491	-.459
9	9	8.9162	19.259	13.872	3.9749	.047	-1.351
10	7	10.096	19.475	13.380	3.0622	1.068	.435
11	9	5.2874	18.151	12.094	4.4439	-.006	-1.310
12	9	8.0603	18.636	13.384	3.7918	-.106	-1.407
13	9	6.5856	20.431	13.428	4.7017	.102	-1.086
14	9	8.1744	19.295	13.192	5.3575	.158	-1.744

Female Non-Indian

Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	3	15.996	22.443	18.278	3.6127	.697	-1.500
6	7	7.9255	22.481	17.634	5.2500	-.853	-.388
7	13	10.916	23.970	16.131	3.8947	.394	-.684
8	12	5.3459	25.040	14.367	5.0987	.335	.108
9	9	7.4437	23.297	13.607	4.5138	.998	.593
10	13	5.2187	21.441	12.751	4.1936	.471	.064
11	13	2.2862	21.177	12.904	4.5885	-3.50	.930
12	12	2.3170	21.242	11.729	4.6783	.024	.448
13	11	2.8551	22.345	12.642	5.2388	-.076	-.195
14	10	-.16127	17.088	10.991	5.3185	-.876	-.159





ANGULAR MEASUREMENT VARIABLE 53

Upper Incisor/Sella-Nasion

UIE-UIA/S-N

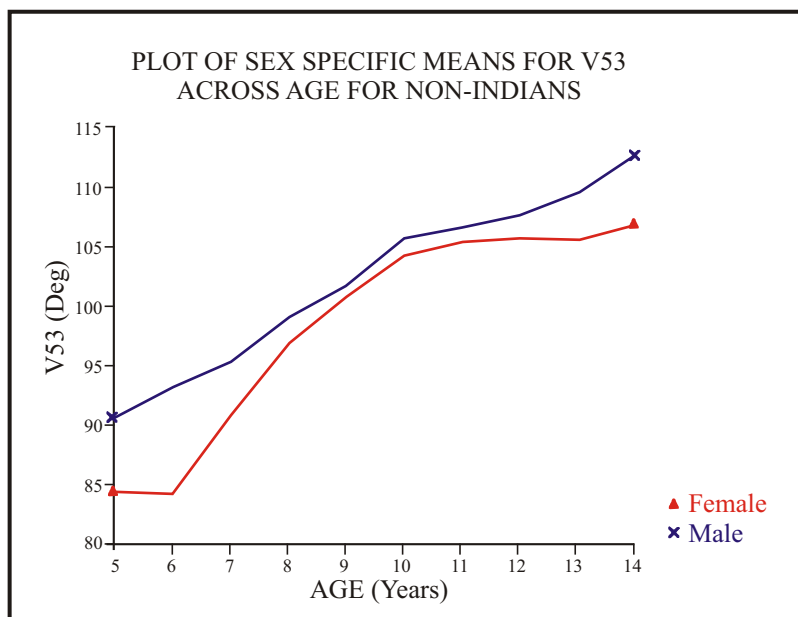
7-12/38-35

Male Non-Indian

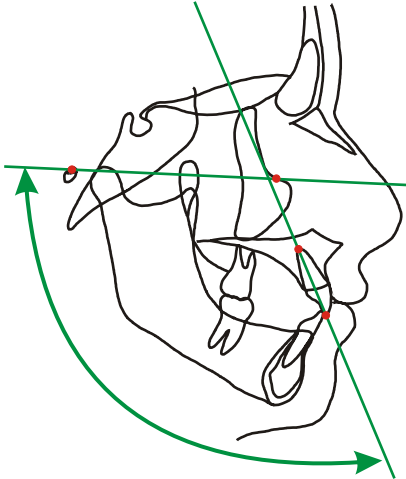
Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis	
5	5	86.796	97.041	90.501	4.1268	.842	-.773	*
6	7	86.854	100.44	92.994	5.7734	.157	-1.716	**
7	7	87.048	104.47	95.287	6.3721	.370	-1.149	
8	10	94.645	107.50	98.996	4.2667	.649	-.558	
9	9	98.043	111.36	101.84	4.1813	1.416	1.001	
10	7	98.724	117.45	105.96	6.5509	.841	-.652	
11	9	98.774	116.12	106.45	6.3112	.563	-1.139	
12	9	98.877	116.41	106.79	6.6841	.334	-1.519	
13	9	101.82	119.52	109.83	6.1375	.469	-1.070	
14	4	101.79	120.98	112.94	8.0451	-.635	-.914	

Female Non-Indian

Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis	
5	3	83.703	85.658	84.573	.99482	.379	-1.500	
6	7	74.269	89.447	84.188	5.3656	-.769	-.349	
7	13	76.880	104.76	91.273	8.6057	.013	-1.076	
8	12	76.396	107.79	97.079	9.7747	-.823	-.395	
9	9	90.676	110.03	101.22	6.4438	-.497	-1.040	
10	13	98.544	111.22	104.25	3.9705	.009	-1.065	
11	13	95.346	114.44	105.66	5.6282	-.488	-.660	
12	12	95.087	112.83	105.98	4.5283	-.921	1.017	
13	11	91.731	115.13	105.60	6.1118	-.796	.725	
14	10	98.401	117.24	106.97	6.5095	-.277	-1.275	



ANGULAR MEASUREMENT VARIABLE 54



Upper Incisor/Frankfort Plane

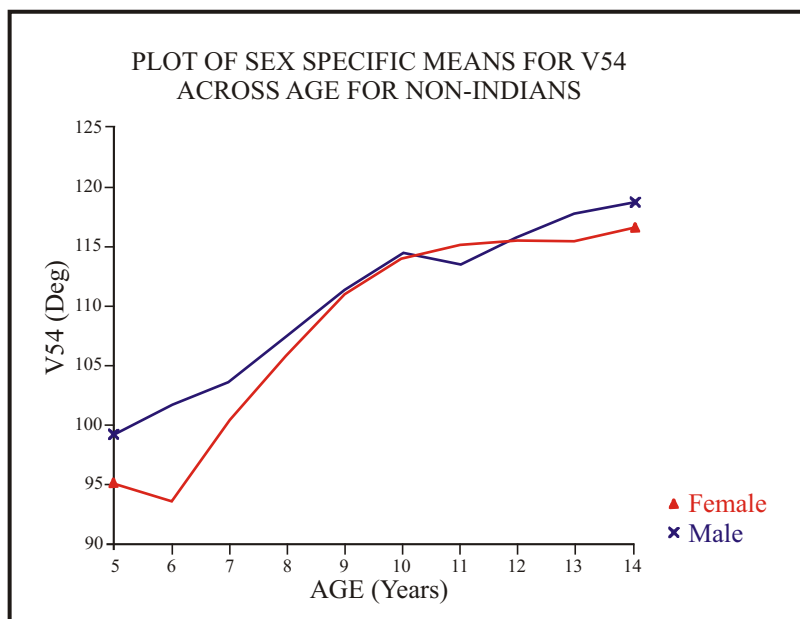
UIE-UIA/PO-OR 7-12/49-40

Male Non-Indian

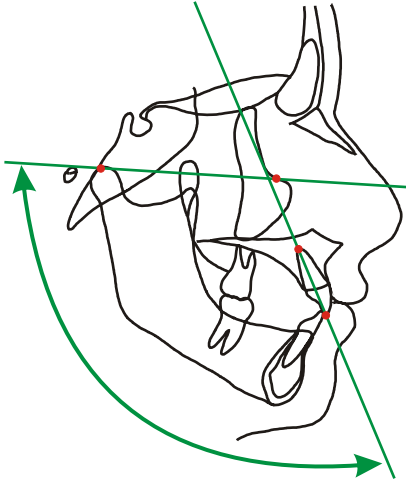
Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	94.180	108.31	99.112	5.6728	.884	-.550
6	7	94.715	110.49	101.74	5.9649	.235	-1.434
7	7	94.590	113.23	103.49	5.7110	.229	-.173
8	10	100.00	116.71	107.37	4.5173	.475	.260
9	9	107.20	122.79	111.28	4.6787	1.816	2.281
10	7	106.59	123.94	114.39	6.2084	.472	-1.073
11	9	100.46	125.04	113.52	8.0263	.153	-.771
12	9	107.63	127.05	115.76	6.8973	.434	-1.270
13	9	108.76	128.66	117.78	6.0847	.230	-.614
14	4	104.39	125.16	118.42	9.7732	-.890	-.921

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	92.626	96.276	95.008	2.0643	-.703	-1.500
6	7	78.856	99.832	93.527	6.9484	-1.467	1.075
7	13	85.418	114.40	100.30	8.6539	.048	-.959
8	12	86.293	115.51	105.69	10.038	-.733	-.886
9	8	102.36	119.25	110.97	6.1031	-.304	-1.175
10	13	107.93	123.55	114.01	5.1591	.511	-.853
11	13	105.18	126.17	115.09	5.5435	.191	-.170
12	11	111.01	118.84	115.41	2.1431	-.350	-.069
13	11	102.02	124.01	115.36	6.1421	-.558	.233
14	10	106.60	130.86	116.74	6.9152	.731	.030



ANGULAR MEASUREMENT VARIABLE 55



Upper Incisor/Condylar Plane

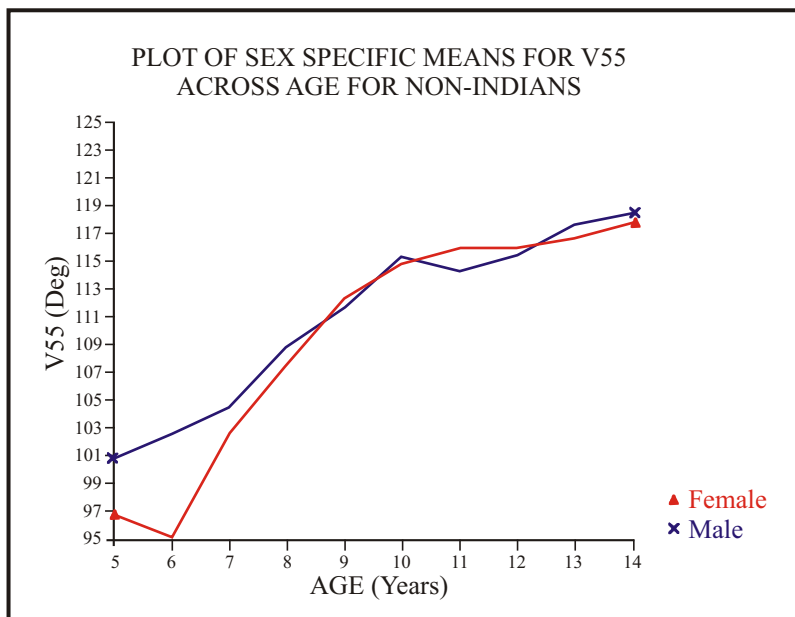
UIE-UIA/CO-OR 7-12/33-40

Male Non-Indian

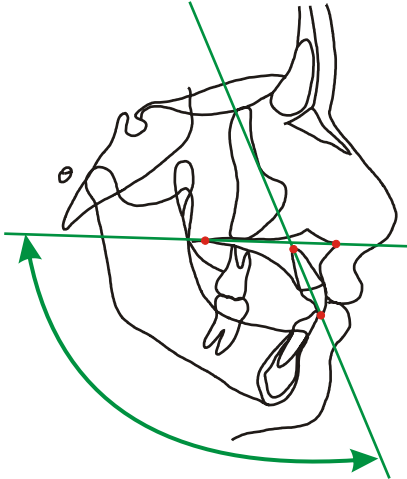
Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	5	94.630	110.53	100.84	6.3240	.627	-.881
6	7	96.479	112.01	102.50	5.7093	.503	-1.016
7	7	97.069	114.26	104.37	5.4815	.605	-.252
8	10	101.77	118.31	108.62	4.2682	.834	1.159
9	9	107.73	122.57	111.72	4.4612	1.740	2.084
10	7	107.28	124.55	115.29	5.8716	.285	-.900
11	9	103.83	126.04	114.07	7.2609	.545	-.685
12	9	108.43	126.40	115.36	6.6487	.501	-1.322
13	9	107.69	128.78	117.74	5.9873	.169	-.118
14	4	105.37	126.01	118.30	9.0194	-.858	-.869

Female Non-Indian

Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	3	93.116	99.412	96.661	3.2222	-.425	-1.500
6	7	80.134	102.40	95.101	7.4448	-1.186	.457
7	13	89.442	114.06	102.53	7.9344	-.035	-1.167
8	12	88.242	116.41	107.28	9.4961	-.784	-.730
9	9	103.39	121.34	112.16	5.8586	-.077	-1.087
10	13	107.81	123.40	114.88	5.1501	.302	-1.246
11	13	104.42	125.78	115.97	5.7360	-.223	-.280
12	12	105.83	121.10	115.87	4.0616	-1.048	1.267
13	11	102.52	124.26	116.55	6.2070	-.768	.502
14	10	107.81	131.58	117.78	6.7595	.703	.013



ANGULAR MEASUREMENT VARIABLE 56



Upper Incisor/Palatal Plane

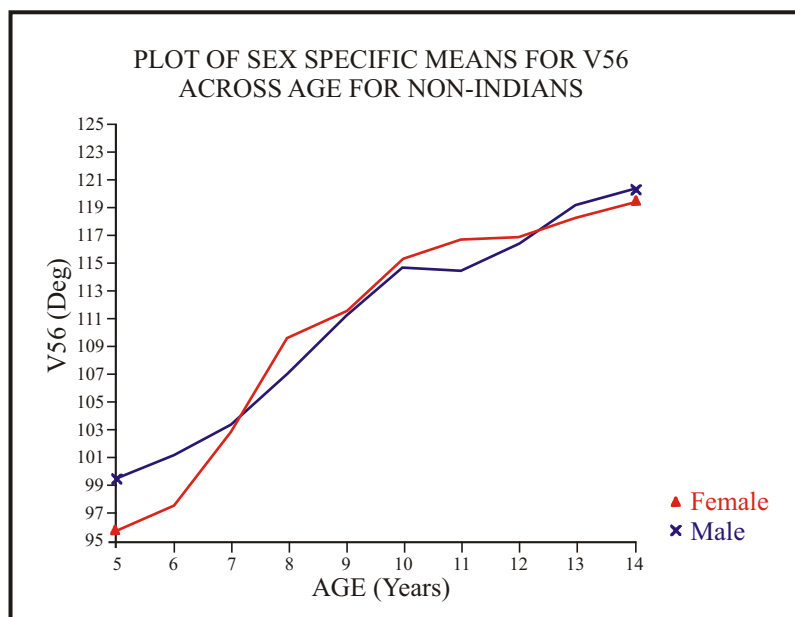
UIE-UIA/PNS-ANS 7-12/45-10

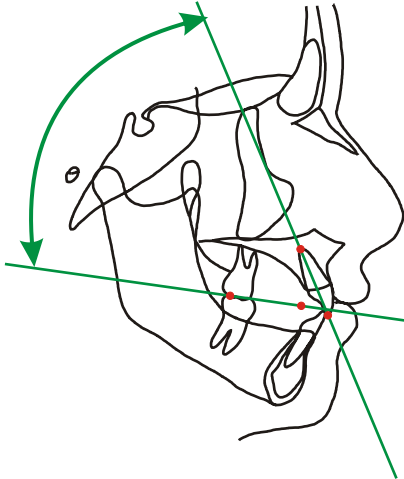
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	96.065	107.41	99.366	4.6134	1.318	.015
6	7	91.831	109.25	101.05	6.0563	.021	-.940
7	7	95.192	114.17	103.30	7.1828	.315	-1.278
8	10	98.777	113.15	107.03	4.6558	-.184	-.864
9	9	106.82	119.75	111.09	3.8806	1.226	.831
10	7	107.71	124.20	114.59	5.3394	.617	-.362
11	9	102.59	123.51	114.37	6.2407	-.226	-.155
12	9	107.28	123.49	116.22	5.7869	-.062	-1.391
13	9	112.02	128.36	119.03	5.2280	.433	-.649
14	4	112.48	125.46	120.43	6.0949	-.486	-1.374

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	94.886	96.314	95.766	.77002	-.645	-1.500
6	7	85.562	104.04	97.366	6.1114	-.952	.111
7	13	86.444	116.90	102.91	8.9193	-.257	-.689
8	11	94.292	118.02	109.60	6.8929	-.996	.280
9	9	103.93	120.80	111.47	5.1952	.618	-.476
10	13	111.24	120.27	115.19	2.5007	.636	-.309
11	13	109.49	122.44	116.78	3.6504	-.632	-.351
12	12	105.32	122.84	116.86	5.1374	-.880	.083
13	11	107.16	124.37	118.10	5.3601	-.854	-.235
14	10	113.49	129.30	119.32	4.6660	.685	.200





ANGULAR MEASUREMENT VARIABLE 57

**Upper Incisor/Functional
Occlusal Plane**

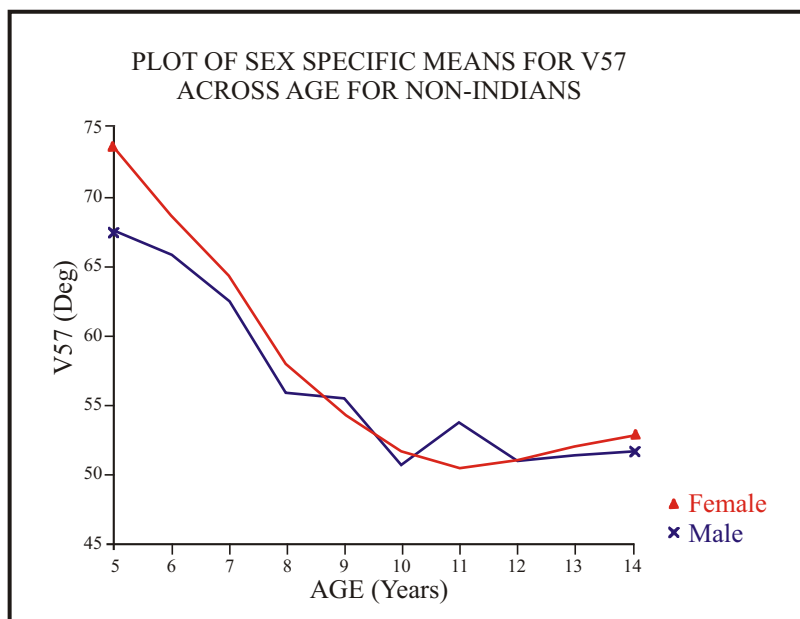
FPP-PMC/UIA-UIE 50-46/12-7

Male Non-Indian

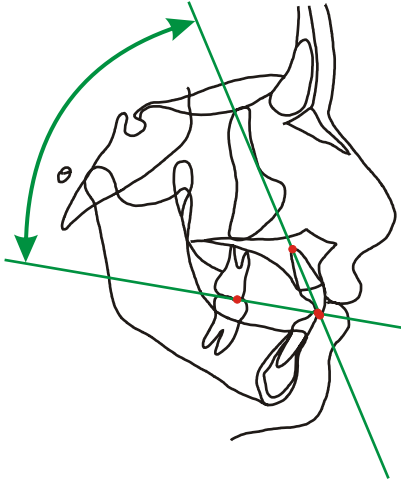
Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	59.413	70.042	67.295	4.5185	-1.333	-.009 *
6	7	58.356	72.303	65.924	5.0112	-.020	-1.047
7	7	54.970	67.988	62.272	5.4637	-.188	-1.680
8	10	44.555	63.184	55.963	5.6859	-.703	-.411
9	9	43.854	59.916	55.277	4.6055	-1.849	2.486
10	7	45.734	58.563	50.411	4.7389	.547	-.840
11	9	44.579	62.236	53.641	5.5957	-.065	-.835
12	9	40.812	59.171	50.955	6.0170	-.252	-1.057
13	9	42.077	61.949	51.037	5.5991	.254	-.512
14	4	44.229	59.803	51.290	7.7870	.111	-1.835

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	71.057	75.270	73.389	2.1420	-.369	-1.500
6	7	60.363	82.563	68.523	7.4610	.872	-.176
7	13	48.406	82.089	64.118	10.106	.066	-.928
8	12	49.745	76.882	57.857	8.9966	1.044	-.323
9	9	43.287	63.808	54.108	6.5073	-.447	-.706
10	13	44.650	55.930	51.390	3.4974	-.713	-.250
11	13	43.047	58.052	50.112	5.1583	-.072	-1.413
12	12	42.439	59.797	50.914	5.0579	.245	-.793
13	11	41.464	63.472	51.879	6.5024	.204	-.708
14	10	42.696	59.533	52.843	5.8065	-.606	-.937



ANGULAR MEASUREMENT VARIABLE 58



**Upper Incisor/Downs Occlusal
Plane**

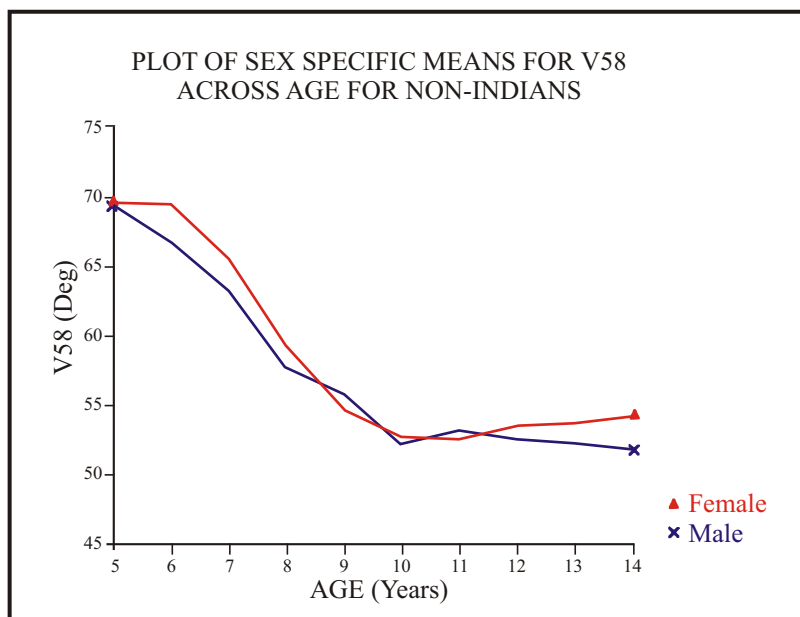
PDP-ADP/UIA-UIE 57-56/12-7

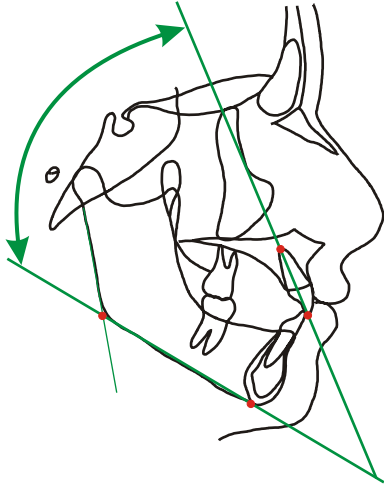
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	60.813	76.998	69.245	5.8153	-.188	-.629
6	7	60.455	74.232	66.483	4.7414	.423	-.915
7	7	53.644	74.346	63.134	7.4295	.109	-1.113
8	10	49.298	63.113	57.592	5.2900	-.534	-1.120
9	9	47.636	59.341	55.772	4.0248	-1.069	-.283
10	7	46.344	57.778	52.087	4.6415	.056	-1.642
11	9	46.302	61.738	53.127	4.6954	.124	-.226
12	9	45.859	60.821	52.378	5.4623	.111	-1.432
13	9	43.262	60.176	52.132	5.6354	-.116	-1.098
14	4	46.853	57.553	51.656	5.3898	.115	-1.838

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	68.934	70.722	69.598	.97909	.673	-1.500
6	7	62.691	81.636	69.348	6.0119	1.245	.713
7	13	52.454	83.026	65.354	8.9110	.345	-.629
8	12	48.744	82.463	59.123	10.027	1.107	.335
9	9	45.899	61.136	54.521	5.2675	-.516	-.963
10	13	47.418	57.099	52.719	2.7098	-.427	-.445
11	13	45.387	57.379	52.342	3.7922	-.185	-.799
12	12	48.660	62.333	53.404	3.9369	.976	.443
13	11	48.620	62.445	53.524	4.2335	.645	-.278
14	10	47.373	59.806	54.019	3.9568	-.213	-.770





ANGULAR MEASUREMENT VARIABLE 59

Upper Incisor/Mandibular Plane

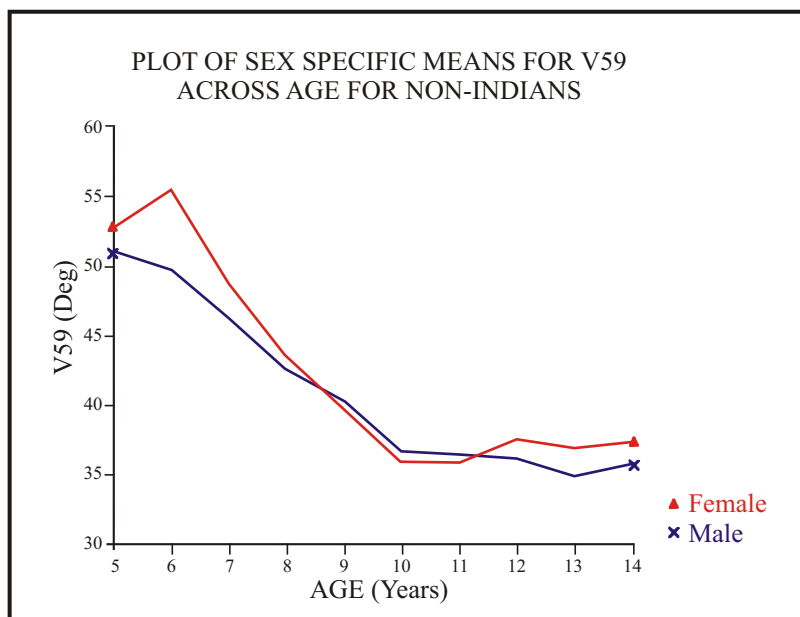
GOI-ME/UIA-UIE 28-1/12-7

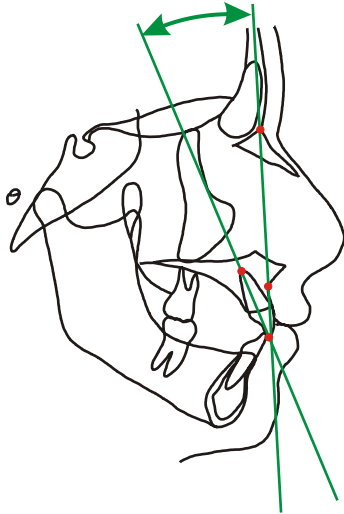
Male Non-Indian

Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	5	42.996	57.981	51.019	5.6985	-.261	-1.036
6	7	40.387	55.681	49.648	5.4322	-.503	-.816
7	7	36.231	56.761	46.188	7.3715	.149	-1.325
8	10	30.571	49.070	42.424	5.6740	-.887	-.118
9	9	27.737	46.087	40.128	5.3689	-1.366	1.278
10	7	28.860	45.015	36.498	5.1960	.237	-.610
11	9	24.966	45.089	36.236	6.5435	-.304	-.721
12	9	24.458	44.860	36.020	6.7857	-.352	-1.067
13	9	21.311	46.156	34.823	7.0892	-.362	-.089
14	4	26.828	45.739	35.714	8.1848	.189	-1.357

Female Non-Indian

Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	3	49.851	57.107	52.543	3.9735	.673	-1.500
6	7	44.844	64.654	55.336	6.5292	-.235	-.747
7	13	32.730	62.935	48.680	9.3444	-.134	-.946
8	12	28.965	63.993	43.487	10.220	.555	-.645
9	9	25.796	49.479	39.549	8.0141	-.596	-.719
10	13	25.511	43.134	35.784	5.3985	-.458	-.529
11	13	24.105	45.718	35.614	6.4400	-.110	-.776
12	12	29.230	50.674	37.405	6.0261	.741	.042
13	11	26.237	53.294	36.808	8.1009	.599	-.488
14	10	23.832	46.612	37.243	7.1105	-.364	-.600





ANGULAR MEASUREMENT VARIABLE 60

Upper Incisor/Nasion-A Point Steiner Analysis

UIA-UIE/N-A

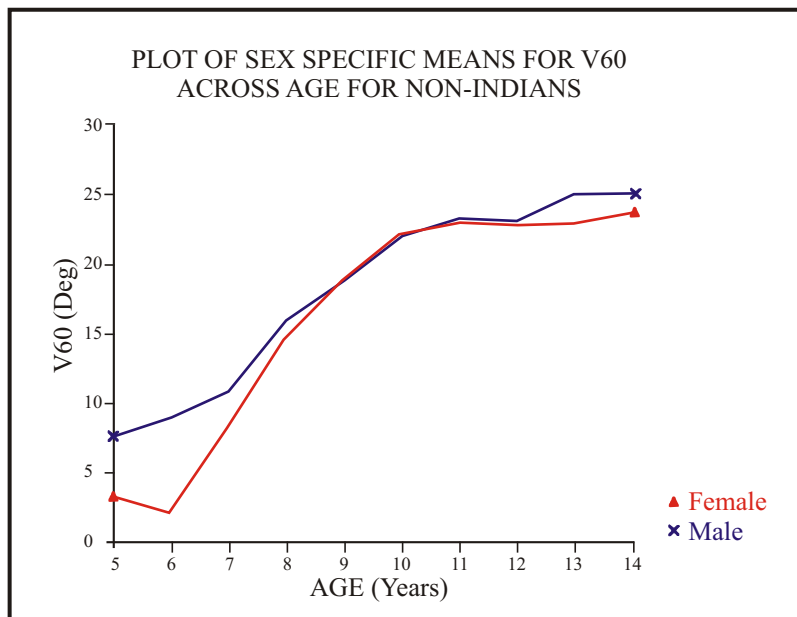
12-7/38-9

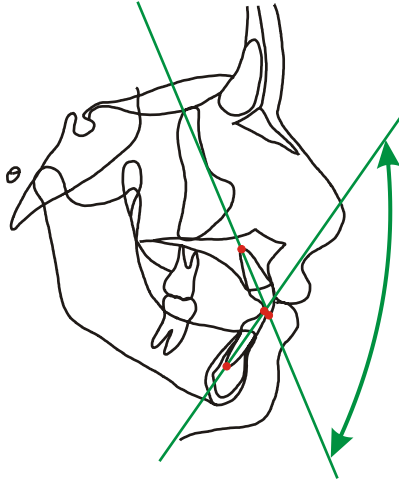
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	1.7251	18.066	7.4775	6.5376	.912	-.599
6	7	.58813	21.885	8.9723	7.8378	.546	-.965
7	7	1.1965	24.506	10.739	8.3737	.441	-.868
8	10	7.1748	28.840	15.901	6.8518	.480	-.817
9	9	12.468	31.595	18.657	5.6474	1.321	1.184
10	7	15.812	29.512	21.961	5.7189	.305	-1.694
11	9	13.201	35.375	23.109	6.8633	.479	-.622
12	9	15.436	33.977	22.957	6.1639	.474	-.830
13	9	19.035	38.917	25.083	6.3267	1.168	.490
14	4	15.251	31.455	25.011	6.8868	-.769	-.863

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	-1.6309	6.3752	3.0942	4.1938	-.558	-1.500
6	7	-12.335	7.6550	1.8646	6.8579	-1.376	.768
7	13	-9.7292	21.320	7.9465	8.9073	-.193	-.501
8	12	-9.5537	25.184	14.375	10.391	-.998	.236
9	9	9.2432	28.118	18.646	6.2056	-.108	-1.019
10	13	15.164	28.703	21.924	4.4953	.385	-1.090
11	13	12.943	30.675	22.840	5.2572	-.391	-.774
12	12	13.794	29.664	22.770	4.8199	-.469	-.781
13	11	11.865	32.858	22.855	6.7050	-.019	-1.049
14	10	12.841	35.157	23.480	6.8733	.355	-.577





ANGULAR MEASUREMENT VARIABLE 61

**Lower Incisor/Upper Incisor
Downs-Steiner Analysis**

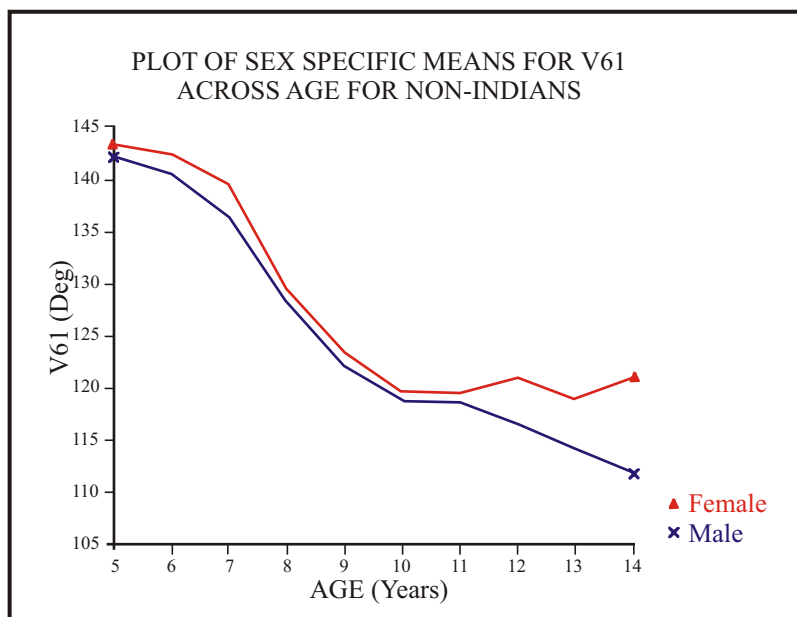
LIA-LIE/UIA-UIE 15-6/12-7

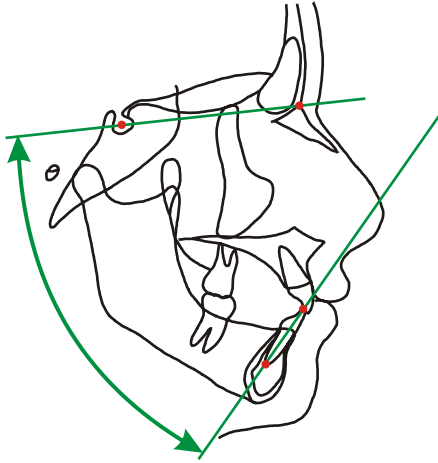
Male Non-Indian

Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	5	131.02	149.69	142.37	8.2142	-.513	-1.477
6	7	126.62	148.50	140.83	7.4230	-.306	-1.411
7	7	120.53	147.78	136.35	10.143	-.707	-1.037
8	10	118.41	145.08	128.30	7.6003	.955	.538
9	9	112.62	130.15	122.17	5.9559	-.266	-1.017
10	7	105.23	126.62	118.71	7.1570	-.817	-.115
11	9	105.95	129.22	118.78	7.8387	-.523	-.735
12	9	103.98	128.41	116.29	9.8837	-.206	-1.634
13	9	101.06	123.25	114.10	8.3147	-.604	-1.301
14	4	101.94	120.76	111.80	9.7536	-.039	-1.929

Female Non-Indian

Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	3	138.39	146.60	143.60	4.5250	-.682	-1.500
6	7	132.57	150.44	142.41	6.3969	-.285	-1.149
7	13	121.44	168.49	139.48	13.508	.460	-.309
8	12	115.75	164.11	129.55	15.399	.991	.011
9	9	109.50	133.28	123.47	7.8877	-.564	-.867
10	13	110.02	131.49	119.70	5.7587	.334	-.335
11	13	111.23	129.51	119.52	6.1584	.147	-1.090
12	12	103.51	136.12	121.02	8.2964	-.441	.325
13	11	109.93	136.91	119.93	8.0711	.737	-.288
14	10	111.35	129.75	121.09	5.7702	-.248	-.790





ANGULAR MEASUREMENT VARIABLE 62

Lower Incisor/Sella-Nasion

LIA-LIE/S-N

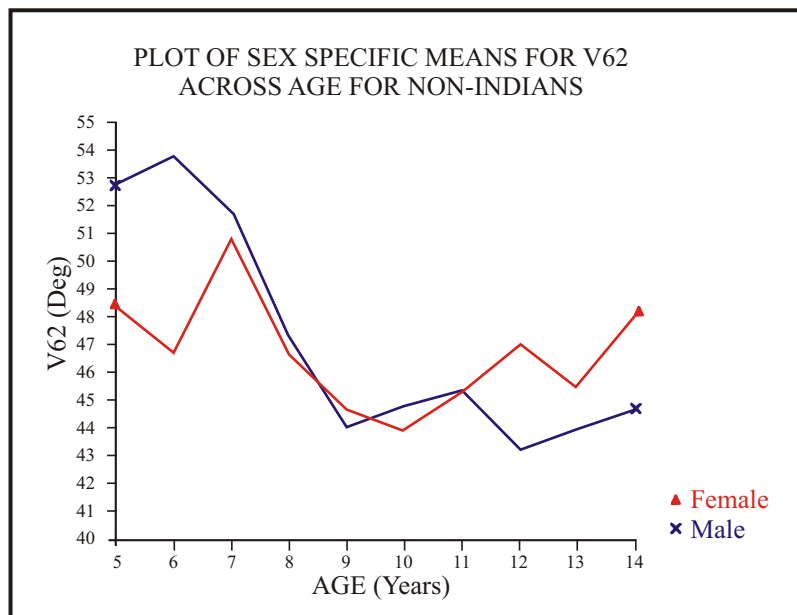
15-6/35-38

Male Non-Indian

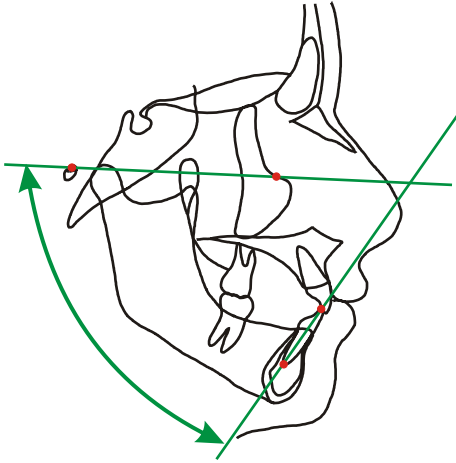
Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	5	44.613	61.683	52.867	6.7594	.055	-1.294
6	7	50.053	59.011	53.825	3.1070	.307	-.728 **
7	7	44.996	54.832	51.637	4.0605	-.885	-1.002
8	10	40.010	59.763	47.299	5.6242	.877	.539
9	9	38.749	52.524	44.007	4.3570	.704	-.363
10	7	39.588	48.391	44.666	3.2028	-.244	-1.040
11	9	42.064	4.933	45.230	2.8627	.409	-1.216
12	9	35.563	50.024	43.086	4.2061	-.039	-.321
13	9	35.292	51.002	43.926	4.4189	-.432	.092
14	4	36.852	53.676	44.746	7.0296	.234	-1.131

Female Non-Indian

Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	3	44.050	50.303	48.169	3.5683	-.706	-1.500
6	7	42.018	51.211	46.595	3.5867	.214	-1.503
7	13	40.462	65.373	50.753	7.0744	.611	-.440
8	12	34.955	60.510	46.632	7.9793	.129	-1.141
9	9	34.849	51.346	44.690	5.7245	-.459	-.896
10	13	35.684	54.385	43.945	5.8247	.193	-.842
11	13	35.789	55.291	45.178	5.5748	-.023	-.719
12	12	33.608	55.308	47.000	6.7605	-.655	-.718
13	11	37.401	54.181	45.532	5.1205	-.136	-.619
14	10	40.196	55.006	48.061	4.5699	-.032	-.781



ANGULAR MEASUREMENT VARIABLE 63



**Lower Incisor/Frankfort Plane
Tweed Analysis**

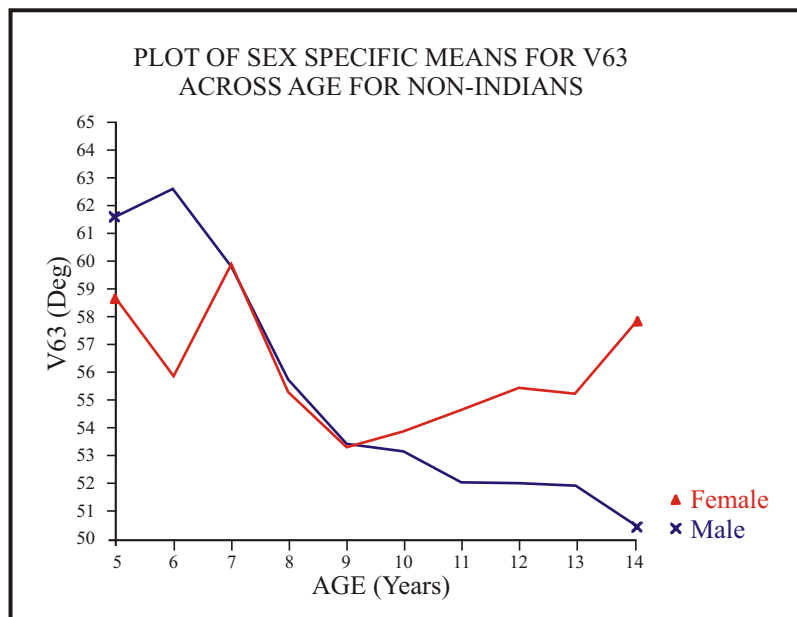
LIA-LIE/PO-OR 15-6/49-40

Male Non-Indian

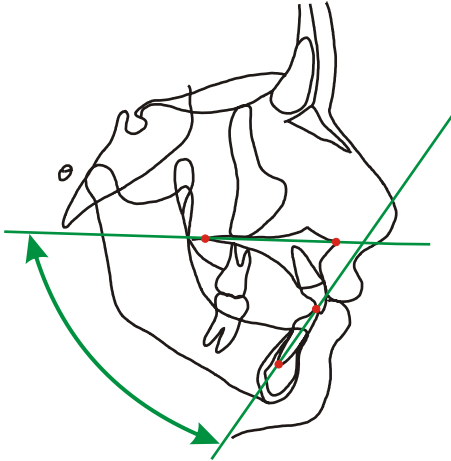
Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	5	54.860	69.483	61.479	5.3588	.392	-.708
6	7	58.892	68.037	62.569	3.1353	.684	-.640
7	7	50.722	63.705	59.840	5.2842	-1.015	-.810
8	10	49.183	68.614	55.677	5.5841	1.162	.923
9	9	47.363	62.140	53.444	4.4073	.655	-.239
10	7	49.173	57.281	53.097	2.9826	.006	-1.157
11	9	48.226	56.586	52.302	2.6754	.078	-.990
12	9	46.843	56.884	52.052	4.0411	-.016	-1.719
13	9	45.750	59.779	51.877	4.8096	.190	-1.132
14	4	45.154	58.657	50.223	5.9805	-.784	-.975 *

Female Non-Indian

Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	3	54.514	62.876	58.604	4.1840	.079	-1.500
6	7	49.299	61.632	55.934	5.5280	-.096	-1.712
7	13	49.107	73.911	59.778	6.7377	.567	.006
8	12	44.792	70.408	55.240	9.4728	.391	-.467
9	8	45.726	59.125	53.209	4.1461	-.509	-.406
10	13	45.794	62.446	53.714	5.7254	-.060	-1.356
11	13	44.343	63.007	54.608	5.9212	-.345	-.928
12	12	41.193	61.444	55.405	6.3366	-1.049	-.001
13	11	43.437	61.949	55.292	5.3688	-1.154	.412
14	10	49.447	65.329	57.830	4.7382	-.052	-.666



ANGULAR MEASUREMENT VARIABLE 64



Lower Incisor/Palatal Plane

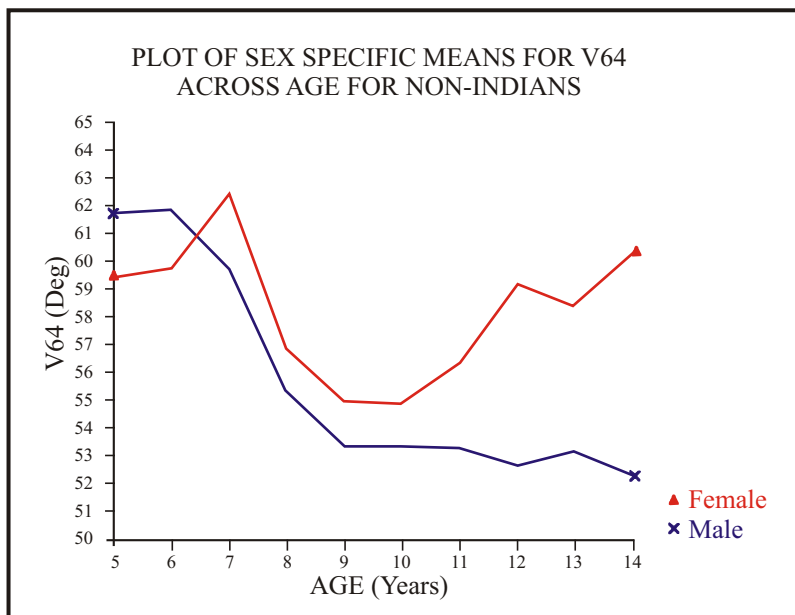
LIA-LIE/PNS-ANS 15-6/45-10

Male Non-Indian

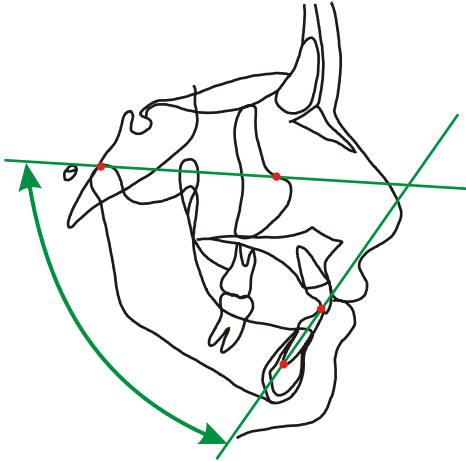
Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	5	54.792	66.392	61.733	5.0718	-.367	-1.414
6	7	56.895	66.347	61.881	3.6541	-.316	-1.421
7	7	50.820	64.398	59.647	4.8019	-.735	-.376
8	10	49.918	63.861	55.337	4.7450	.538	-1.056
9	9	47.176	59.419	53.259	3.9692	.022	-.942
10	7	49.359	58.682	53.298	3.9640	.237	-1.560
11	9	49.464	57.244	53.152	2.8119	-.058	-1.406
12	9	45.042	57.545	52.512	4.3988	-.499	-1.162 **
13	9	44.617	57.078	53.132	4.0963	-1.052 *	-.032 *
14	4	46.878	58.410	52.230	4.8728	.258	-1.194 **

Female Non-Indian

Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	3	54.706	61.896	59.363	4.0377	-.699	-1.500
6	7	54.913	66.630	59.773	4.7029	.355	-1.388
7	13	52.061	75.690	62.391	7.5345	.557	-.779
8	12	47.180	68.890	56.851	7.0997	.177	-1.150
9	9	50.300	59.490	54.942	3.2099	-.126	-1.469
10	13	47.576	65.462	54.888	4.5791	.773	.417
11	13	45.998	61.657	56.303	4.3897	-1.089	.353
12	11	53.146	64.873	59.157	3.1734	-.057	-.201
13	11	47.215	66.499	58.035	5.7000	-.194	-.606
14	10	49.301	65.812	60.406	4.8157	-1.394	.955



ANGULAR MEASUREMENT VARIABLE 65



Lower Incisor/Condylar Plane

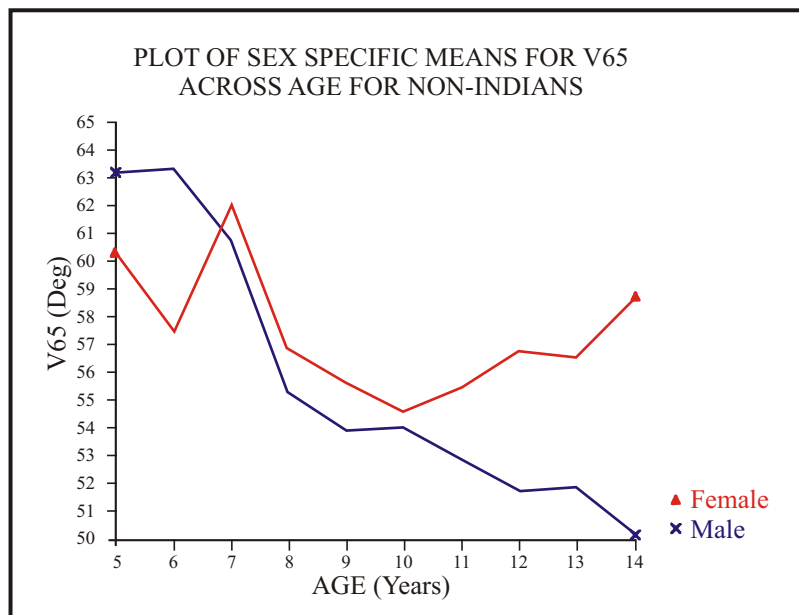
LIA-LIE/CO-OR 15-6/33-40

Male Non-Indian

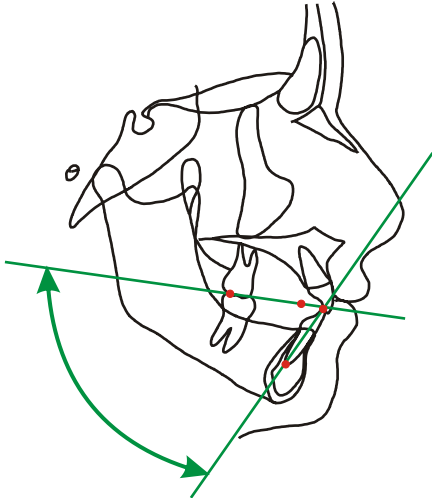
Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	59.205	69.838	63.204	4.1028	.879	-.557
6	7	58.731	68.304	63.334	3.5106	.357	-1.185
7	7	51.486	64.867	60.719	5.3362	-.966	-.797
8	9	50.728	58.321	55.252	2.8322	-.348	-1.430
9	9	47.680	63.251	53.881	4.4306	.839	.425
10	7	49.775	56.639	53.966	2.2811	-.802	-.258
11	9	49.687	55.092	52.851	1.8050	-.584	-.896
12	9	45.397	57.846	51.655	3.8768	-.075	-.859 *
13	9	44.733	58.269	51.836	4.4907	-.050	-1.144 *
14	4	44.222	59.113	50.101	6.6399	.613	-1.162 *

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	55.846	66.012	60.257	5.2144	.442	-1.500
6	7	48.970	64.603	57.508	6.1772	-.266	-1.444
7	13	51.905	77.935	62.015	7.1377	.629	.138
8	12	46.537	72.356	56.832	7.7874	.400	-.696
9	9	46.389	61.696	55.635	4.9288	-.571	-.470
10	13	45.879	63.465	54.582	5.8486	.036	-1.186
11	13	45.996	64.568	55.486	6.1724	-.234	-1.085
12	12	43.660	63.150	56.894	6.0796	-.924	-.311
13	11	44.393	61.107	56.486	5.2852	-1.385	.688
14	10	51.316	65.836	58.865	4.6641	-.197	-.874



ANGULAR MEASUREMENT VARIABLE 66



**Lower Incisor/Functional
Occlusal Plane**

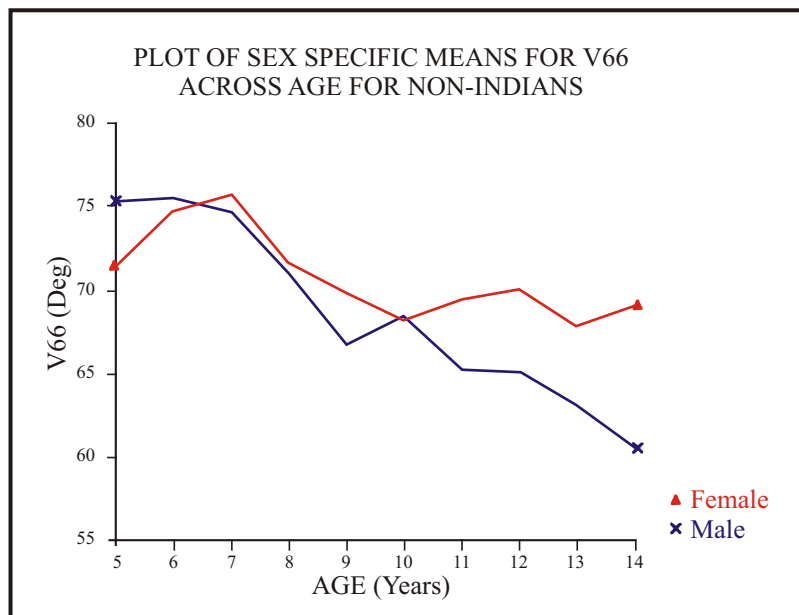
LIA-LIE/FPP-PMC 15-6/50-46

Male Non-Indian

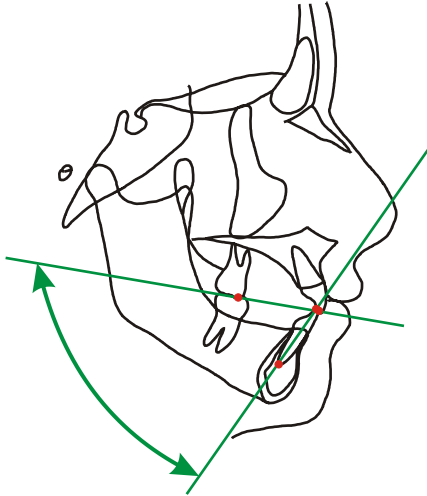
Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	5	69.578	83.041	75.233	5.8347	.323	-1.472
6	7	70.710	78.930	75.471	3.5989	-.308	-1.771
7	7	65.431	83.574	74.698	6.3445	-.017	-1.090
8	9	66.935	73.977	71.075	2.5672	-.171	-1.319
9	9	59.958	73.518	66.731	4.2149	-.086	-.730
10	7	59.780	72.278	68.406	4.4742	-1.027	-.045
11	9	58.250	70.746	65.193	3.7014	-.401	-.403 *
12	9	57.809	71.042	65.145	4.7859	-.321	-1.048 *
13	9	56.232	71.634	63.130	4.9348	.174	-.892
14	4	58.015	61.556	60.447	2.3460	.444	-1.104 **

Female Non-Indian

Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	3	69.890	72.252	71.309	1.2507	-.597	-1.500
6	7	68.257	85.064	74.751	5.6472	.767	-.370
7	13	68.280	85.943	75.815	5.0721	.366	-.381
8	12	62.648	87.255	71.726	7.4287	.597	-.461
9	9	65.908	76.200	69.950	3.3288	.754	-.514
10	13	60.564	75.683	68.191	4.2794	.004	-.828
11	13	61.960	78.144	69.357	5.1696	.133	-1.062
12	12	55.597	79.001	70.079	6.1127	-.762	1.022
13	11	59.472	73.558	67.848	5.7119	-.644	-1.244
14	9	66.969	72.021	69.120	1.7933	.272	-1.163



ANGULAR MEASUREMENT VARIABLE 67



Lower Incisor/Downs Occlusal Plane

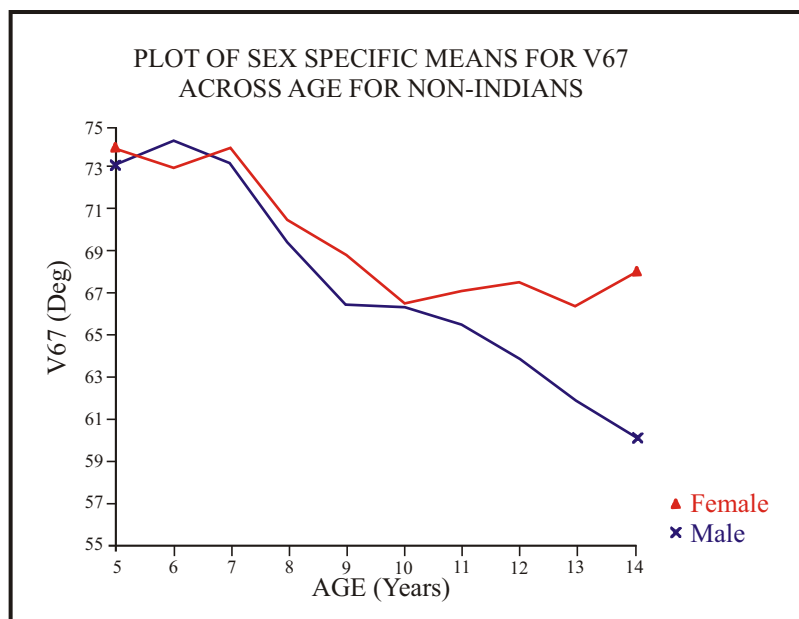
LIA-LIE/PDP-ADP 15-6/57-56

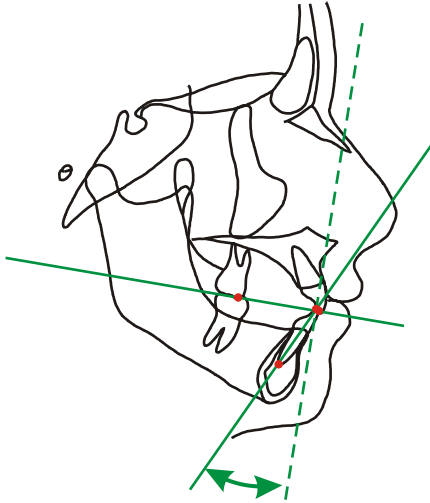
Male Non-Indian

Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	5	65.618	80.141	73.121	6.5802	.177	-1.661
6	7	69.161	79.891	74.348	4.3900	-.011	-1.495
7	7	65.525	79.296	73.216	4.5105	-.387	-.552
8	9	65.949	74.512	69.452	2.8230	.463	-.796
9	9	61.348	70.812	66.394	3.7989	-.072	-1.556
10	7	58.885	72.506	66.622	3.9431	-1.072	.171
11	9	59.297	69.963	65.655	3.6076	-.585	-.730
12	9	56.657	69.362	63.917	4.7498	-.412	-1.399
13	9	56.373	67.158	61.967	3.5507	-.280	-1.037 *
14	4	54.618	64.694	60.149	4.6503	-.213	-1.605 **

Female Non-Indian

Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	3	67.670	77.666	73.999	5.5040	-.681	-1.500
6	7	68.319	81.560	73.059	4.7886	.717	-.676
7	13	65.007	85.467	74.126	6.0654	.526	-.531
8	12	60.058	81.651	70.430	6.6335	.171	-.938
9	9	63.599	72.642	68.950	3.1082	-.214	-.954
10	13	61.184	74.394	66.980	3.6997	-.368	-.571
11	13	59.148	72.854	67.176	3.8705	-.316	-.344
12	12	54.845	73.785	67.616	5.3951	-.987	.638
13	11	58.364	74.469	66.408	4.8975	.098	-.955
14	9	63.977	69.948	68.076	1.6913	-1.655	2.106





ANGULAR MEASUREMENT VARIABLE 68

**Lower Incisor/Downs Occlusal Plane
(Downs Analysis)**

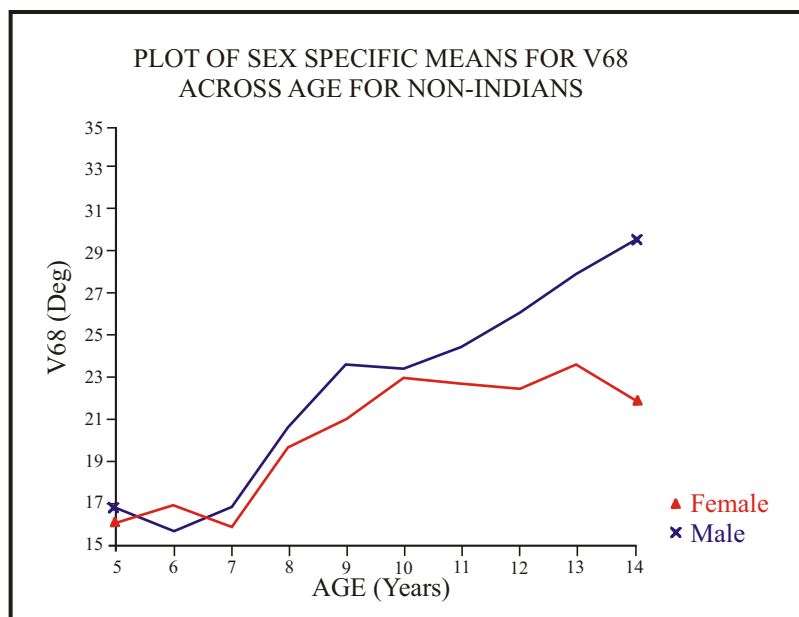
LIA-LIE/PDP-ADP (15-6/57-56)

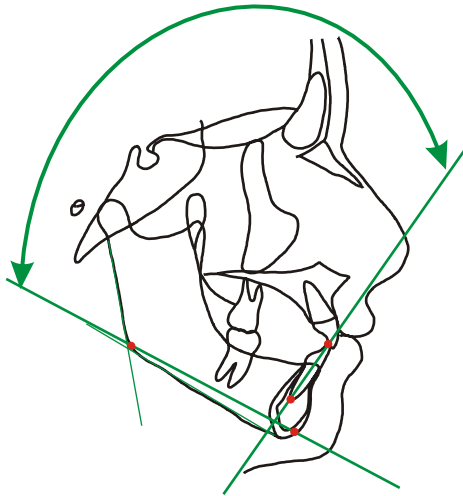
Male Non-Indian

Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	5	9.8586	24.381	16.879	6.5801	-.177	-1.661
6	7	10.109	20.838	15.652	4.3901	.011	-1.495
7	7	10.703	24.475	16.783	4.5105	.387	-.552
8	9	15.488	24.050	20.548	2.8229	-.463	-.796
9	9	19.188	28.651	23.606	3.7989	-.072	-1.556
10	7	19.494	31.115	23.377	3.9430	1.072	.171
11	9	20.037	30.703	24.345	3.6076	.585	-.730
12	9	20.638	33.343	26.083	4.7498	.412	-1.399
13	9	22.842	33.627	28.033	3.5506	.280	-1.037 *
14	4	25.306	35.381	29.851	4.3502	-.213	-1.605 **

Female Non-Indian

Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	3	12.334	22.330	16.001	5.5040	.681	-1.500
6	7	8.4395	21.681	16.941	4.7886	-.717	-.676
7	13	4.5330	24.992	15.873	6.0654	-.526	-.531
8	12	8.3484	29.941	19.570	6.6335	-.171	-.938
9	9	17.358	26.401	21.050	3.1081	.214	-.954
10	13	15.606	28.815	23.020	3.6997	-.368	-.571
11	13	17.145	30.852	22.823	3.8705	.316	-.344
12	12	16.215	35.155	22.383	5.3951	.987	.638
13	11	15.531	31.636	23.591	4.8975	-.098	-.955
14	9	20.052	26.023	21.923	1.6913	1.655	2.106





ANGULAR MEASUREMENT VARIABLE 69

Lower Incisor/Gonion-Gnathion

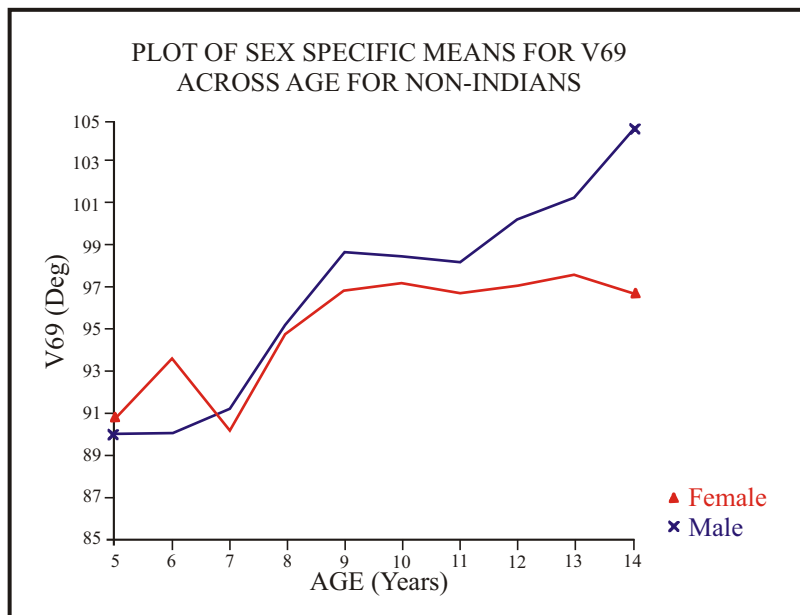
GO-GN/LIE-LIA 27-2/6-15

Male Non-Indian

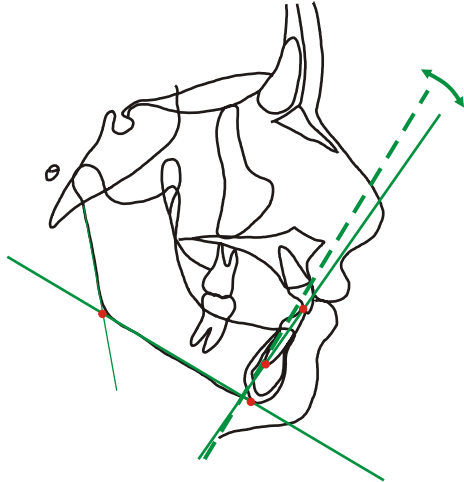
Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	85.433	93.965	90.082	4.2582	-.325	-1.796
6	7	87.012	93.854	90.032	2.7742	.409	-1.520 *
7	7	82.934	98.017	91.114	5.4250	-.116	-1.092
8	10	84.866	100.23	95.155	4.4367	-1.285	.976
9	9	93.328	106.07	98.841	4.5307	.324	-1.104
10	7	94.044	403.85	98.462	3.1770	.247	-.491
11	9	94.344	102.89	98.185	2.4573	.385	-.144
12	9	93.867	110.47	100.35	5.0214	.752	-.058
13	9	94.613	111.25	101.24	5.1807	.434	-.312
14	4	99.161	110.14	104.07	4.6436	.331	-1.136 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	84.768	99.601	90.619	7.8966	.614	-1.500
6	7	85.321	99.613	93.773	5.5725	-.711	-1.137
7	13	76.511	98.386	90.183	6.1265	-.819	-.000
8	12	81.509	104.46	94.996	6.9338	-.324	-.827
9	9	92.802	102.30	96.913	3.7695	.091	-1.606
10	13	91.324	106.52	97.205	5.4352	.486	-1.182
11	13	90.068	106.31	96.851	5.1493	.106	-1.074
12	12	89.366	110.25	97.139	5.7261	.846	.341
13	11	92.033	107.30	97.668	4.7592	.987	-.163
14	10	90.476	104.90	96.734	3.8678	.597	.407



ANGULAR MEASUREMENT VARIABLE 70



Lower Incisor/Mandibular Plane Downs Analysis

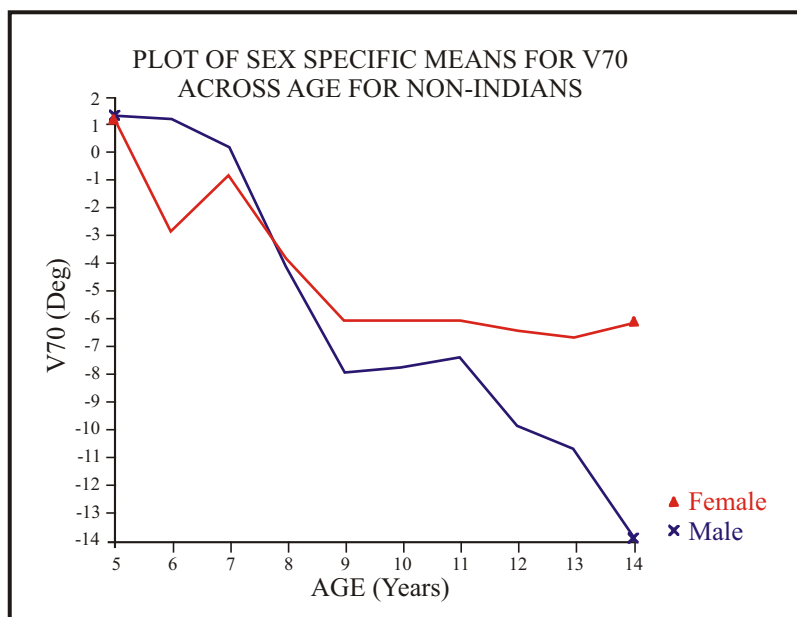
**GOI-ME/LIE-LIA 28-1/6-15/
-90 deg**

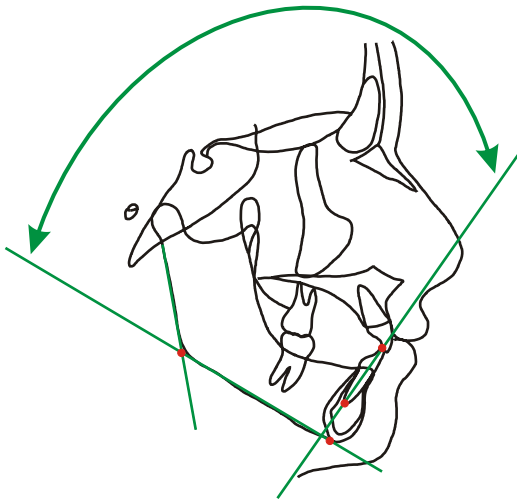
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	-1.9790	6.2681	1.3480	4.2417	.404	-1.813
6	7	-2.1863	4.6328	1.1824	2.4811	-.075	-1.380 *
7	7	-7.4048	9.1958	.16222	5.8225	.211	-1.001
8	10	-9.4966	6.0144	-4.1214	4.5045	1.177	.617
9	9	-14.455	-2.4976	-7.9627	4.5133	-.322	-1.256
10	7	-13.631	-2.9321	-7.7881	3.4259	-.315	-.469
11	9	-12.655	-3.9582	-7.4543	2.5678	-.750	.008
12	9	-19.492	-4.2998	-9.7252	4.8282	-.812	-.122
13	9	-20.741	-4.0747	-10.724	5.1545	-.516	-.348
14	4	-19.975	-8.7859	-13.909	4.7690	-.290	-1.230 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	-8.7143	6.7490	1.0535	8.4982	-.678	-1.500
6	7	-9.4829	6.4653	-2.9291	6.0437	.532	-1.165
7	13	-7.7568	15.558	.80053	6.3548	.926	.245
8	12	-12.984	10.121	-3.9343	6.9187	.432	-.600
9	9	-12.560	-1.3196	-6.0781	4.0755	-.139	-1.382
10	13	-15.546	-2.4072	-6.0850	5.4904	-.567	-1.104
11	13	-15.756	.58936	-6.0950	5.1553	-.164	-.972
12	12	-19.793	1.3774	-6.3844	5.9969	-.788	.100
13	11	-16.776	-.99072	-6.8757	4.8425	-.941	-.146
14	10	-14.076	-.37719	-6.1554	3.8980	-.591	-.086





ANGULAR MEASUREMENT VARIABLE 71

Lower Incisor/Mandibular Plane Tweed Analysis

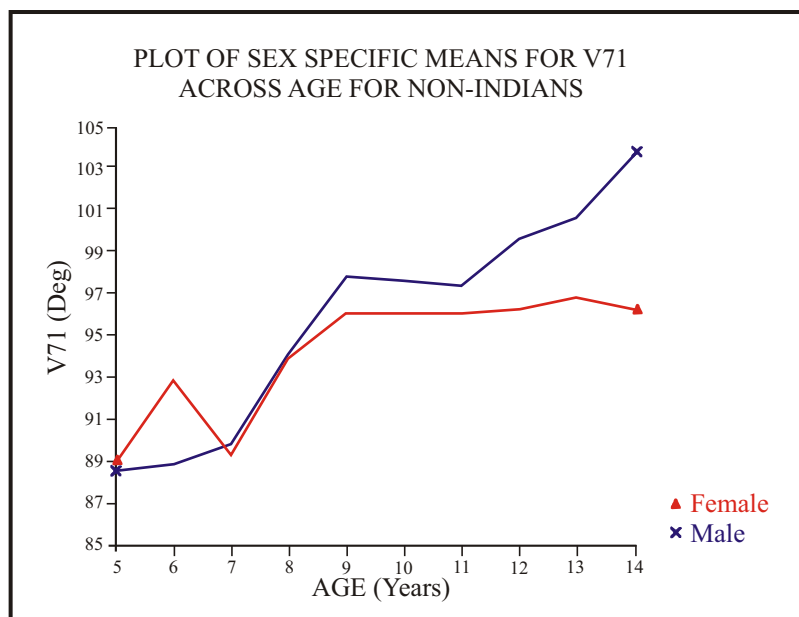
GOI-ME/LIE-LIA 28-1/6-15

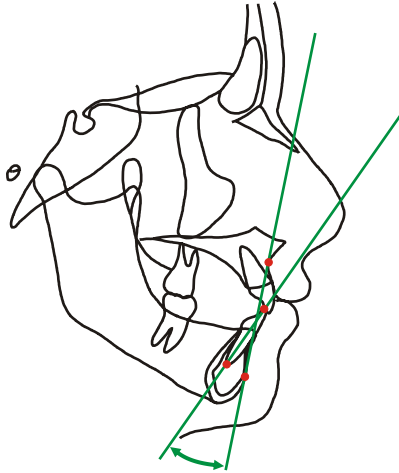
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	83.732	91.979	88.652	4.2418	-.404	-1.813
6	7	85.367	92.187	88.818	2.4810	.075	-1.380 *
7	7	80.804	97.405	89.838	5.8226	-.211	-1.001
8	10	83.986	99.497	94.121	4.5046	-1.177	.617
9	9	92.498	104.46	97.963	4.5133	.322	-1.256
10	7	92.932	103.63	97.788	3.4260	.315	-.469
11	9	93.958	102.65	97.454	2.5677	.750	.008
12	9	94.300	109.49	99.725	4.8283	.812	-.122
13	9	94.075	110.74	100.72	5.1545	.516	-.348
14	4	98.786	109.98	103.91	4.7691	.290	-1.230 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	83.251	98.715	88.947	8.4984	.678	-1.500
6	7	83.535	99.483	92.929	6.0436	-.532	-1.165
7	13	74.442	97.757	89.200	6.3548	-.926	.245
8	12	79.879	102.98	93.934	6.9187	-.432	-.600
9	9	91.320	102.56	96.078	4.0754	.139	-1.382
10	13	90.241	105.55	96.085	5.4904	.567	-1.103
11	13	89.411	105.76	96.095	5.1553	.164	-.972
12	12	88.623	109.79	96.385	5.9969	.788	.100
13	11	90.991	106.78	96.876	4.8425	.941	-.146
14	10	90.377	104.08	96.156	3.8980	.591	-.086





ANGULAR MEASUREMENT VARIABLE 72

**Lower Incisor/A Point-Pogonion
Ricketts Analysis**

PG-A/LIA-LIE

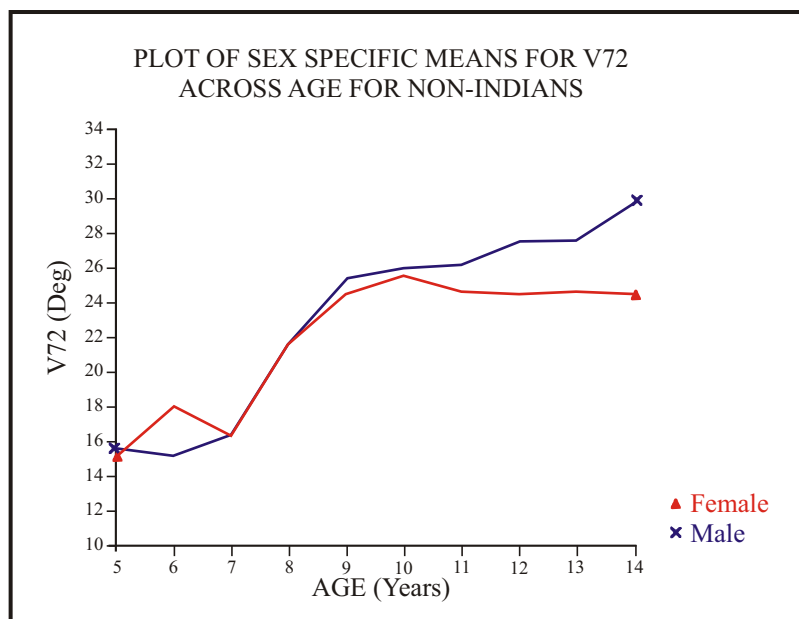
3-9/15-6

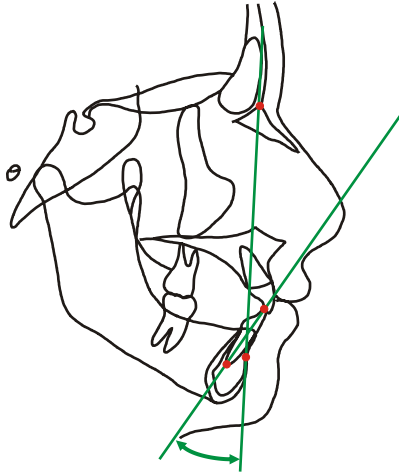
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	9.6423	22.767	15.488	5.1604	.338	-1.166
6	7	10.865	22.428	15.010	3.8083	1.006	.154
7	7	8.7549	26.387	16.341	6.3329	.438	-1.036
8	10	10.277	30.937	21.632	5.2661	-.486	.937
9	9	16.719	35.677	25.304	5.2122	.431	.310
10	7	22.665	35.163	25.948	4.2308	1.714	1.483
11	9	20.387	34.793	26.016	4.6321	.838	-.377
12	9	19.849	37.067	27.364	5.5143	.385	-.862
13	9	17.142	36.006	27.390	5.9234	-.235	-.786
14	4	25.537	34.362	29.992	3.9881	-.023	-1.599 *

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	12.466	19.236	15.031	3.6711	.657	-1.500
6	7	12.909	22.304	18.094	3.2035	-.398	-.921
7	13	4.7915	23.745	16.442	5.8820	-.670	-.538
8	12	10.566	27.714	21.705	5.1622	-.918	-.108
9	9	22.232	26.355	24.276	1.5523	.092	-1.585
10	13	19.075	30.937	25.625	3.6578	-.175	-1.049
11	13	20.560	29.120	24.737	2.6063	.055	-1.165
12	12	17.048	31.392	24.480	4.1431	-.007	-.737
13	11	17.549	29.353	24.571	3.8155	-.289	-.948
14	10	20.317	28.222	24.441	2.5555	-.121	-.909





ANGULAR MEASUREMENT VARIABLE 73

Lower Incisor/Nasion-B Point Steiner Analysis

B-N/LIA-LIE

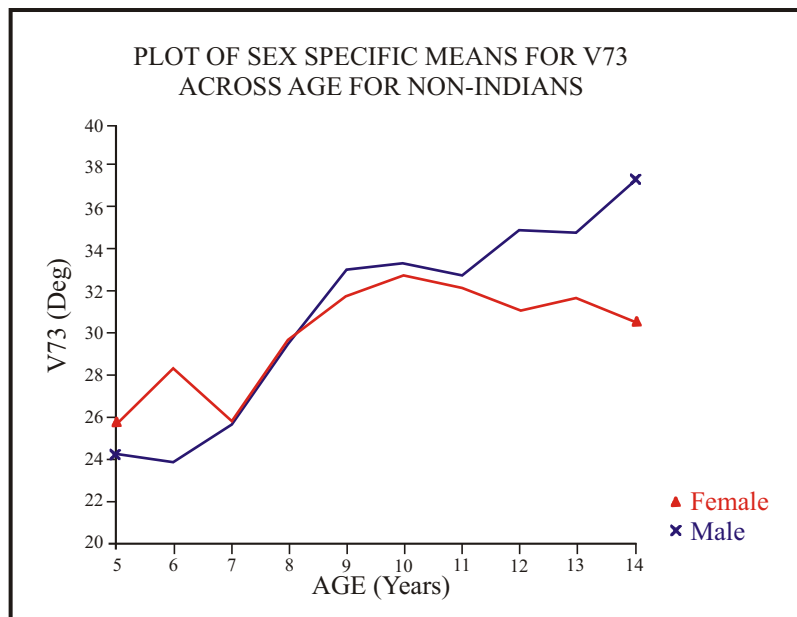
4-38/15-6

Male Non-Indian

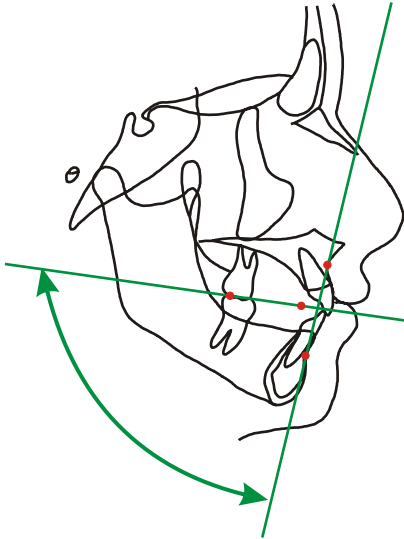
Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	5	16.521	30.148	24.199	5.4389	-.276	-1.166
6	7	19.652	28.676	23.909	3.1382	.358	-.970 *
7	7	21.431	32.506	25.789	4.1141	.686	-1.008
8	10	19.174	35.993	29.519	4.9085	-.682	.059
9	9	25.302	40.406	33.034	4.9893	.181	-.932
10	7	29.525	39.721	33.202	3.8434	.796	-.920
11	9	27.309	38.714	32.833	3.9855	.095	-1.329
12	9	28.478	42.648	35.020	5.3767	-.050	-1.338
13	9	28.875	42.975	34.929	5.0076	.249	-1.200
14	4	29.503	43.428	37.247	5.8462	-.424	-1.070 *

Female Non-Indian

Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	3	22.228	28.069	25.676	3.0596	-.558	-1.500
6	7	23.530	33.570	28.325	4.0704	.091	-1.385
7	13	14.174	34.218	25.790	6.2521	-.575	-.302
8	12	18.910	39.416	29.834	6.6508	-.209	-.990
9	9	27.705	39.129	31.820	3.7242	.823	-.359
10	13	24.314	40.295	32.942	4.7758	-.225	-1.070
11	13	25.352	39.504	32.182	4.2443	.258	-.851
12	12	24.387	40.617	31.040	5.3316	.351	-1.085
13	11	25.444	38.250	31.730	4.3061	.309	-.996
14	10	25.844	36.320	30.535	2.9897	.468	-.294



ANGULAR MEASUREMENT VARIABLE 73.1



**A Point-B Point/Functional
Occlusal Plane**

A-B/PMC-FPP

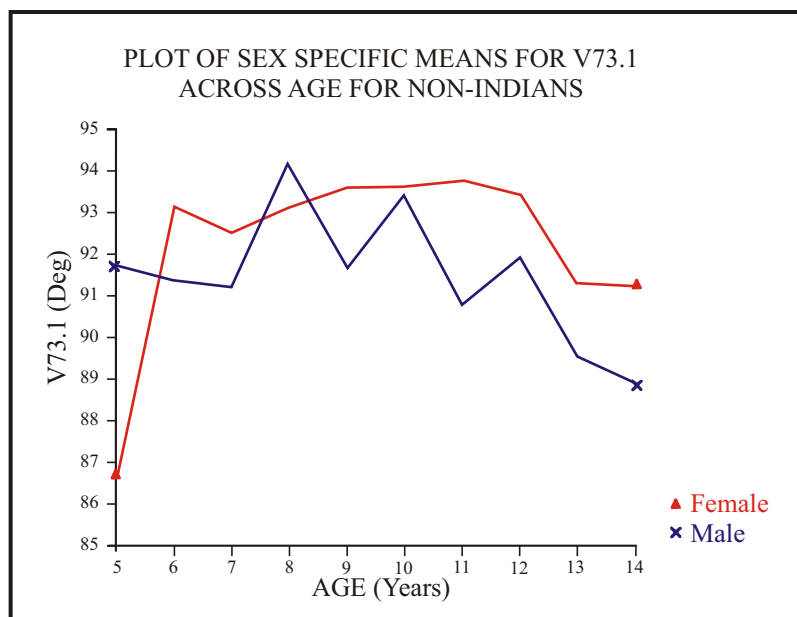
9-4/46-50

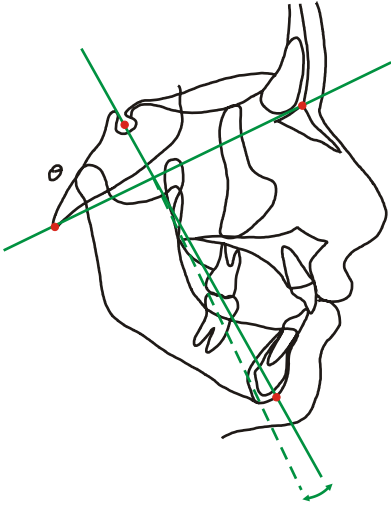
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	83.842	99.747	91.747	5.9304	-.000	-.953
6	7	86.713	98.035	91.441	3.8912	.481	-.768
7	7	85.395	98.524	91.240	4.6624	.187	-1.096
8	10	88.923	102.33	94.104	4.2094	.580	-.588
9	9	89.440	98.281	91.662	2.7541	1.734	1.823
10	7	88.553	98.531	93.417	3.3543	.025	-.910
11	9	84.870	97.176	90.708	3.9233	.042	-.918
12	9	87.914	98.194	91.897	3.4697	.596	-.803
13	9	83.842	94.484	89.466	3.7535	-.037	-1.328
14	4	86.140	92.788	88.764	2.9331	.652	-1.097

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	86.158	87.522	86.622	.77968	.706	-1.500
6	7	87.704	100.91	93.121	4.3968	.573	-.515
7	13	88.817	97.055	92.492	2.6650	.346	-1.007
8	12	84.957	98.138	93.111	3.5656	-.785	.429
9	9	89.641	97.845	93.559	2.8827	.204	-1.279
10	13	88.908	99.289	93.582	3.0216	.477	-.636
11	13	87.255	100.33	93.725	4.0958	-.067	-1.137
12	12	85.623	100.37	93.359	4.4463	-.283	-.725
13	11	84.702	97.861	91.180	3.8355	-.169	-.661
14	10	84.242	96.530	91.154	4.0917	-.207	-1.069





ANGULAR MEASUREMENT VARIABLE 74

Gnathion-Sella/Basion-Nasion Ricketts Analysis

N-BA/GN-S

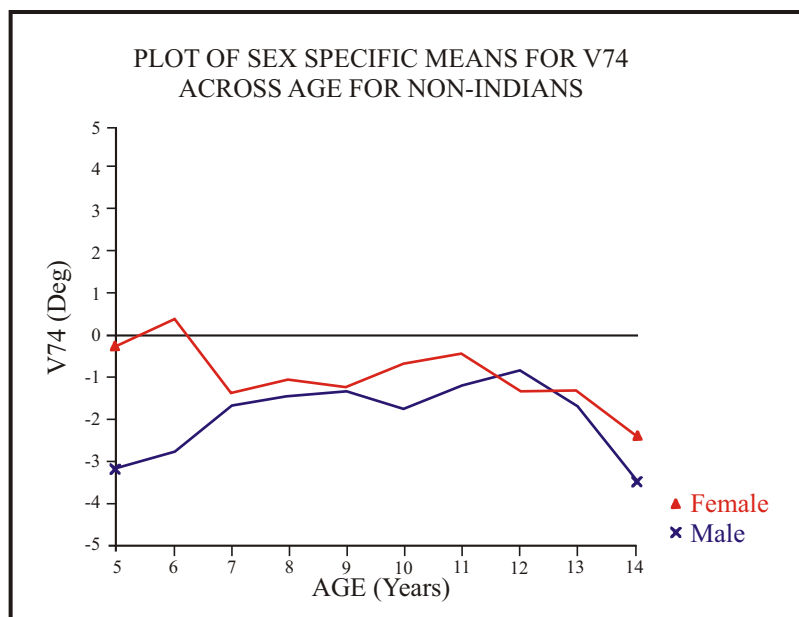
**38-30/2-35
-90 deg**

Male Non-Indian

Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	5	-5.5000	.39576	-3.1730	2.4658	.442	-1.169
6	7	-5.6736	.88086	-2.8072	2.3837	.175	-1.105
7	7	-4.4123	1.5999	-1.6711	2.0926	.160	-1.085
8	10	-4.4775	2.4424	-1.4784	2.6107	.436	-1.305
9	9	-3.7324	.91065	-1.3704	1.7397	-.064	-1.598
10	7	-5.7021	1.9387	-1.7080	2.8931	-.280	-1.222
11	9	-5.6841	3.4255	-1.2008	3.1170	.069	-1.214
12	9	-3.8769	2.4392	-.88012	2.4164	-.005	-1.621
13	9	-6.8218	4.5596	-1.7189	3.5509	.315	-.726
14	4	-6.7466	-.49853	-3.4816	3.2197	-.039	-1.923

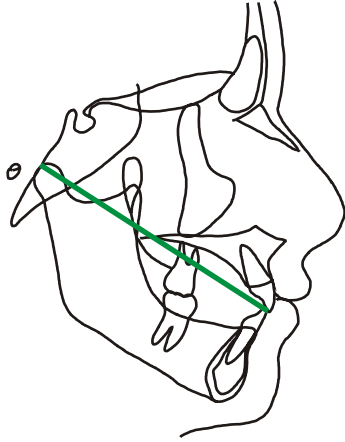
Female Non-Indian

Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	3	-4.0190	2.0208	-.28548	3.2631	-.650	-1.500
6	7	-5.6418	3.6602	.30731	3.1182	-.855	.029
7	13	-6.2812	4.3579	-1.3783	3.2828	.066	-.968
8	12	-6.1787	3.7444	-1.0193	3.1637	-.202	-.992
9	9	-5.3430	4.2039	-1.3064	3.1520	.435	-.970
10	13	-5.6870	4.4539	-.66997	3.4032	.043	-1.299
11	13	-6.8313	4.0608	-.48116	3.2587	-.381	-.767
12	12	-6.3379	3.5435	-1.3733	3.0886	-.007	-1.090
13	11	-4.0405	4.3215	-1.3316	2.09386	.714	-.954
14	10	-5.8853	.70777	-2.3900	2.2694	-.106	-1.228





**9. MEDIDAS LINEALES
LINEAR MEASUREMENTS
(75-188)**



LINEAR MEASUREMENT VARIABLE 75

**Condylion-Lower Incisor Incisal
Edge**

CO-LIE

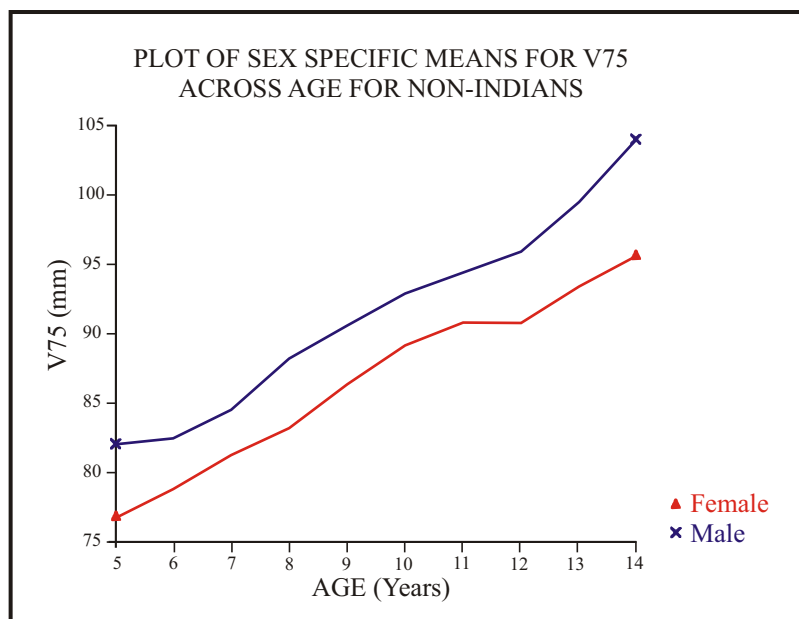
33-6

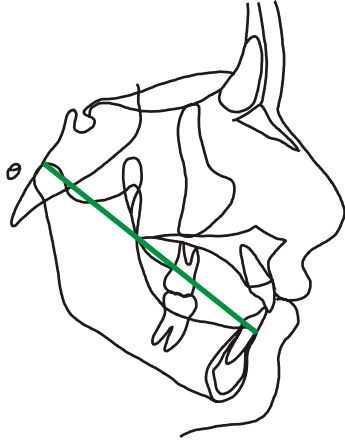
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	79.863	83.947	82.042	1.5080	-.246	-.819
6	7	74.326	86.606	82.576	4.8470	-.862	-.888 *
7	7	77.096	88.391	84.544	3.7169	-1.184	.408
8	10	82.785	92.390	88.257	3.0474	-.546	-.811 **
9	9	83.104	95.668	90.645	4.2190	-.679	-.938 *
10	7	86.009	98.372	92.967	4.8887	-.548	-1.240
11	9	86.647	102.27	94.487	5.4627	-.188	-1.050
12	9	86.995	103.37	96.004	5.5149	-.470	-.860 **
13	9	88.873	104.80	99.595	6.1476	-.870	-.786 *
14	4	99.371	107.78	104.18	4.0181	-.253	-1.645 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	70.773	81.762	76.693	5.5438	-.276	-1.500
6	7	77.111	80.840	78.799	1.6075	.289	-1.618
7	13	75.398	84.725	81.264	2.6055	-.918	.233
8	12	74.162	87.512	83.216	3.7143	-.998	.986
9	9	78.320	91.319	86.385	4.1496	-.648	-.396
10	13	80.039	95.566	89.208	3.9885	-.505	.453
11	12	87.955	94.112	90.864	2.0873	.037	-1.399
12	12	83.827	96.250	90.834	3.4393	-.388	-.320
13	11	83643	97.813	93.476	4.4343	-.896	.063
14	10	85.752	102.30	95.717	4.5453	-.778	.534





LINEAR MEASUREMENT VARIABLE 76

Condylion-Infradentale

CO-ID

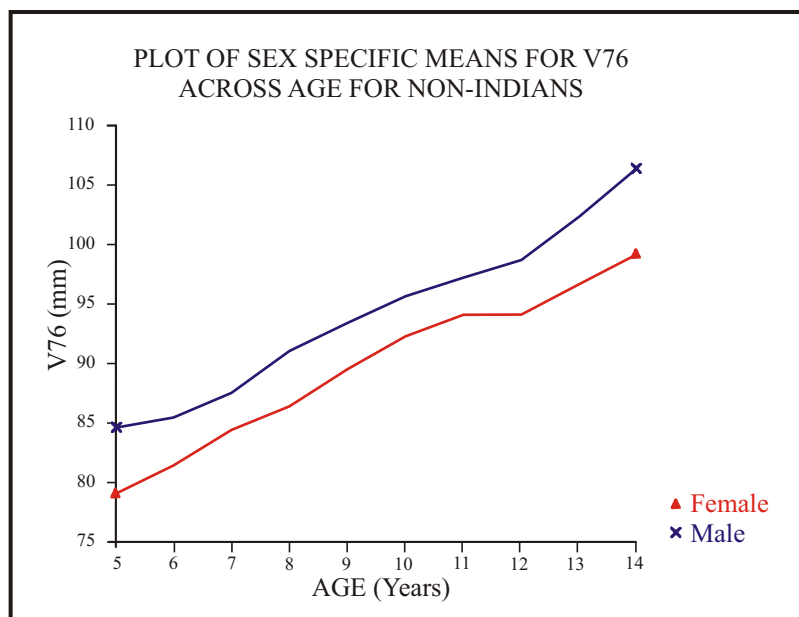
33-5

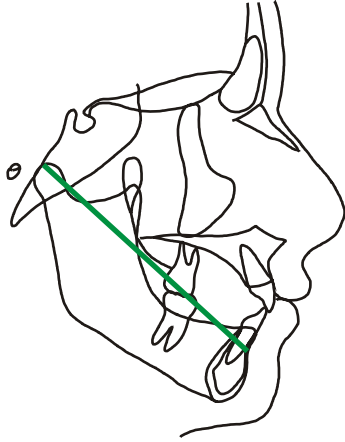
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	82.973	86.757	84.733	1.8955	.240	-1.776
6	7	77.418	90.683	85.594	4.9607	-.708	-.973 *
7	7	79.880	92.160	87.675	4.0906	-.916	-.066
8	10	85.495	94.715	91.217	3.2763	-.647	-.950 **
9	9	87.388	97.763	93.583	3.8587	-.602	-1.308
10	7	89.428	100.25	95.837	4.5757	-.583	-1.290
11	9	89.670	104.41	97.415	5.2997	-.215	-1.110
12	9	92.011	105.46	98.906	4.7246	-.162	-1.008 **
13	9	93.357	108.32	102.58	5.8292	-.584	-1.221 *
14	4	100.99	111.63	106.69	4.9930	-.139	-1.695 *

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	73.615	83.147	79.145	4.9461	-.513	-1.500
6	7	78.535	85.068	81.542	2.1792	.287	-.831
7	13	78.334	88.053	84.543	2.8593	-.984	.142
8	12	78.254	90.868	86.540	3.5587	-.897	.470
9	9	82.004	95.393	89.674	4.1763	-.407	-.552
10	13	82.487	99.823	92.450	4.3772	-.373	.505
11	12	91.429	99.292	94.277	2.2614	.594	.084
12	12	87.722	98.853	94.294	2.9902	-.652	.141
13	11	86.677	101.22	96.871	4.1095	-1.365	1.459
14	10	88.815	104.21	99.411	4.4216	-1.317	1.399





LINEAR MEASUREMENT VARIABLE 77

Condylion-B Point

CO-B

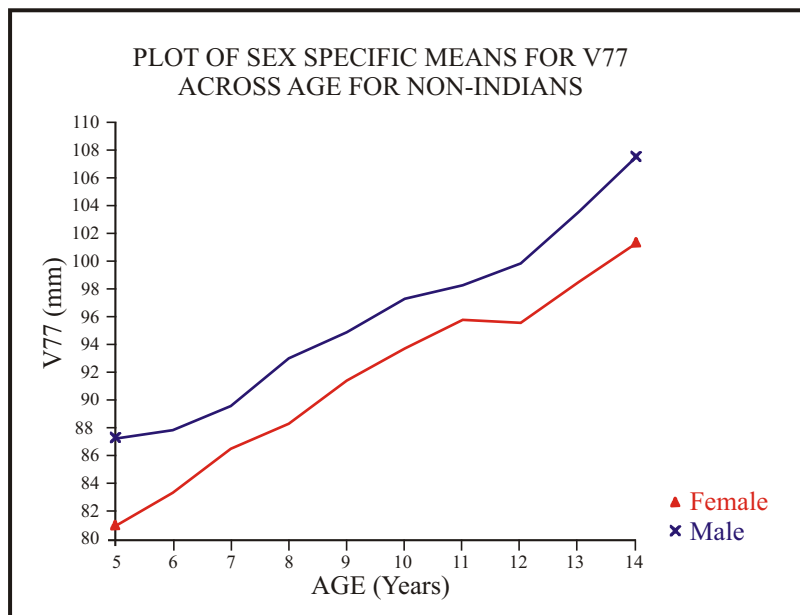
33-4

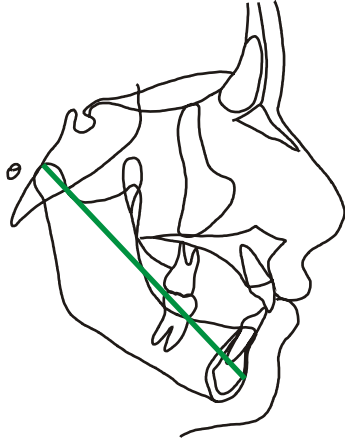
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	84.980	92.266	87.573	2.9825	.810	-.821
6	7	80.125	93.021	88.192	4.6528	-.718	-.733 *
7	7	82.655	94.526	89.939	3.9156	-.756	-.197
8	10	87.595	97.332	93.395	3.2250	-.520	-1.035 **
9	9	90.295	98.653	95.284	3.4349	-.573	-1.419
10	7	91.620	101.81	97.708	4.3735	-.607	-1.285
11	9	90.740	105.21	98.688	5.1487	-.254	-1.171
12	9	94.272	106.68	100.27	4.1682	.011	-.959 **
13	9	95.135	110.07	104.00	5.7334	-.519	-1.280 *
14	4	102.07	113.86	108.02	5.4936	-.019	-1.713

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	76.581	84.069	81.221	4.0527	-.653	-1.500
6	7	79.076	87.809	83.659	2.7074	-.233	-.300
7	13	80.771	90.997	86.843	2.9195	-.704	-.039
8	12	81.647	93.322	88.658	3.5490	-.556	-.655
9	9	84.742	99.639	91.782	4.6971	.086	-.840
10	13	83.962	102.43	94.106	4.7399	-.095	.195
11	12	92.518	102.25	96.183	2.5926	.867	.625
12	12	89.925	100.80	95.967	2.7842	-.540	.438
13	11	90.104	103.77	98.922	3.8539	-.940	.532
14	10	91.376	106.43	101.75	4.3244	-1.312	1.431





LINEAR MEASUREMENT VARIABLE 78

Condylion-Pogonion

CO-PG

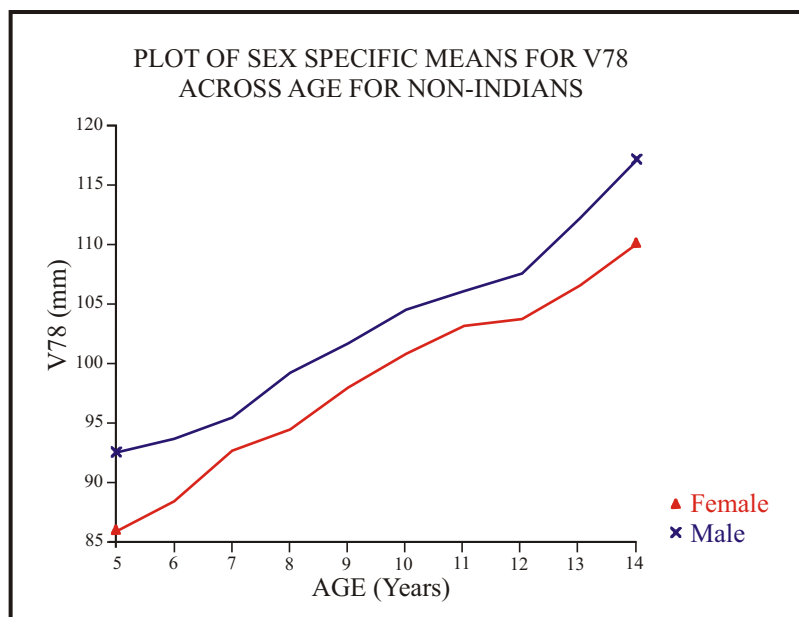
33-3

Male Non-Indian

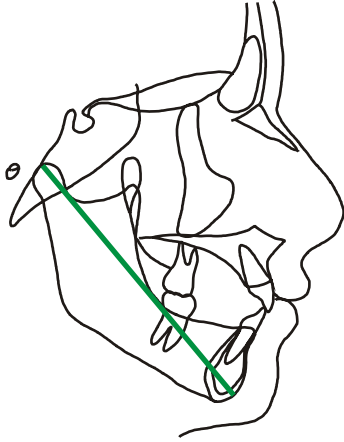
Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	89.041	96.558	92.587	3.3267	.272	-1.672
6	7	85.051	100.29	93.746	5.6011	-.502	-1.071 *
7	7	87.346	100.35	95.541	4.5809	-.776	-.615
8	10	92.903	104.50	99.327	4.0676	-.092	-1.287 **
9	9	94.628	107.92	101.81	5.1601	-.434	-1.405
10	7	97.391	111.45	104.66	5.8287	-.247	-1.529
11	9	96.449	115.71	106.23	6.3896	-.199	-1.078
12	9	99.489	116.02	107.72	5.2453	-.197	-.716 **
13	9	102.10	119.73	112.40	6.6298	-.500	-1.189 *
14	4	110.39	124.09	117.42	6.5381	-.044	-1.780

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	79.098	89.770	85.915	5.9204	-.689	-1.500
6	7	83.802	93.658	88.466	3.0443	.232	-.249
7	13	86.327	97.520	92.742	3.1293	-.562	-.028
8	12	85.713	100.87	94.538	4.1755	-.565	-.054
9	9	89.230	104.85	98.079	5.0820	-.207	-.774
10	13	89.272	110.55	100.93	5.7978	-.035	-.237
11	12	98.320	109.48	103.29	3.3553	.433	-.904
12	12	96.465	110.37	103.87	3.4253	-.197	.653
13	11	95.927	114.00	106.71	4.8275	-.713	.552
14	10	98.234	116.56	110.30	5.0330	-1.297	1.453



LINEAR MEASUREMENT VARIABLE 79



Condylion-Gnathion

CO-GN

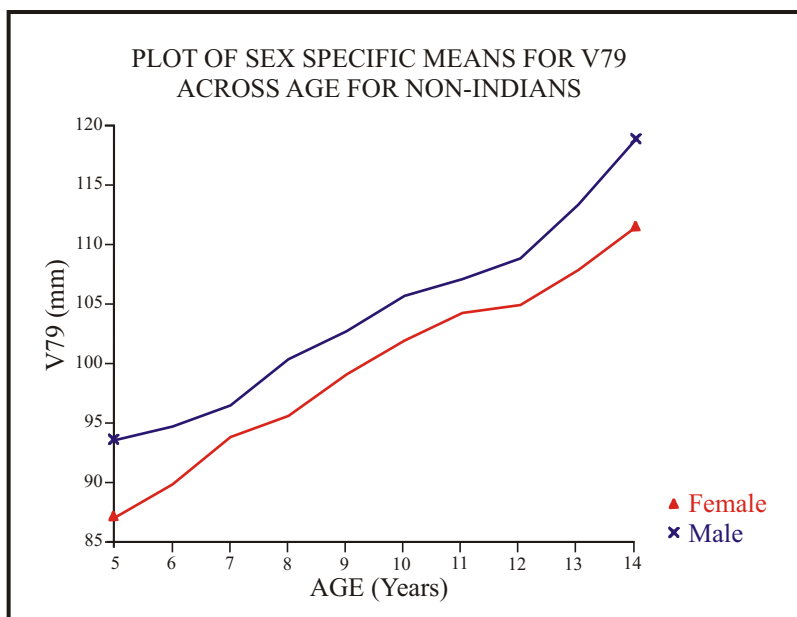
33-2

Male Non-Indian

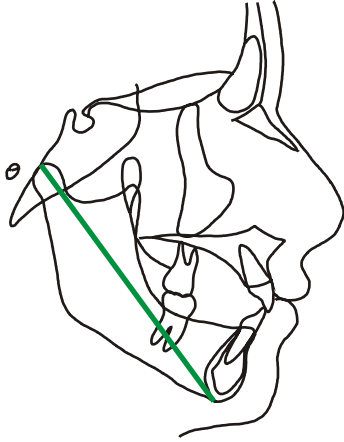
Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	90.412	97.533	93.541	3.2682	.339	-1.710
6	7	87.168	101.14	94.699	5.4664	-.427	-1.207
7	7	89.442	100.91	96.485	4.0253	-.680	-.758
8	10	93.741	105.87	100.39	3.9567	-.102	-1.068 **
9	9	96.183	109.42	102.75	5.1648	-.318	-1.405
10	7	98.159	112.50	105.74	5.6197	-.265	-1.426
11	9	97.619	116.81	107.16	6.2895	-.174	-.982
12	9	101.22	117.49	108.91	5.1616	-.056	-.666 **
13	9	103.57	120.85	113.46	6.4293	-.560	-1.082 *
14	4	112.29	125.29	119.02	6.5479	.023	-1.798

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	80.197	90.753	86.984	5.8892	-.694	-1.500
6	7	85.387	94.671	89.810	2.8832	.257	-.296
7	13	88.195	98.195	93.811	2.9282	-.547	-.343
8	12	86.253	102.21	95.600	4.1939	-.649	.331
9	9	89.956	105.72	99.097	5.1236	-.257	-.724
10	13	90.376	110.78	101.96	5.6367	-.187	-.230
11	12	99.217	109.92	104.30	3.1397	.331	-.832
12	12	97.613	111.70	104.97	3.5319	-.161	.380
13	11	97.001	114.51	107.93	4.6953	-.894	.845
14	10	99.253	117.55	111.59	5.1611	-1.288	1.392



LINEAR MEASUREMENT VARIABLE 80



Condylion-Menton

CO-ME

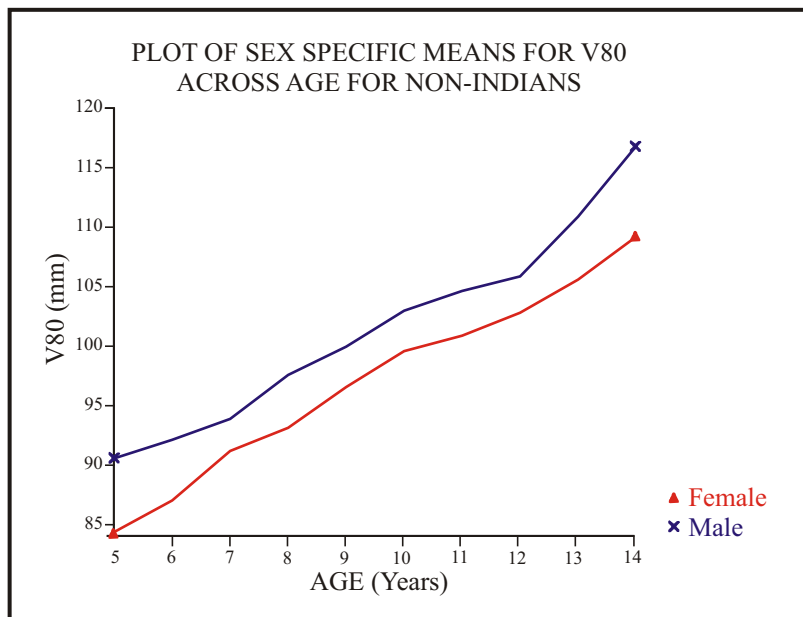
33-1

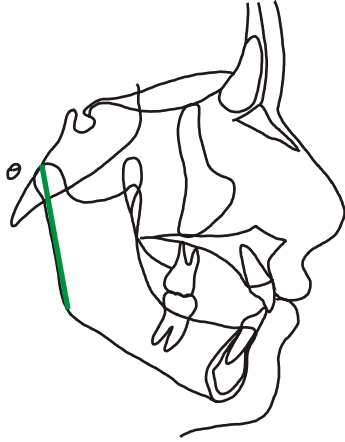
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	86.574	95.776	90.591	3.8673	.395	-1.477
6	7	84.333	100.00	92.160	5.6822	-.248	-1.092
7	7	88.066	97.867	93.927	3.8938	-.492	-1.420
8	10	90.684	103.57	97.642	3.9938	-.075	-.882 *
9	9	92.302	106.25	100.03	5.1926	-.342	-1.399
10	7	94.736	109.40	103.07	5.5512	-.293	-1.328
11	9	96.143	114.55	104.74	6.0697	-.045	-1.007 *
12	9	99.134	114.07	105.97	4.8538	-.079	-.799
13	9	101.20	118.07	111.02	6.2168	-.588	-1.009
14	4	110.84	124.95	116.97	6.5309	.285	-1.557

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	76.571	88.681	84.387	6.7803	-.697	-1.500
6	7	82.255	92.082	87.033	3.1264	.128	-.517
7	13	85.896	94.851	91.217	2.8320	-.411	-.845
8	12	83.659	99.023	93.174	4.2022	-.781	.406
9	9	87.900	104.40	96.616	5.0581	-.090	-.621
10	13	88.789	108.23	99.654	5.6099	-.186	-.538
11	13	88.217	108.41	100.96	5.1787	-.973	1.015
12	12	95.393	108.92	102.90	3.6070	-.294	-.147
13	11	95.444	112.14	105.70	4.7578	-.615	-.011
14	10	97.239	115.00	109.32	5.0069	-1.357	1.535





LINEAR MEASUREMENT VARIABLE 81

Condylion-Gonion

CO-GO

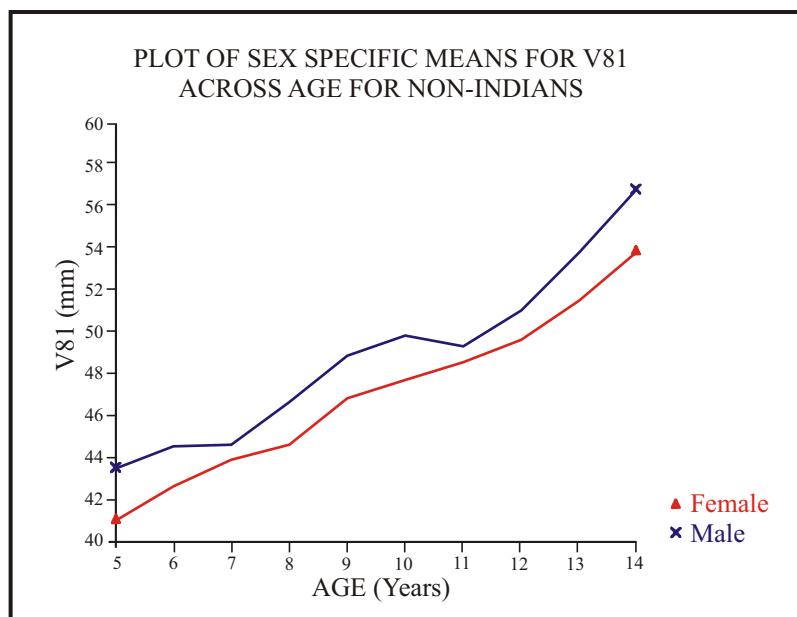
33-27

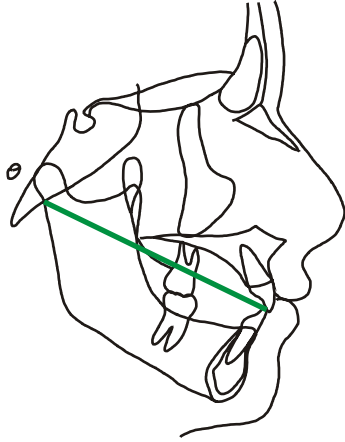
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	39.661	46.515	43.502	2.5773	-.462	-.853
6	7	37.229	50.632	44.580	4.2443	-.173	-.904
7	7	41.672	48.546	44.658	2.7316	.186	-1.509
8	10	40.678	51.069	46.717	3.3229	-.469	-.940
9	9	43.181	52.724	48.956	3.5672	-.476	-1.273
10	7	45.646	54.091	49.930	3.0533	.212	-1.115
11	9	44.332	55.666	49.410	4.3214	.381	-1.213
12	9	46.515	55.741	51.142	2.9900	.159	-.962
13	9	47.007	59.449	53.944	3.8004	-.324	-.572
14	4	52.445	62.801	57.023	4.4232	.400	-1.179

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	37.161	42.999	40.984	3.3117	-.704	-1.500
6	7	36.197	48.303	42.645	3.9271	-.161	-.624
7	13	41.669	45.704	43.933	1.5101	-.416	-1.385
8	12	40.644	47.415	44.659	1.8094	-.699	.237
9	9	42.450	48.740	46.900	1.9080	-1.500	1.378
10	13	41.483	53.076	47.785	3.6631	-.173	-1.175
11	13	40.928	54.569	48.643	3.4103	-.433	.425
12	12	46.151	56.562	49.725	2.9294	.978	.460
13	11	46.676	59.032	51.621	3.5938	.734	-.128
14	10	48.003	59.844	53.989	3.3777	.204	-.253





LINEAR MEASUREMENT VARIABLE 82

**Articulare-Lower Incisor
Incisal Edge**

AR-LIE

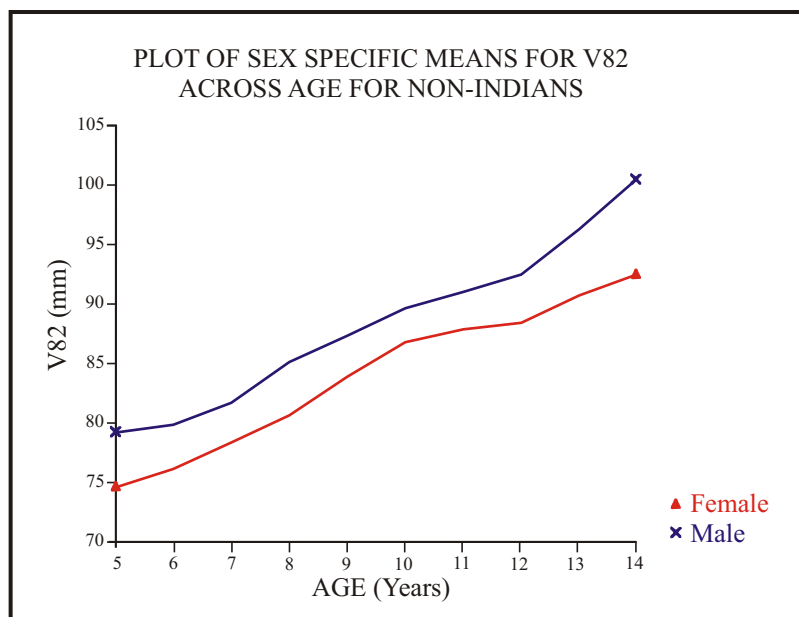
31-6

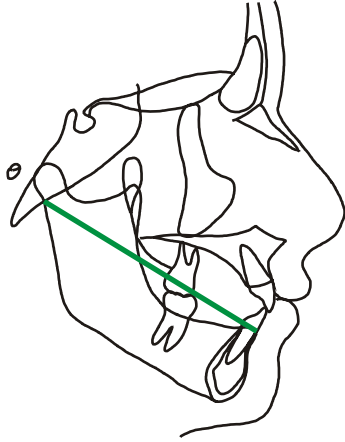
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	75.721	80.918	79.370	2.2888	-.907	-.796
6	7	72.604	85.071	80.032	4.6550	-.602	-1.067
7	7	75.114	86.582	81.890	3.7979	-.674	-.479
8	10	79.932	89.894	85.333	3.4019	-.244	-1.107 **
9	9	79.864	93.493	87.555	4.2022	-.463	-.489
10	7	83.837	94.901	89.877	4.7003	-.325	-1.457
11	9	83.675	97.689	91.258	5.2755	-.200	-1.286
12	9	84.184	100.09	92.729	5.5361	-.290	-.902 *
13	9	85.108	102.88	96.561	6.1834	-.809	-.614 *
14	4	97.050	104.16	100.83	3.7001	-.050	-1.925 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	71.144	78.298	74.729	3.5771	-.008	-1.500
6	7	74.021	78.542	76.297	1.7783	.072	-1.500
7	13	74.751	82.227	78.533	2.3530	-.035	-1.197
8	12	71.471	85.766	80.827	3.9383	-.876	.763
9	9	76.262	88.059	84.091	3.7643	-.883	.023
10	13	80.855	93.215	87.008	3.3640	.180	-.446
11	12	85.085	91.853	88.095	2.2667	.089	-1.250
12	12	80.850	94.595	88.647	3.5346	-.382	.522
13	11	82.601	96.173	90.963	3.8928	-.610	.092
14	10	85.081	98.709	92.746	3.8025	-.329	.058





LINEAR MEASUREMENT VARIABLE 83

Articulare -Infradentale

AR-ID

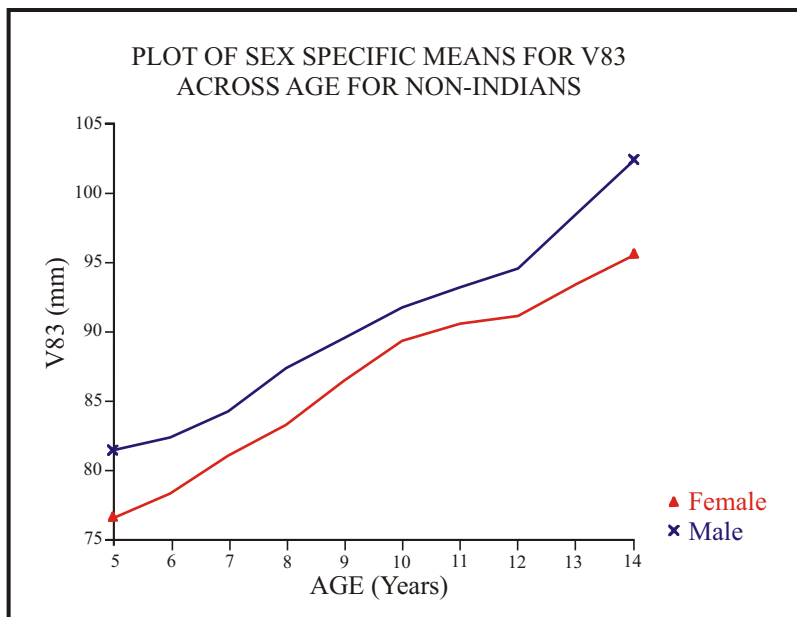
31-5

Male Non-Indian

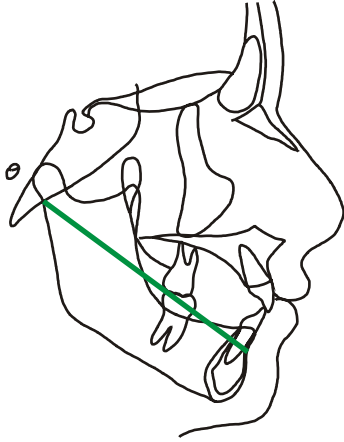
Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	78.269	84.226	81.410	2.6315	-.277	-1.670
6	7	74.967	87.470	82.351	4.6947	-.580	-1.123 *
7	7	77.384	89.605	84.238	4.0708	-.457	-.723
8	10	82.119	92.772	87.373	3.5962	-.147	-1.053 **
9	9	83.204	94.965	89.548	3.8722	-.182	-.832
10	7	85.710	96.567	91.764	4.4318	-.368	-1.470
11	9	85.613	99.604	93.227	5.2100	-.155	-1.302
12	9	87.816	101.84	94.591	4.9443	.086	-.962 *
13	9	88.586	105.43	98.524	5.8999	-.499	-1.054 *
14	4	97.840	107.09	102.43	4.7193	.008	-1.921 *

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	73.322	78.995	76.473	2.8881	-.381	-1.500
6	7	75.614	81.670	78.288	2.3089	.207	-1.419
7	13	77.276	85.820	81.030	2.4951	.268	-.518
8	12	74.438	87.603	83.267	3.7022	-.979	.632
9	9	79.002	90.891	86.466	3.7273	-.745	-.272
10	13	82.685	96.568	89.348	3.6619	.365	-.225
11	12	87.607	96.061	90.592	2.4588	.805	.080
12	12	83.568	95.525	91.152	3.0343	-1.077	1.463
13	11	84.784	98.146	93.448	3.5871	-1.100	1.250
14	10	87.266	99.693	95.556	3.6201	-1.007	.887



LINEAR MEASUREMENT VARIABLE 84



Articulare-B Point

AR-B

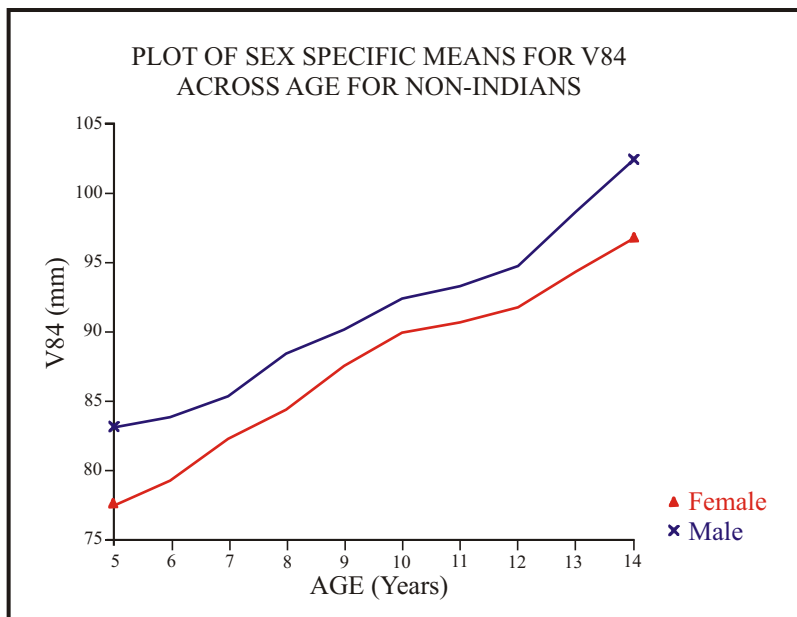
31-4

Male Non-Indian

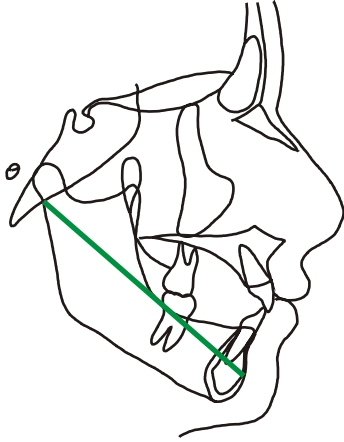
Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	79.776	88.642	83.333	3.4468	.609	-.800 *
6	7	76.859	89.590	84.100	4.4732	-.497	-.962 *
7	7	79.118	89.971	85.613	3.9592	-.399	-.961
8	10	82.535	93.626	88.702	3.5147	-.100	-.831 **
9	9	85.179	95.023	90.443	3.5014	-.215	-.949
10	7	87.063	97.243	92.689	4.2788	-.385	-1.510
11	9	85.524	99.667	93.589	5.1815	-.182	-1.275
12	9	89.252	101.56	95.048	4.3859	.188	-.944 *
13	9	89.999	106.00	98.994	5.7898	-.432	-1.159
14	4	98.086	108.26	102.77	5.2063	.075	-1.890

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	75.159	79.072	77.633	2.1515	-.679	-1.500
6	7	75.109	83.617	79.502	2.8365	-.091	-.887
7	13	77.885	88.079	82.529	2.6472	.614	.346
8	12	76.945	88.979	84.643	3.5093	-.639	-.091
9	9	80.914	94.223	87.812	4.2320	-.185	-.973
10	13	83.576	98.499	90.221	4.0644	.653	-.209
11	13	82.453	98.051	90.966	3.7601	-.308	.782
12	12	84.969	96.576	92.057	2.9183	-.908	1.244
13	11	87.493	100.41	94.649	3.5844	-.228	-.202
14	10	89.017	101.18	97.062	3.5369	-.971	.799



LINEAR MEASUREMENT VARIABLE 85



Articulare-Pogonion

AR-PG

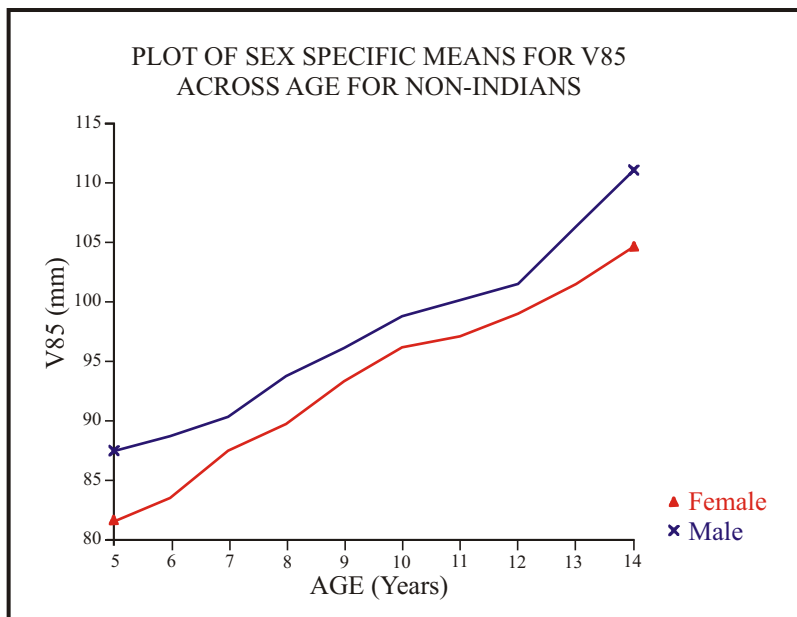
31-3

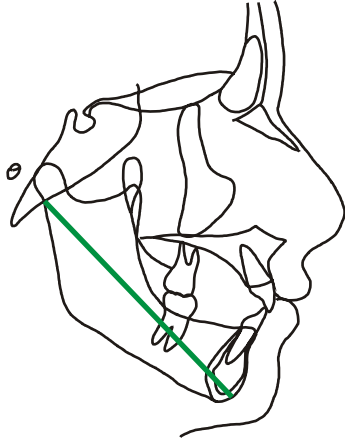
Male Non-ndian

Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	5	82.923	92.230	87.475	3.8583	-.026	-1.482
6	7	81.003	96.203	88.776	5.3927	-.297	-1.049
7	7	83.035	95.004	90.409	4.5848	-.498	-1.230
8	10	87.055	99.658	93.853	4.4284	-.103	-1.389 *
9	9	89.126	103.71	96.225	4.8664	-.086	-1.106
10	7	92.177	105.48	98.910	5.8674	-.157	-1.726
11	9	90.506	108.57	100.27	6.3619	-.163	-1.241
12	9	93.941	110.13	101.64	5.4268	-.005	-.904
13	9	95.426	114.25	106.49	6.7023	-.526	-1.118
14	4	105.59	117.59	111.27	6.2995	.038	-1.941

Female Non-Indian

Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	3	77.012	83.989	81.495	3.8909	-.694	-1.500
6	7	78.981	88.809	83.553	3.3474	.312	-.959
7	13	83.478	93.262	87.547	3.1072	.511	-.490
8	12	80.323	94.969	89.805	4.0542	-.862	.609
9	9	84.851	98.807	93.416	4.7270	-.463	-.804
10	13	88.318	105.67	96.281	5.0520	.483	-.599
11	13	87.398	104.42	97.213	4.6365	-.272	-.149
12	12	90.398	104.75	99.126	3.7178	-.723	.894
13	11	92.558	108.61	101.63	4.4223	-.152	.243
14	10	94.992	110.50	104.80	4.4333	-.784	.639





LINEAR MEASUREMENT VARIABLE 86

Articulare-Gnathion

AR-GN

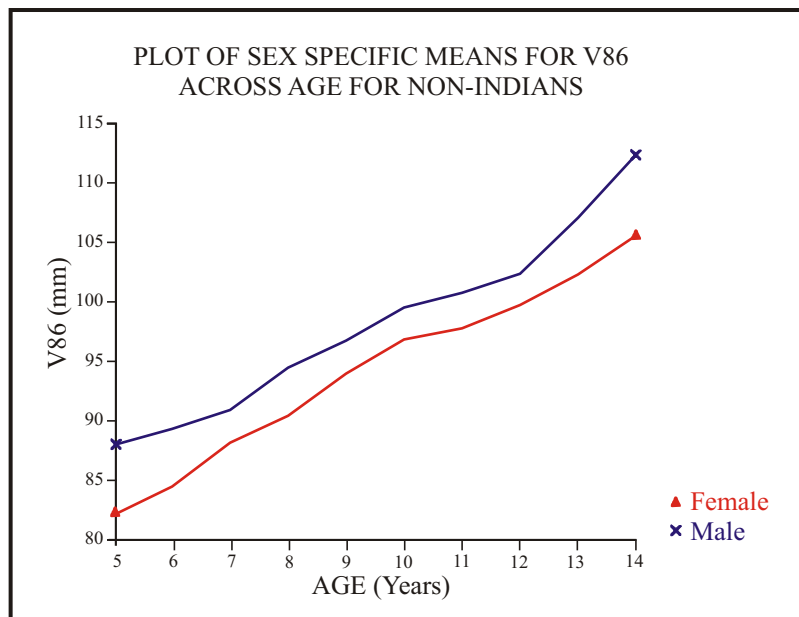
31-2

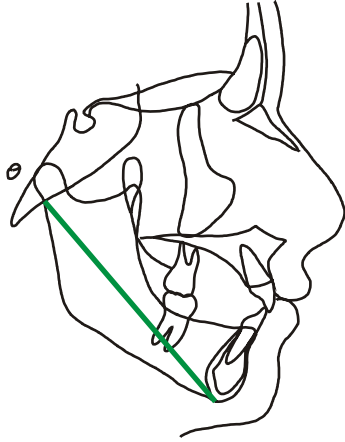
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	83.795	92.767	88.013	3.8233	.015	-1.528
6	7	82.264	96.738	89.370	5.2949	-.259	-1.083
7	7	84.669	95.182	90.968	4.1570	-.390	-1.439
8	10	87.604	99.992	94.544	4.3016	-.125	-1.267 *
9	9	90.128	104.89	96.829	4.9153	.038	-.993
10	7	92.627	106.20	99.626	5.6986	-.139	-1.662
11	9	91.261	109.39	100.87	6.2753	-.153	-1.186
12	9	94.580	111.24	102.48	5.3782	.101	-.815
13	9	96.618	114.17	107.21	6.4987	-.567	-1.108
14	4	107.03	119.10	112.54	6.3639	.059	-1.921

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	77.633	84.514	82.111	3.8811	-.701	-1.500
6	7	80.048	89.472	84.496	3.3008	.369	-1.013
7	13	84.021	93.473	88.201	2.9880	.365	-.642
8	12	80.343	95.682	90.478	4.1545	-1.128	1.057
9	9	85.115	99.616	94.041	4.8466	-.496	-.711
10	13	88.989	105.60	96.926	4.8737	.321	-.674
11	13	87.887	104.49	97.868	4.5481	-.457	-.008
12	12	90.887	105.11	99.838	3.7978	-.810	.818
13	11	93.120	109.22	102.42	4.3913	-.365	.263
14	10	95.481	111.15	105.71	4.4859	-.987	.879





LINEAR MEASUREMENT VARIABLE 87

Articulare-Menton

AR-ME

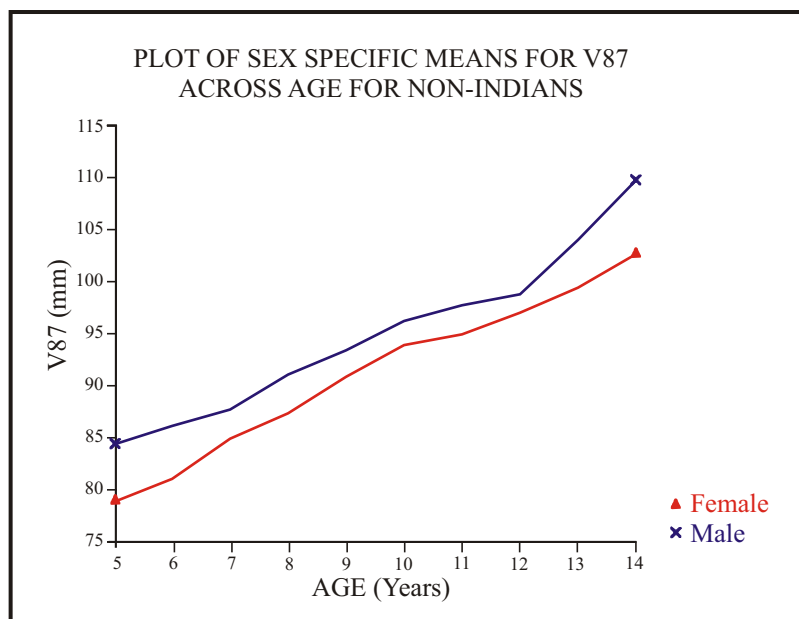
31-1

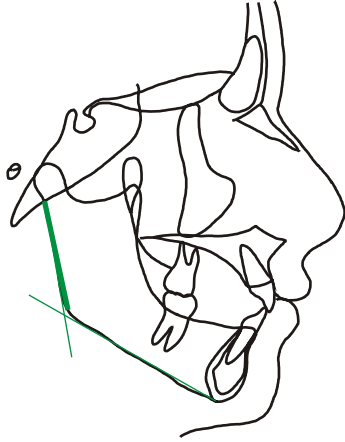
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	79.612	90.746	84.757	4.3555	.226	-1.192
6	7	78.770	95.354	86.539	5.6412	.011	-.836
7	7	83.087	91.839	88.122	4.0932	-.294	-1.841
8	10	84.302	98.053	91.501	4.4336	-.064	-1.109 *
9	9	87.822	101.49	93.844	4.8748	.151	-1.317
10	7	88.883	103.06	96.675	5.7956	-.150	-1.602
11	9	89.563	106.88	98.194	6.0493	-.023	-1.246
12	9	92.263	107.52	99.255	5.1217	.079	-1.053
13	9	94.644	112.39	104.51	6.3760	-.508	-1.136
14	4	104.58	117.90	110.27	6.3596	.260	-1.637

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	73.617	82.594	79.206	4.8768	-.660	-1.500
6	7	76.620	86.579	81.425	3.5454	.244	-1.059
7	13	80.151	90.532	85.306	2.9193	.032	-.751
8	12	77.364	93.040	87.761	4.2702	-1.225	1.056
9	9	82.745	97.094	91.285	4.8901	-.545	-.827
10	13	87.155	102.83	94.348	4.8665	.210	-.877
11	13	86.173	102.69	95.385	4.7801	-.284	-.570
12	12	88.234	102.72	97.476	3.9802	-.856	.462
13	11	91.203	106.47	99.895	4.4837	-.256	-.494
14	10	93.082	107.98	103.14	4.1993	-1.291	1.451





LINEAR MEASUREMENT VARIABLE 88

Articulare-Gonion

AR-GO

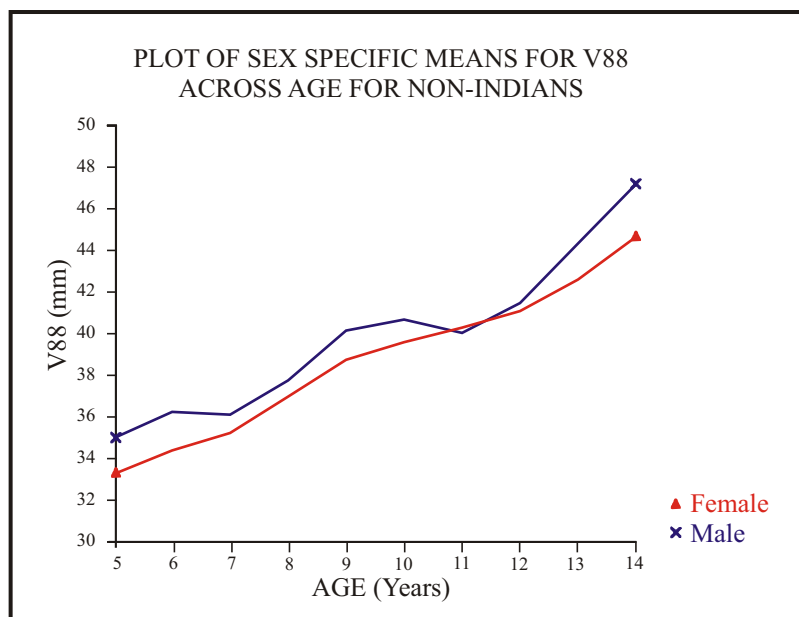
31-27

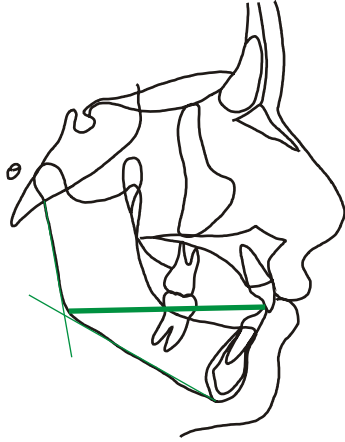
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	31.028	38.454	35.118	3.1607	-.113	-1.469
6	7	30.180	42.865	36.377	4.2442	.175	-.880
7	7	33.421	40.052	36.243	2.7337	.461	-1.340
8	10	32.171	42.422	37.897	3.2905	-.184	-.870
9	9	34.679	45.290	40.304	3.6105	-.321	-.802
10	7	36.701	45.261	40.836	3.2621	.240	-1.448
11	9	35.206	46.657	40.191	4.4649	.484	-1.447
12	9	36.930	47.690	41.634	3.3438	.427	-.481
13	9	38.009	50.147	44.511	4.0677	-.116	-1.032
14	4	44.049	52.331	47.376	3.9078	.400	-1.474

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	31.405	34.441	33.380	1.7121	-.701	-1.500
6	7	27.881	39.621	34.515	3.6922	-.497	-.187
7	13	32.438	37.994	35.359	1.5398	-.140	-.629
8	11	35.375	39.637	37.115	1.3862	.575	-.807
9	9	34.200	41.965	38.893	2.4134	-.578	-.424
10	13	35.982	45.555	39.743	3.2169	.442	-.937
11	13	36.077	45.074	40.446	2.7539	.311	-1.180
12	12	37.092	48.659	41.246	3.3930	.830	-.151
13	11	38.708	49.740	42.769	3.3438	.943	-.165
14	10	39.760	49.487	44.832	3.0048	-.034	-.967





LINEAR MEASUREMENT VARIABLE 89

**Gonion-Lower Incisor Incisal
Edge**

GO-LIE

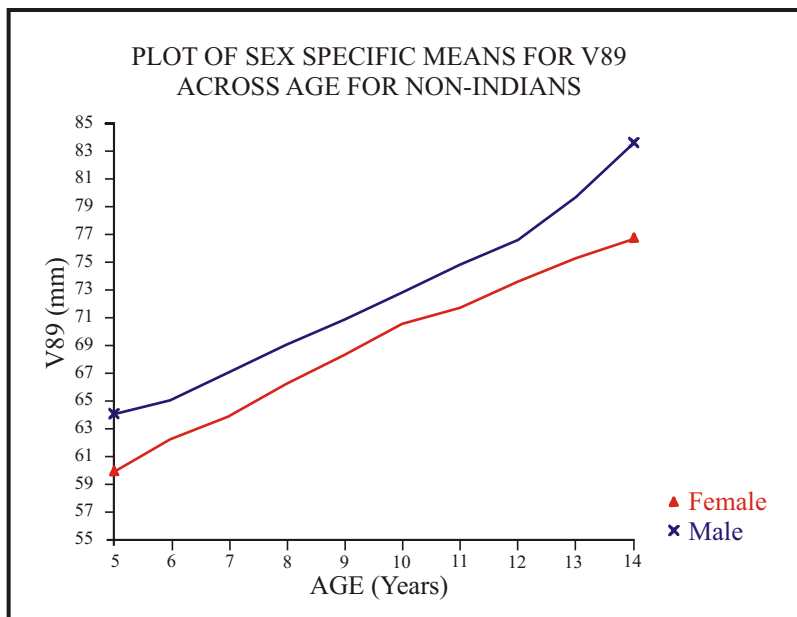
27-6

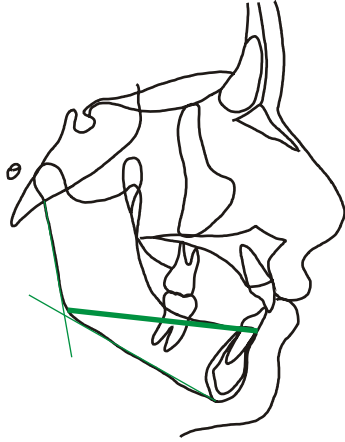
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	60.845	67.302	64.130	2.7149	.103	-1.525
6	7	60.946	68.346	65.167	2.5899	-.422	-.975 **
7	7	64.384	70.307	67.171	2.1430	.004	-1.263 **
8	10	65.542	73.948	69.186	2.3191	.467	.087 *
9	9	65.932	73.300	71.000	2.5701	-.824	-.499
10	7	68.660	78.046	72.975	3.2928	.164	-1.140
11	9	70.514	79.677	74.996	3.4152	-.097	-1.456 *
12	9	71.577	80.654	76.785	3.4572	-.347	-1.288
13	9	74.526	84.517	79.897	3.5628	-.512	-1.129 **
14	4	79.027	86.566	83.822	3.5043	-.666	-1.163 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	58.031	62.476	59.905	2.3028	.505	-1.500
6	7	59.968	66.054	62.340	2.1690	.496	-.830
7	13	59.497	68.240	63.985	2.6913	.053	-.868
8	12	59.673	70.281	66.349	2.9324	-.704	.287
9	9	63.487	73.081	68.443	2.8933	-.055	-.556
10	13	65.708	75.110	70.705	2.8280	-.244	-.777
11	13	67.347	75.843	71.869	2.5801	-.319	-.592
12	12	68.634	77.624	73.770	3.0388	-.321	-.967
13	11	72.171	80.439	75.467	2.4806	.481	-.519
14	10	72.696	79.629	76.861	2.4034	-.409	-1.132





LINEAR MEASUREMENT VARIABLE 90

Gonion-Infradentale

GO-ID

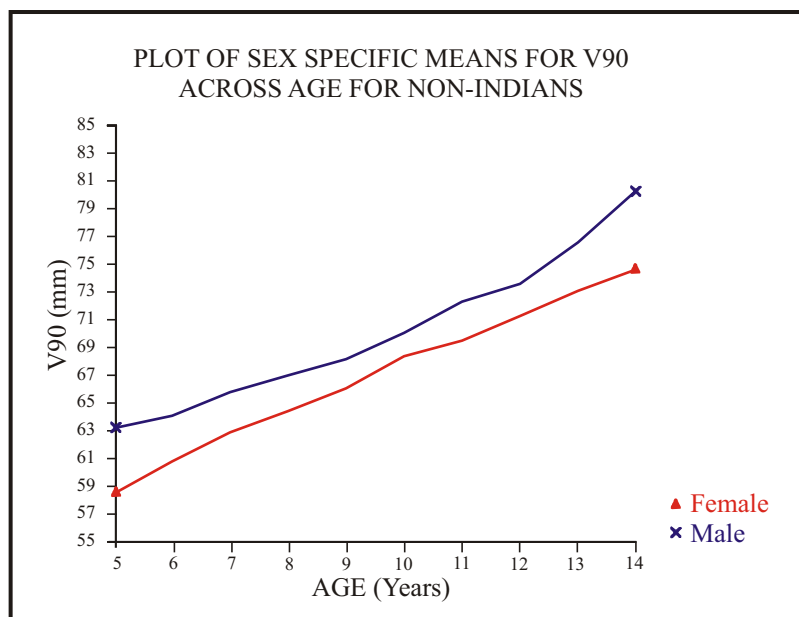
27-5

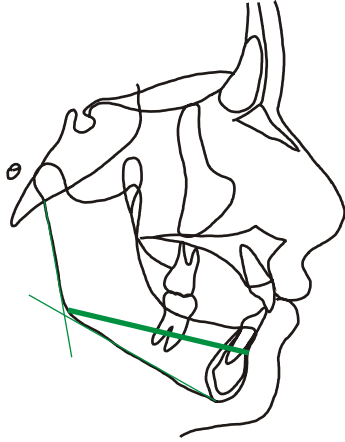
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis	
5	5	58.773	67.242	63.311	3.1981	-.221	-.972	*
6	7	59.897	67.173	64.204	2.4989	-.585	-.695	**
7	7	64.054	68.322	65.915	1.7885	.275	-1.544	**
8	10	63.146	71.289	67.130	2.3076	-.026	-.360	
9	9	62.588	71.348	68.305	2.6617	-.966	.441	
10	7	66.277	74.502	70.208	3.0085	.052	-1.293	
11	9	68.236	76.487	72.471	3.1677	-.166	-1.445	*
12	9	69.112	77.192	73.760	2.9932	-.527	-1.131	
13	9	72.357	81.958	76.763	3.3018	-.070	-1.111	**
14	4	75.259	83.910	80.505	3.7529	-.723	-.980	**

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis	
5	3	57.219	60.315	58.569	1.5856	.431	-1.500	
6	7	58.413	65.424	60.896	2.5953	.570	-.762	
7	13	59.208	68.185	63.003	2.9348	.566	-.722	
8	12	58.573	69.672	64.543	3.0510	-.230	-.339	
9	9	62.127	71.318	66.191	3.0475	.158	-.998	
10	13	64.215	73.407	68.516	3.1029	.024	-1.351	
11	13	65.431	74.329	69.646	2.7594	.115	-.813	
12	12	67.022	75.462	71.430	2.7167	-.224	-1.178	
13	11	70.587	78.577	73.253	2.4161	.906	.165	
14	10	70.801	77.819	74.801	2.3124	-.238	-1.051	





LINEAR MEASUREMENT VARIABLE 91

Gonion-B Point

GO-B

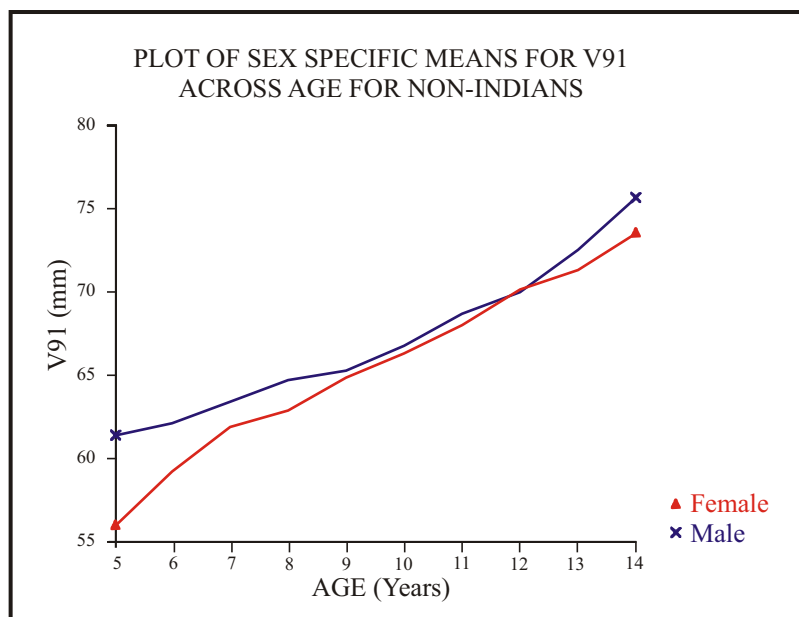
27-4

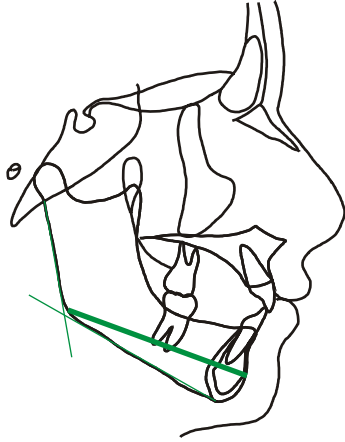
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	55.875	66.158	61.334	3.8110	-.235	-.861 *
6	7	58.079	65.454	62.087	2.5751	-.125	-.957 **
7	7	60.646	66.673	63.383	2.4008	.295	-1.423
8	10	61.167	68.615	64.691	2.2036	.127	-.572
9	9	60.363	68.946	65.262	2.5368	-.518	-.237
10	7	63.230	70.586	66.763	2.8407	.158	-1.422
11	9	64.885	72.870	68.696	3.0618	.114	-1.334
12	9	66.110	73.975	70.001	2.6977	-.142	-1.144
13	9	67.529	77.235	72.553	3.4876	-.123	-1.286
14	4	70.951	79.288	75.702	3.5217	-.518	-1.041

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	54.426	56.940	55.948	1.3386	-.614	-1.500
6	7	55.288	63.280	58.193	2.6587	.904	.019
7	13	56.354	67.064	61.067	3.1450	.406	-.820
8	12	57.786	66.828	62.426	3.0536	-.178	-1.104
9	9	58.050	69.982	63.826	3.7326	.105	-.893
10	13	60.684	71.662	65.659	3.6936	.133	-1.429
11	13	62.742	71.554	66.743	2.7858	.258	-1.030
12	12	65.222	72.288	68.568	2.5949	.007	-1.518
13	11	67.399	75.031	70.169	2.5670	.732	-.690
14	10	68.851	76.742	71.844	2.4796	.629	-.576





LINEAR MEASUREMENT VARIABLE 92

Gonion-Pogonion

GO-PG

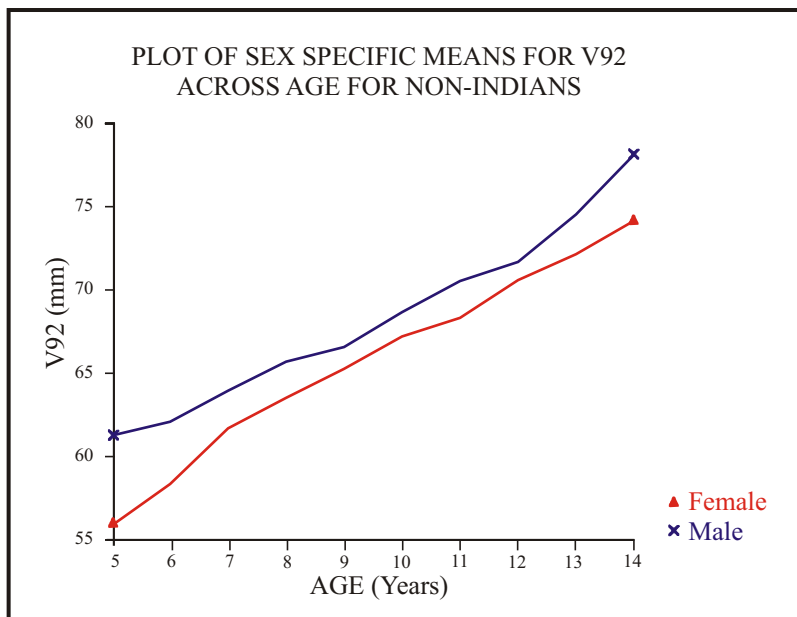
27-3

Male Non-Indian

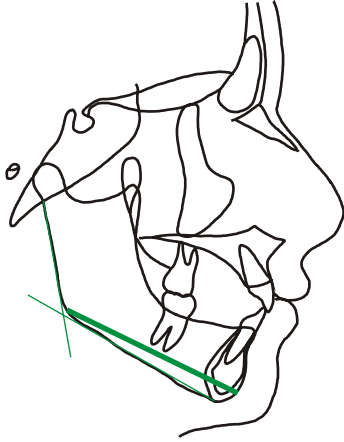
Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	55.952	66.243	61.708	4.0221	-.349	-1.099
6	7	58.508	66.291	62.536	2.9001	-.061	-1.323 **
7	7	60.435	68.275	64.410	3.1564	.062	-1.530
8	10	61.333	70.602	66.162	2.9352	-.172	-1.067
9	9	60.437	71.345	67.046	3.4809	-.507	-.566
10	7	63.642	73.123	69.151	3.8716	-.270	-1.576
11	9	66.234	75.810	71.031	4.0177	-.140	-1.613
12	9	67.392	76.785	72.183	3.4966	-.160	-1.384
13	9	68.342	81.930	75.050	4.4630	.008	-1.138
14	4	73.453	82.693	78.661	3.8676	-.492	-1.009

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	53.684	58.318	56.286	2.3687	-.416	-1.500
6	7	54.453	64.596	58.777	3.3709	.490	-.590
7	13	56.422	68.675	62.139	3.6919	.136	-.944
8	12	58.355	68.084	63.978	3.4609	-.310	-1.180
9	9	59.038	71.223	65.730	4.1281	-.120	-1.151
10	13	61.576	73.560	67.684	4.2539	.061	-1.597
11	13	63.230	74.421	68.807	3.5467	.126	-1.241
12	12	66.616	76.335	71.085	3.1685	.095	-1.221
13	11	69.421	79.656	72.651	3.4305	.895	-.464
14	10	70.469	81.511	74.666	3.2668	.843	-.065



LINEAR MEASUREMENT VARIABLE 93



Gonion-Gnathion

GO-GN

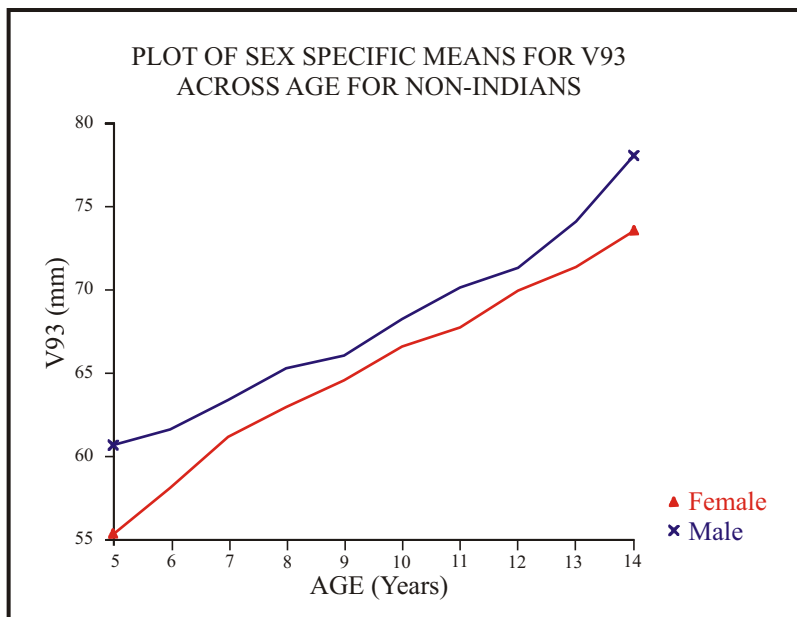
27-2

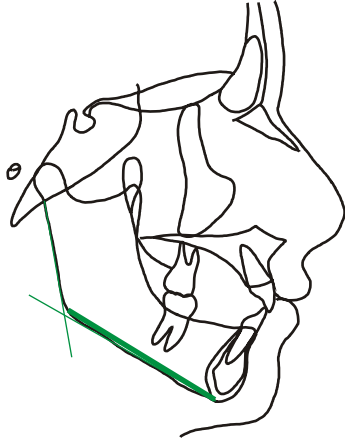
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	55.319	64.803	60.624	3.8512	-.280	-1.291 *
6	7	57.896	65.679	61.585	2.9477	.097	-1.379 *
7	7	60.032	67.057	63.362	2.8905	.109	-1.634
8	10	60.736	69.516	65.276	2.8793	-.091	-1.238
9	9	59.434	70.158	66.045	3.5469	-.461	-.706
10	7	63.152	72.182	68.248	3.7728	-.205	-1.661
11	9	65.363	74.936	70.152	4.0021	-.093	-1.649
12	9	66.297	76.128	71.341	3.5755	-.165	-1.309
13	9	67.884	80.951	74.137	4.2433	.085	-1.073
14	4	73.061	82.234	78.131	3.8449	-.400	-1.074

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	52.611	57.038	55.199	2.3061	-.533	-1.500
6	7	53.510	64.395	58.056	3.5585	.589	-.409
7	13	55.854	67.408	61.136	3.6506	.197	-1.112
8	12	57.102	68.269	62.934	3.6598	-.245	-.977
9	9	58.142	69.871	64.551	4.1381	-.031	-1.244
10	13	60.594	72.100	66.589	4.1618	.058	-1.613
11	13	62.276	73.445	67.741	3.5674	.132	-1.289
12	12	64.849	75.318	69.964	3.0209	.072	-.827
13	11	68.397	77.953	71.392	3.3717	.929	-.548
14	10	68.722	80.188	73.571	3.1445	.673	.226





LINEAR MEASUREMENT VARIABLE 94

Gonion-Menton

GO-ME

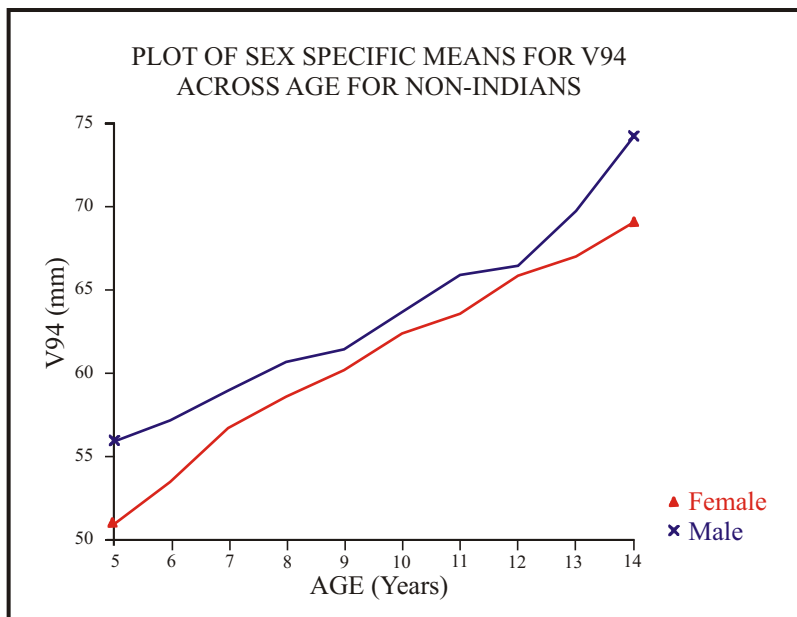
27-1

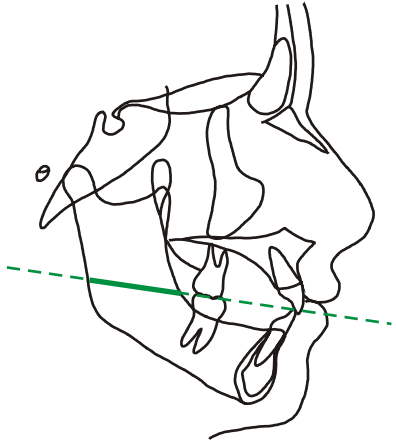
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	50.340	61.771	56.400	4.6533	-.193	-1.406
6	7	54.300	62.137	57.718	3.0621	.307	-1.279 *
7	7	55.024	63.510	59.517	3.1948	-.098	-1.411
8	10	56.218	66.538	61.248	3.1250	-.032	-.798
9	9	54.026	65.966	62.010	3.7561	-.942	.234
10	7	58.230	68.441	64.260	3.8907	-.466	-1.324
11	9	60.100	71.005	66.498	4.1425	-.257	-1.502
12	9	60.018	71.226	67.053	3.9174	-.553	-1.057
13	9	64.998	76.063	70.361	3.7919	-.061	-1.257
14	4	70.554	80.028	74.875	3.8985	.364	-.973 *

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	47.535	53.467	51.365	3.3214	-.697	-1.500
6	7	48.366	60.624	54.004	3.8261	.363	-.293
7	13	52.871	62.026	57.256	3.5342	.183	-1.595
8	12	52.395	65.159	59.150	3.8646	-.295	-.656
9	9	53.047	66.794	60.755	4.3094	-.309	-.704
10	13	56.053	68.406	62.966	4.2684	-.020	-1.460
11	13	56.866	70.164	64.157	3.8827	-.063	-.854
12	12	60.942	70.992	66.454	3.0432	-.201	-.851
13	11	63.264	73.955	67.615	3.5385	.715	-.565
14	10	64.950	75.309	69.687	2.7631	.402	.257





LINEAR MEASUREMENT VARIABLE 95

**Anterior Ramus Border-
Posterior Ramus Border**

AB-PB

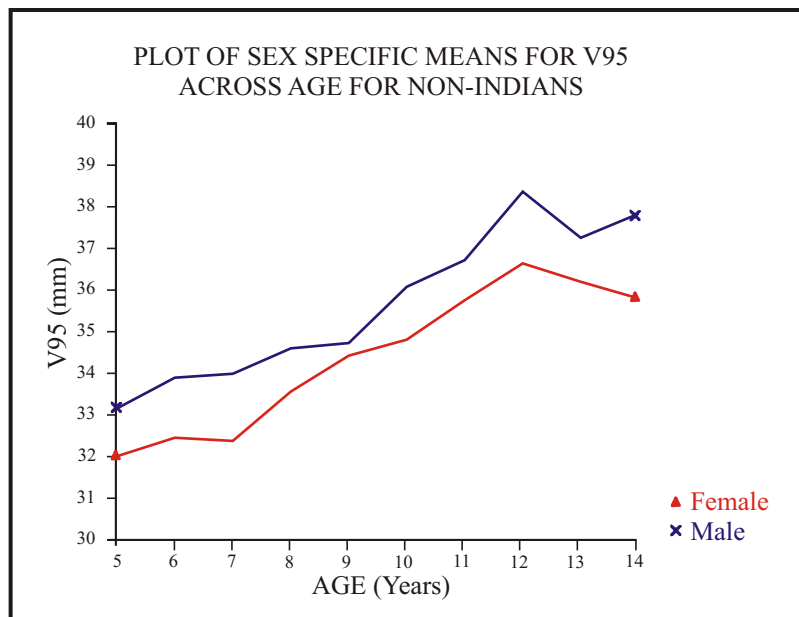
52-51

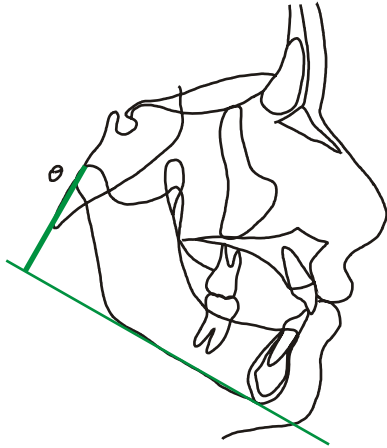
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	30.836	34.678	33.153	1.4995	-.625	-.788
6	7	32.828	35.068	33.897	.89956	.201	-1.661
7	7	32.828	36.742	33.992	1.3778	1.164	.324 *
8	10	32.620	36.407	34.605	1.2743	-.081	-.935
9	9	33.203	36.395	34.734	.98410	.143	-.796
10	7	35.272	37.321	36.092	.85818	.469	-1.416 *
11	9	34.185	40.024	36.736	1.9181	.134	-.954
12	9	36.221	41.073	38.389	1.6171	.405	-.948
13	9	33.236	39.574	37.275	1.9222	-.914	.198
14	4	35.549	40.736	37.858	2.1531	.439	-.991

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	31.725	32.445	31.999	.38930	.652	-1.500
6	7	30.099	35.520	32.447	1.8073	.378	-.681
7	13	30.372	35.752	32.370	1.9142	.559	-1.291
8	11	32.641	35.084	33.561	.87925	.492	-1.249
9	9	33.184	36.246	34.429	1.2072	.483	-1.202
10	13	30.361	38.261	34.816	2.1908	-.134	-.246
11	13	32.897	38.929	35.768	1.9229	.231	-1.165
12	12	31.908	43.071	36.657	3.1046	.496	-.295
13	11	32.151	40.982	36.213	2.4735	.243	-.359
14	10	33.429	38.593	35.809	2.0902	.242	-1.595





LINEAR MEASUREMENT VARIABLE 96

**Condylion Perpendicular to
Mandibular Plane**

CO⊥GOI-ME

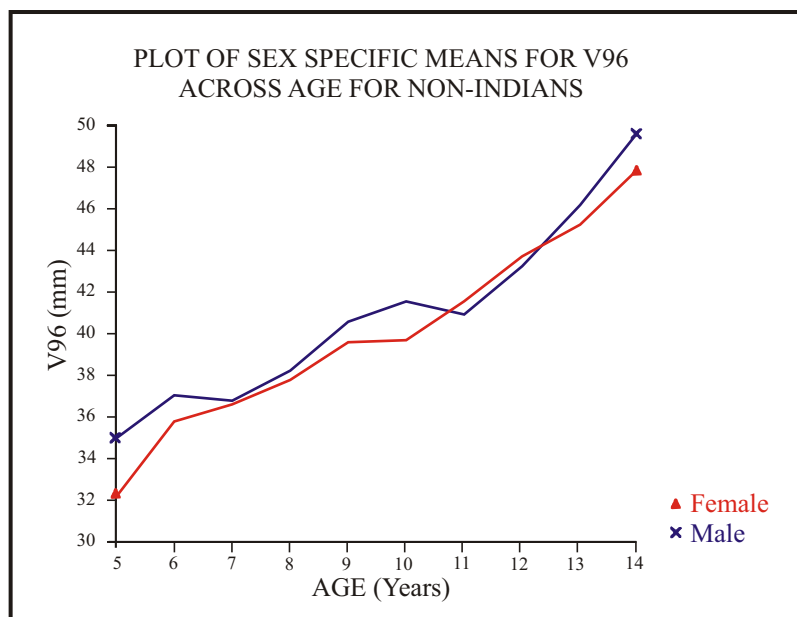
33⊥28-1

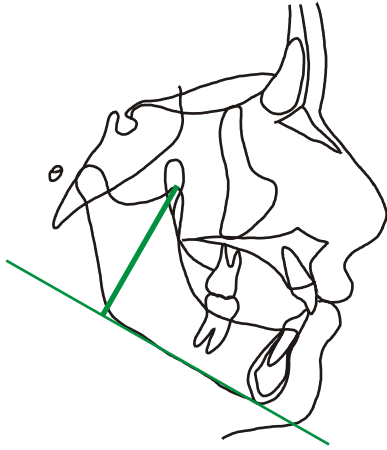
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	30.522	40.246	35.032	4.0123	.046	-1.404
6	7	31.101	44.531	37.110	4.3800	.303	-.535
7	7	29.805	42.245	36.848	4.0259	-.568	-.447
8	10	32.706	45.960	38.299	4.5105	.186	-1.145
9	9	35.268	44.871	40.662	3.9095	-.301	-1.575
10	7	36.287	48.029	41.643	3.8859	.285	-.760
11	9	36.016	46.070	41.013	4.0074	.166	-1.648
12	9	37.443	47.862	43.342	3.7153	-.277	-1.343
13	9	40.321	51.835	46.297	3.7292	.018	-.968
14	4	45.070	55.988	49.829	4.6315	.462	-1.103

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	29.691	34.038	32.211	2.2550	-.512	-1.500
6	7	30.938	44.702	35.845	5.2743	.645	-1.018
7	13	31.311	40.715	36.672	2.6781	-.402	-.527
8	12	34.366	42.665	37.851	2.8825	.341	-1.116
9	9	34.511	42.999	39.672	2.3787	-.935	.710
10	13	33.008	46.310	39.772	4.0619	-.190	-1.111
11	13	36.133	50.966	41.650	3.9794	.838	.423
12	12	39.533	51.560	43.819	3.4522	1.128	-.440
13	11	39.282	53.914	45.352	3.9251	.615	.333
14	10	44.980	54.124	48.040	3.1087	.888	-.474





LINEAR MEASUREMENT VARIABLE 97

**Coronoid Process perpendicular
to Mandibular Plane**

CP_⊥GOI-ME

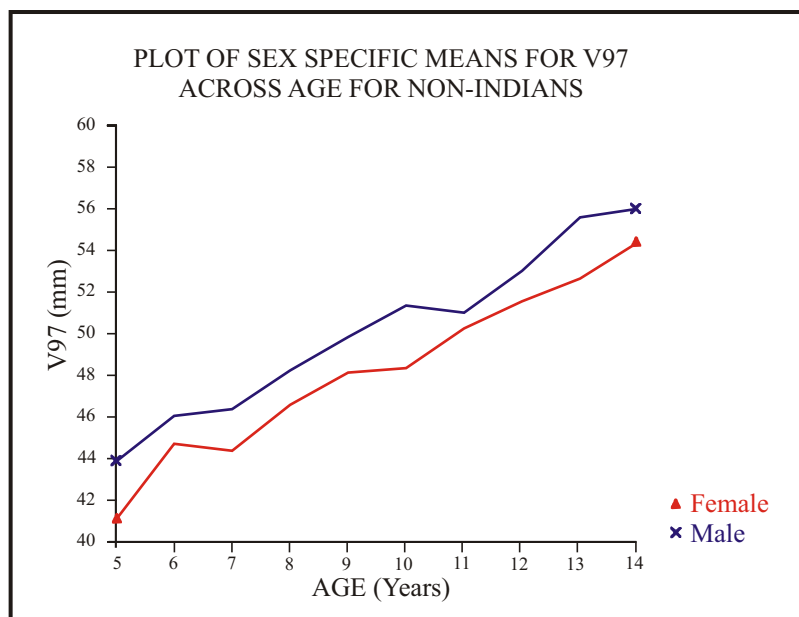
44_⊥28-1

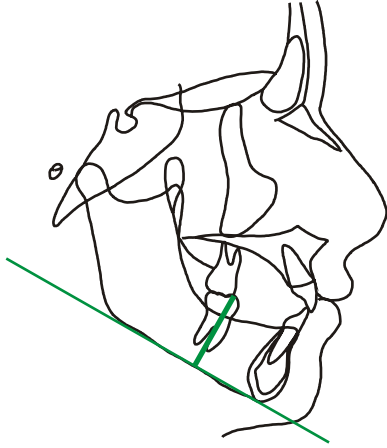
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	40.256	47.419	43.682	2.9484	-.012	-1.435
6	7	41.899	50.656	45.886	2.7555	.422	-.335
7	7	42.156	50.416	46.212	2.8650	-.086	-1.028
8	10	41.928	54.132	48.081	3.1243	-.019	.640
9	9	46.411	52.617	49.694	2.0216	-.153	-1.071
10	7	47.506	55.436	51.215	2.7931	.060	-1.072
11	9	47.063	53.833	50.870	2.2405	-.434	-1.035
12	9	48.095	57.093	52.891	2.4377	-.329	.392
13	9	51.476	61.011	55.473	3.0743	.473	-.808
14	4	53.818	58.858	55.891	2.3175	.418	-1.420

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	39.930	43.384	41.433	1.7699	.436	-1.500
6	7	41.891	49.195	45.086	2.2484	.573	-.010
7	13	40.738	49.952	44.749	2.3824	.482	.138
8	12	43.260	50.384	46.967	2.4815	.082	-1.331
9	9	46.137	50.978	48.525	1.7328	.171	-1.464
10	13	45.696	52.244	48.741	2.5450	.201	-1.461
11	13	45.980	56.430	50.657	2.9739	.096	-.483
12	12	45.798	56.236	51.967	2.8219	-.585	.082
13	11	50.229	57.708	53.065	2.0186	.812	.737
14	10	51.303	59.990	54.819	2.7712	.535	-.591





LINEAR MEASUREMENT VARIABLE 98

**Lower Molar Mesial Cusp Tip
perpendicular to Mandibular
Plane**

LMT_⊥GOI-ME

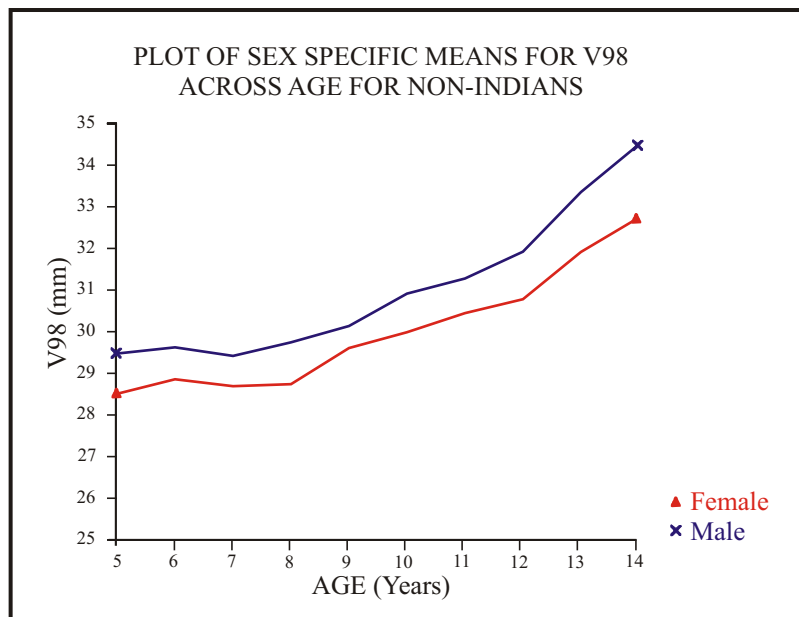
18_⊥28-1

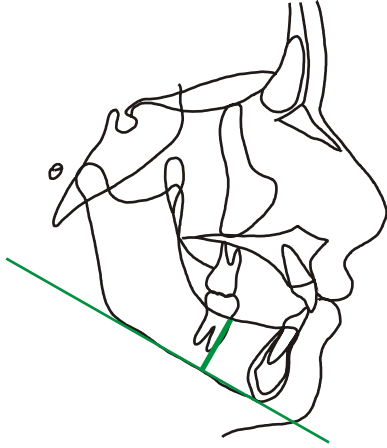
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	27.405	31.621	29.507	1.6643	.086	-1.295
6	7	28.523	30.822	29.657	.99017	-.112	-1.743 *
7	7	25.292	31.405	29.450	2.5424	-.920	-.994
8	10	26.708	32.055	29.778	1.7241	-.134	-.856
9	9	26.750	32.180	30.172	1.6544	-.754	.136
10	7	28.178	33.735	30.954	2.0358	.224	-1.116
11	9	28.849	32.907	31.319	1.3385	-.467	-.663
12	9	29.597	33.140	31.967	1.0915	-1.156	.472
13	9	30.580	36.079	33.406	1.5463	-.129	-.082
14	4	33.507	35.027	34.559	.70733	-.1094	-.712 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	27.558	29.672	28.535	1.0660	.270	-1.500
6	7	27.630	30.220	28.886	.92301	.155	-1.176
7	13	27.261	30.637	28.719	.94627	.185	-.497
8	12	26.839	30.810	28.768	1.3665	-.002	-1.371
9	9	28.035	31.754	29.640	1.1833	.180	-.602
10	13	26.775	31.717	30.022	1.4361	-.838	.034
11	13	27.486	33.143	30.483	1.6923	-.148	-.998
12	12	27.810	33.190	30.819	1.5831	-.087	-.574
13	11	27.823	35.448	31.960	1.8951	-.371	.837
14	10	29.733	34.549	32.792	1.7113	-.733	-1.026





LINEAR MEASUREMENT VARIABLE 99

Lower Molar Mesial Cemento-Enamel Junction perpendicular to Mandibular Plane

LMJ⊥GOI-ME

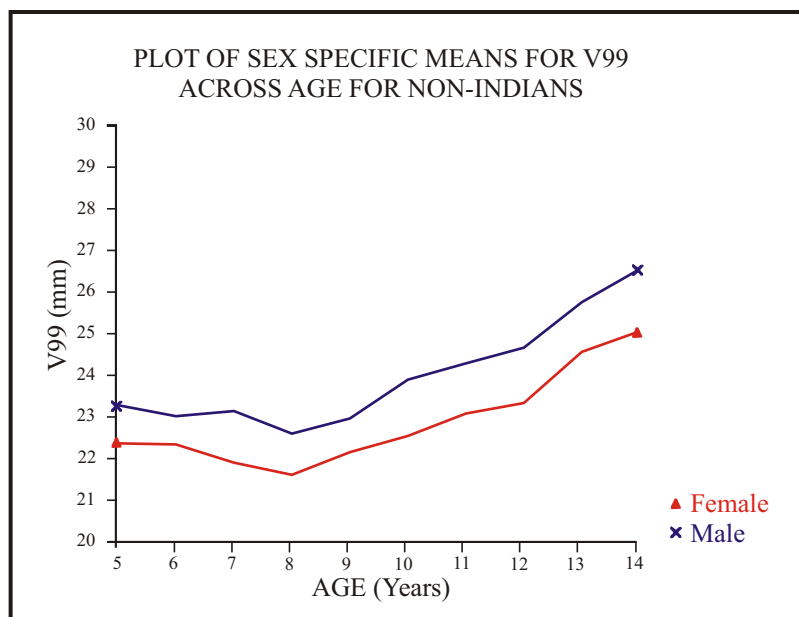
17⊥28-1

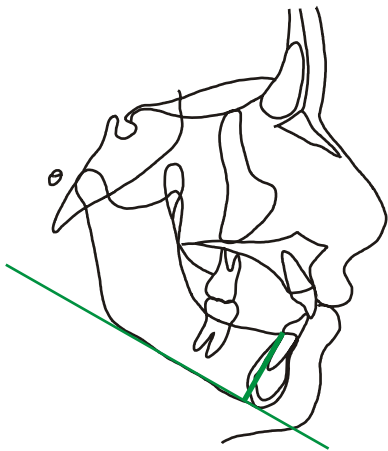
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	20.984	25.366	23.352	1.7412	-.148	-1.242
6	7	21.737	24.816	23.087	1.2551	.277	-1.646
7	7	18.471	25.828	23.211	2.9400	-.750	-1.095
8	10	19.995	24.961	22.666	1.4686	-.064	-.524
9	9	19.593	24.506	23.032	1.4999	-1.290	1.194
10	7	22.016	25.979	23.969	1.4851	.223	-1.301
11	9	22.732	25.845	24.362	1.1585	-.136	-1.575
12	9	22.346	26.627	24.741	1.2528	-.473	-.200
13	9	22.177	27.410	25.840	1.5403	-1.501	1.790
14	4	26.200	27.491	26.640	.60817	.768	-1.054 *

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	20.957	23.463	22.431	1.3097	-.549	-1.500
6	7	20.532	24.027	22.405	1.3828	.044	-1.588
7	13	19.863	24.712	21.965	1.4297	.120	-.778
8	12	18.862	24.108	21.671	1.6080	-.143	-.845
9	9	20.149	23.910	22.218	1.5136	-.310	-1.510
10	13	19.017	25.524	22.610	1.5674	-.533	.787
11	13	20.018	25.789	23.151	1.7655	-.225	-1.107
12	12	19.469	26.170	23.405	1.8296	-.486	-.088
13	11	19.892	27.717	24.640	2.0042	-.911	1.190
14	10	21.738	26.729	25.139	1.8032	-.967	-.723





LINEAR MEASUREMENT VARIABLE 100

**Lower Incisor Lingual Bony
Contact Point perpendicular
to Mandibular Plane**

LIB⊥GOI-ME

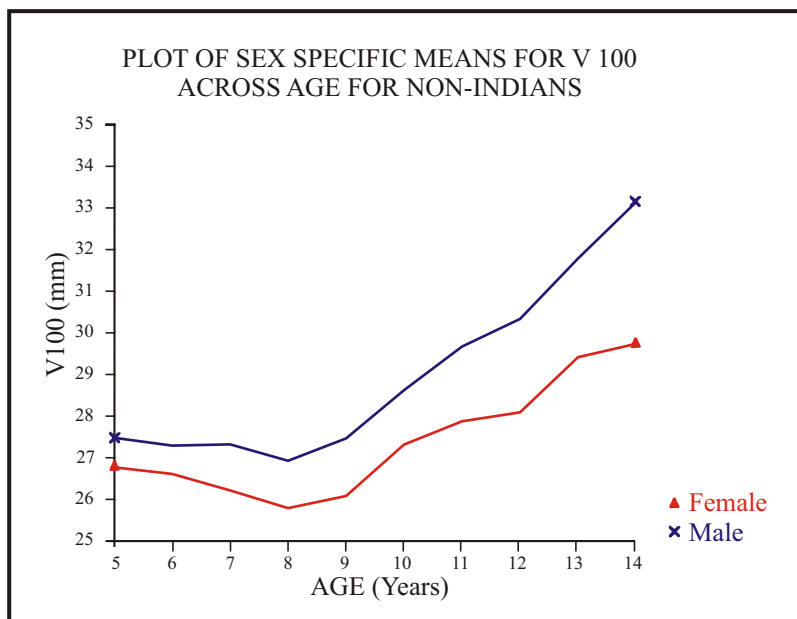
14⊥28-1

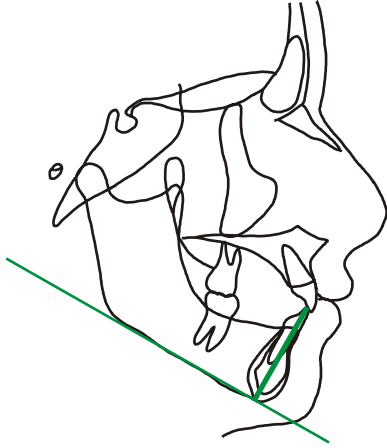
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	26.738	28.089	27.563	.50575	-.868	-.409
6	7	24.076	29.394	27.374	1.8034	-.913	-.387
7	7	25.892	29.540	27.404	1.3293	.410	-1.141
8	10	24.625	30.444	27.008	1.7943	.526	-.608
9	9	25.281	29.554	27.548	1.4607	-.245	-1.290
10	7	27.730	30.660	28.713	1.0647	.802	-.486 *
11	9	28.125	31.697	29.766	1.2738	.346	-1.261 **
12	9	28.504	32.465	30.433	1.1323	.218	-.169 **
13	9	30.156	32.830	31.892	.86241	-.818	-.236 **
14	4	32.278	34.245	33.253	.95066	.012	-1.817 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	26.431	27.354	26.850	.46731	.328	-1.500
6	7	22.907	30.569	26.690	2.5194	-.131	-.693
7	13	23.742	30.016	26.292	1.9853	.495	-.786
8	12	22.417	29.010	25.865	2.2154	-.130	-1.154
9	9	22.291	29.219	26.157	1.9848	-.362	.050
10	13	24.905	30.079	27.400	1.5549	.329	-.829
11	13	24.787	30.748	27.961	1.8185	.100	-.869
12	12	25.933	30.721	28.177	1.4884	.234	-1.172
13	11	26.516	33.558	29.509	2.0017	.512	-.378
14	10	26.450	31.463	29.832	1.4348	-1.259	1.181





LINEAR MEASUREMENT

VARIABLE 101

**Lower Incisor Incisal Edge
perpendicular to Mandibular
Plane**

LIE_⊥GOI-ME

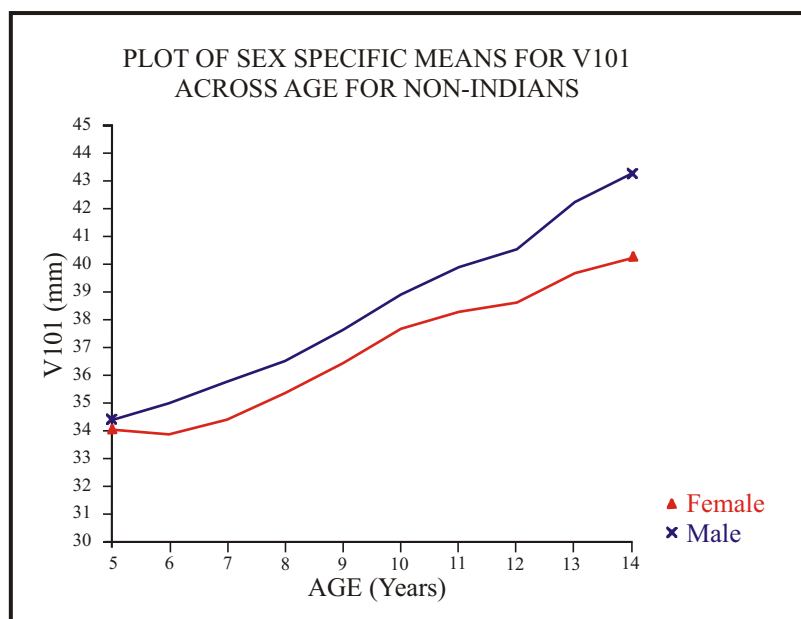
6_⊥28-1

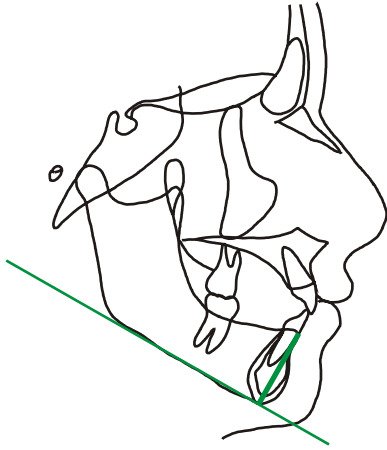
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	33.319	36.001	34.353	1.1399	.478	-1.203
6	7	33.763	36.778	34.973	1.0524	.570	-.808 *
7	7	34.916	37.483	35.753	.88481	1.095	.106 *
8	10	35.163	39.180	36.502	1.2368	.964	.092
9	9	36.369	38.938	37.629	.88847	-.003	-1.251
10	7	38.109	41.586	38.909	1.2430	1.670	1.273
11	9	38.085	42.223	39.902	1.3166	.448	-.718 *
12	9	39.283	42.610	40.550	1.2629	.292	-1.368 **
13	9	40.266	43.744	42.260	1.0848	-.292	-.448 **
14	4	41.897	43.881	43.312	.94660	-1.132	-.684 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	33.187	35.150	34.019	1.0153	.495	-1.500
6	7	31.686	35.850	33.845	1.5814	-.152	-1.467
7	13	31.726	37.014	34.378	1.8131	-.170	-1.378
8	12	32.117	37.878	35.339	1.7583	-.308	-.939
9	9	32.111	40.279	36.423	2.5306	-.125	-.784
10	13	33.564	41.082	37.669	2.0439	-.128	-.415
11	13	34.183	41.972	38.283	2.2701	.018	-.776
12	12	35.956	41.910	38.620	1.9296	.501	-1.059
13	11	35.950	42.855	39.684	2.0167	-.155	-.484
14	10	36.388	42.555	40.237	1.6521	-1.111	1.194





LINEAR MEASUREMENT VARIABLE 102

**Infradentale perpendicular to
Mandibular Plane**

ID⊥GOI-ME

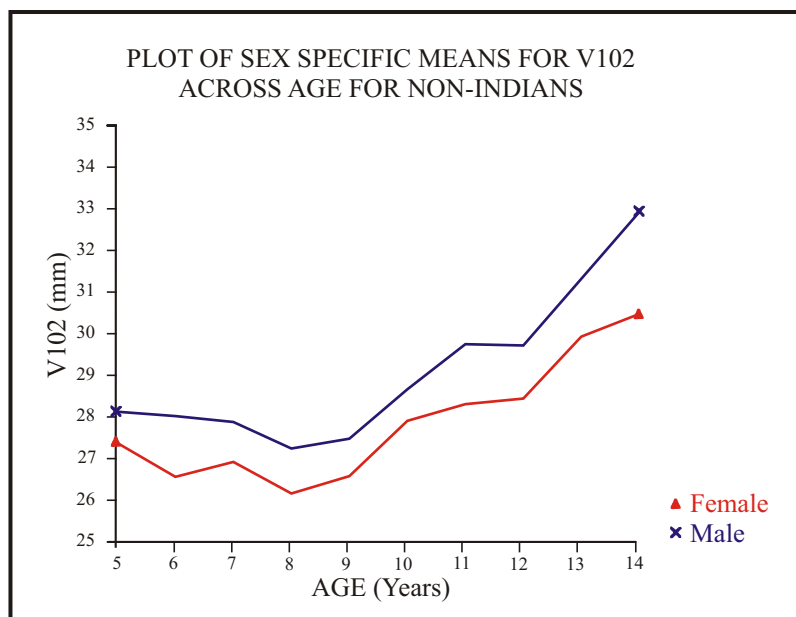
5⊥28-1

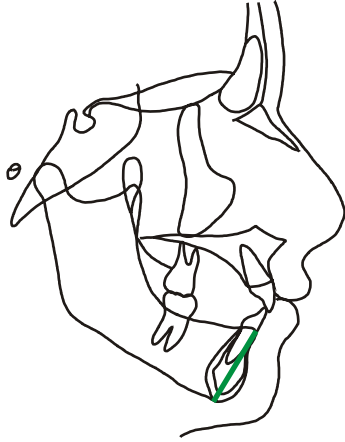
Male Non-Indian

Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	5	27.519	29.528	28.108	.82402	1.243	-.103
6	7	24.854	30.038	28.003	1.6868	-.854	-.153
7	7	25.561	29.874	27.860	1.5470	.023	-1.036
8	10	25.273	31.554	27.220	2.0499	1.015	-.115
9	9	25.430	29.469	27.457	1.5118	-.174	-1.470
10	7	27.825	30.370	28.649	.88948	1.081	.004
11	9	28.250	31.259	29.739	1.1428	-.104	-1.502 *
12	9	27.397	32.729	29.708	1.5002	.638	.185
13	9	29.492	32.924	31.318	1.2070	-.267	-1.247
14	4	31.817	33.627	32.931	.84828	-.511	-1.345 **

Female Non-Indian

Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	3	26.525	28.147	27.352	.81140	-.071	-1.500
6	7	22.528	28.741	26.536	2.2122	-.985	-.514
7	13	23.794	30.850	26.896	2.1493	.161	-.817
8	12	23.049	30.132	26.134	2.1174	.267	-.884
9	9	23.115	29.579	26.553	2.0546	-.268	-.886
10	13	25.442	30.450	27.888	1.7189	.095	-1.344
11	13	25.293	31.612	28.291	1.9670	.319	-1.033
12	12	26.481	30.910	28.426	1.6217	.456	-1.335
13	11	27.242	33.159	29.922	1.7620	.245	-.760
14	10	27.904	32.111	30.469	1.0739	-1.152	1.726





LINEAR MEASUREMENT VARIABLE 103

Infradentale-Menton

ID-ME

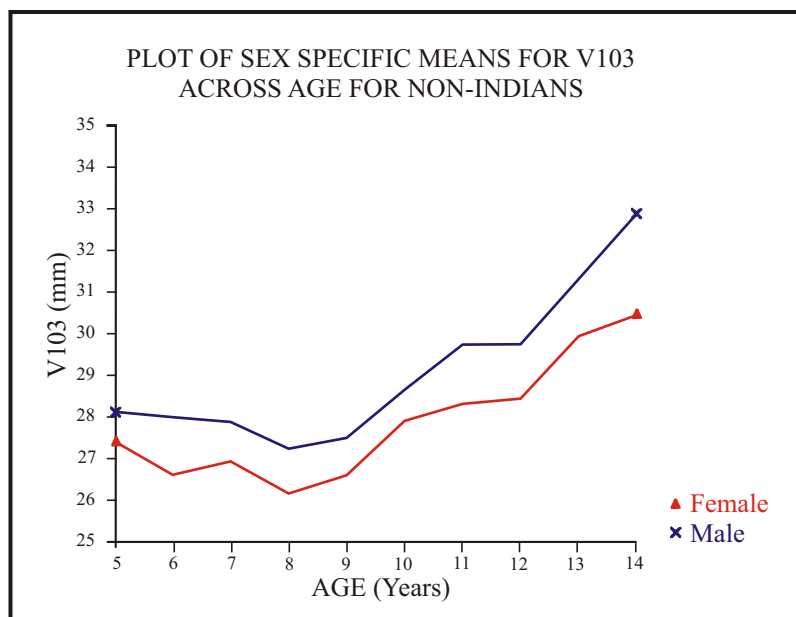
5-1

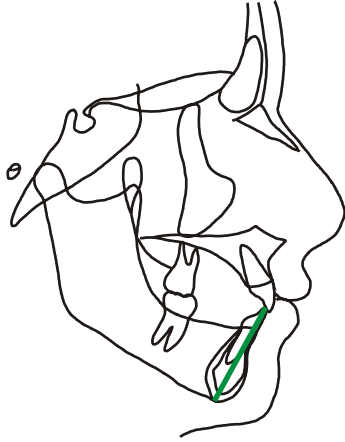
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	27.519	29.539	28.160	.82447	1.070	-.356
6	7	24.876	30.057	28.030	1.6903	-.864	-.164
7	7	25.603	29.936	27.914	1.5293	.013	-.982
8	10	25.363	31.559	27.268	2.0248	1.040	-.104
9	9	25.535	29.471	27.529	1.4494	-.141	-1.496
10	7	27.901	30.377	28.691	.86485	1.120	.073
11	9	28.368	31.431	29.782	1.1539	-.018	-1.459 *
12	9	27.404	32.995	29.791	1.5515	.702	.404
13	9	29.580	32.924	31.362	1.2012	-.230	-1.254
14	4	31.838	33.639	32.973	.85603	-.545	-1.310 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	26.583	28.206	27.445	.81614	-.225	-1.500
6	7	22.587	28.936	26.638	2.2503	-.949	-.545
7	13	23.857	30.853	26.962	2.1166	.143	-.807
8	12	23.113	30.137	26.186	2.1193	.245	-.938
9	9	23.175	29.581	26.627	2.0438	-.312	-.843
10	13	25.473	30.654	27.940	1.7342	.125	-1.303
11	13	25.308	31.623	28.351	1.9847	.316	-1.035
12	12	26.484	30.966	28.478	1.5984	.452	-1.296
13	11	27.253	33.283	29.983	1.7587	.263	-.617
14	10	27.931	32.123	30.495	1.0707	-1.175	1.749





LINEAR MEASUREMENT VARIABLE 104

**Lower Incisor Incisal Edge-
Menton**

LIE-ME

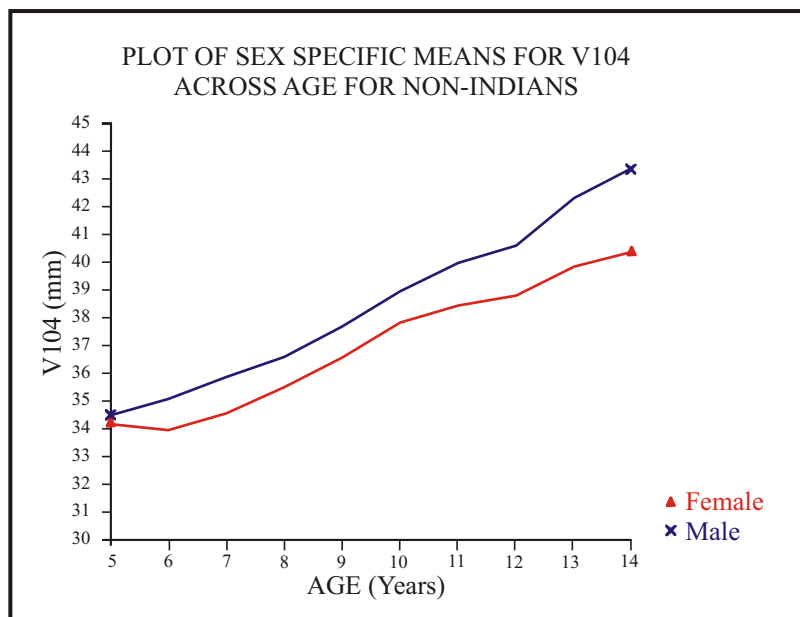
6-1

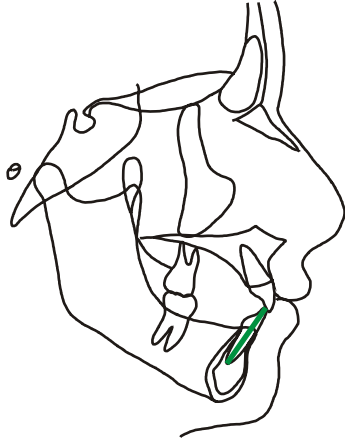
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	33.358	36.246	34.448	1.2019	.597	-1.068
6	7	33.858	36.925	35.041	1.0649	.656	-.633 *
7	7	35.010	37.513	35.837	.90381	.972	-.388 *
8	10	35.164	39.258	36.565	1.2603	.923	-.011
9	9	36.423	38.948	37.668	.88929	-.039	-1.306
10	7	38.148	41.596	38.943	1.2357	1.647	.215
11	9	38.223	42.261	39.970	1.2926	.453	-.736
12	9	39.308	42.643	40.597	1.2332	.323	-1.305 **
13	9	40.403	43.747	42.321	1.0552	-.262	-.491 **
14	4	41.942	44.018	43.408	.98530	-1.099	-.713 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	33.195	35.481	34.132	1.1981	.558	-1.500
6	7	31.697	35.866	33.913	1.6321	-.171	-1.517
7	13	31.767	37.031	34.520	1.8079	-.188	-1.438
8	12	32.146	37.900	35.469	1.7499	-.356	-.839
9	9	32.121	40.416	36.542	2.5114	-.154	-.630
10	13	33.566	41.328	37.810	2.0485	-.194	-.208
11	13	34.203	42.314	38.426	2.2671	.038	-.630
12	12	35.970	41.915	38.787	1.8913	.407	-1.043
13	11	35.961	42.866	39.837	2.0142	-.304	-.366
14	10	36.391	42.665	40.371	1.6647	-1.260	1.538





LINEAR MEASUREMENT

VARIABLE 105

**Lower Incisor Incisal Edge-
Lower Incisor Apex**

LIE-LIA

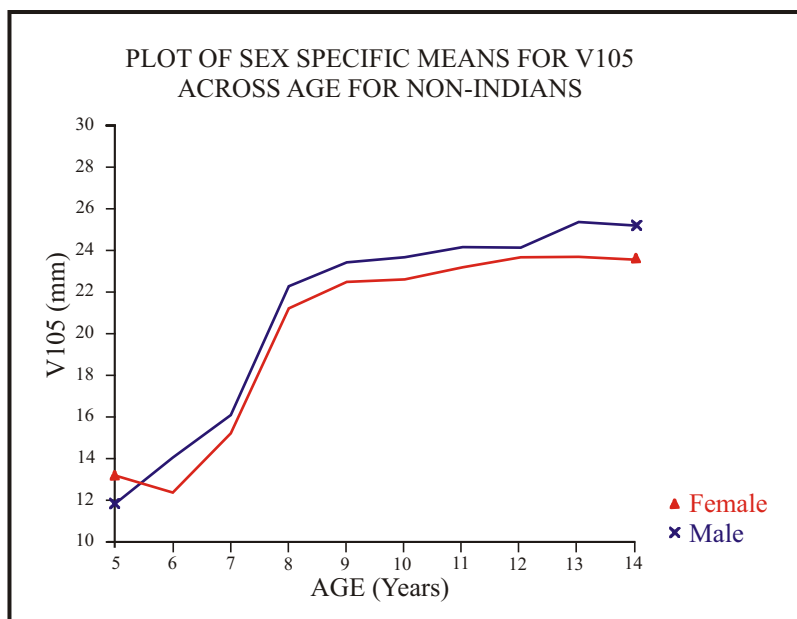
6-15

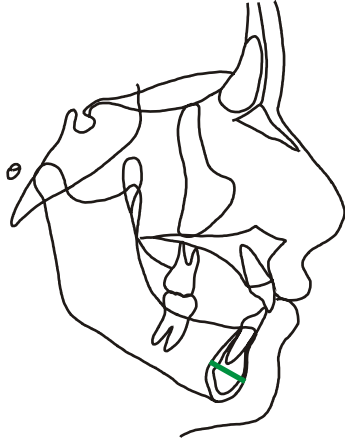
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	10.936	13.587	11.897	1.0519	.885	-.659
6	7	9.4507	24.076	14.138	4.7895	1.375	.826
7	7	9.4347	22.332	16.190	5.5525	-.072	-1.718
8	9	19.389	24.880	22.411	1.7341	-.253	-.845
9	9	19.758	26.350	23.565	1.9197	-.692	-.018
10	7	21.428	26.188	23.813	1.9623	.148	-1.640
11	9	21.179	26.865	24.302	1.7983	-.117	-.609
12	9	22.240	26.824	24.276	1.5963	.034	-1.120
13	9	22.774	28.315	25.514	2.0651	-.124	-1.519
14	4	24.285	26.219	25.339	.89048	-.198	-1.607 *

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	11.950	13.997	13.276	1.1499	-.699	-1.500
6	7	8.8814	20.355	12.448	3.6669	1.608	1.392
7	13	6.6744	23.518	15.308	5.8428	.060	-1.506
8	11	18.148	24.400	21.342	1.6728	-.050	-.046
9	9	20.575	25.842	22.621	1.9724	.777	-1.077
10	13	18.838	25.498	22.742	1.9308	-.394	-.625
11	13	20.329	25.783	23.327	1.6588	-.386	-.954
12	12	21.999	26.430	23.810	1.2654	.743	-.165
13	11	21.266	26.976	23.832	1.7930	.164	-.967
14	10	20.829	25.389	23.692	1.5338	-.743	-.808





LINEAR MEASUREMENT

VARIABLE 106

Pogonion-Lingual Symphyseal Point

PG-SYMP

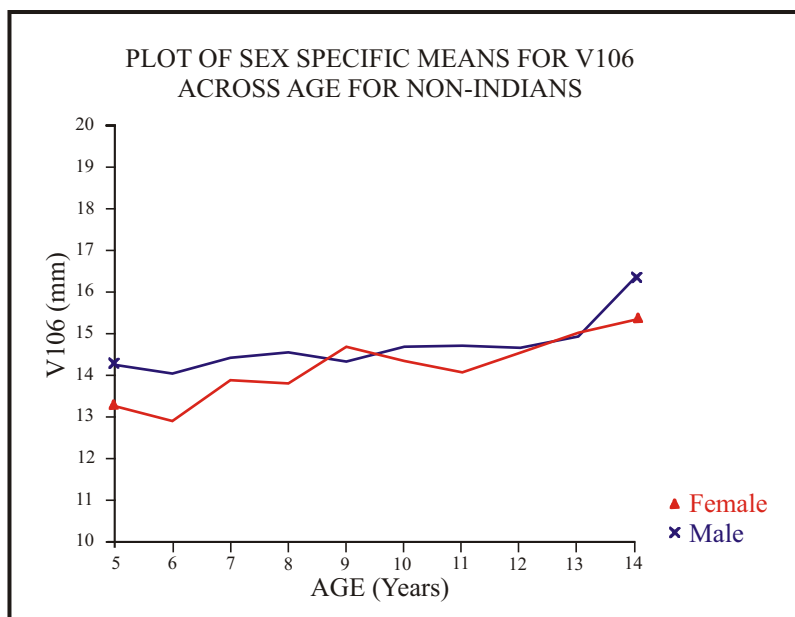
3-16

Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	13.026	15.493	14.311	1.0511	-.230	-1.582
6	7	12.170	15.928	14.099	1.1947	-.123	-.551
7	7	12.286	17.370	14.480	1.6965	.506	-.694
8	10	12.348	16.177	14.611	1.2552	-.249	-.922
9	9	12.164	16.438	14.389	1.1672	-.244	.253
10	7	12.646	17.131	14.747	1.4554	.088	-.562
11	9	11.627	16.853	14.772	1.7163	-.515	-.639
12	9	12.424	16.909	14.721	1.4635	.010	-1.002
13	9	11.607	17.612	14.994	2.1409	-.247	-1.260
14	4	14.841	18.276	16.447	1.7546	.062	-1.898

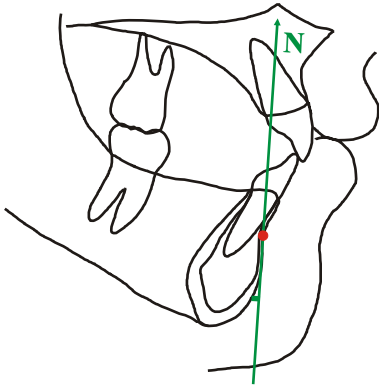
Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	13.136	13.631	13.315	.27434	.688	-1.500
6	7	12.040	13.722	12.953	.65481	-.215	-1.266
7	13	12.193	15.300	13.939	.84521	-.481	.176
8	12	12.210	15.464	13.861	1.1966	-.006	-1.556
9	9	13.098	16.778	14.746	1.2234	.121	-.947
10	13	11.893	17.041	14.403	1.7014	.201	-1.397
11	13	11.336	16.597	14.128	1.8065	.014	-1.429
12	12	11.931	17.158	14.603	1.8506	.068	-1.526
13	11	13.021	17.937	15.084	1.6414	.258	-1.257
14	10	12.919	17.673	15.404	1.7311	.132	-1.461



LINEAR MEASUREMENT

VARIABLE 107



Pogonion perpendicular to Nasion-B Point

PG \perp N-B

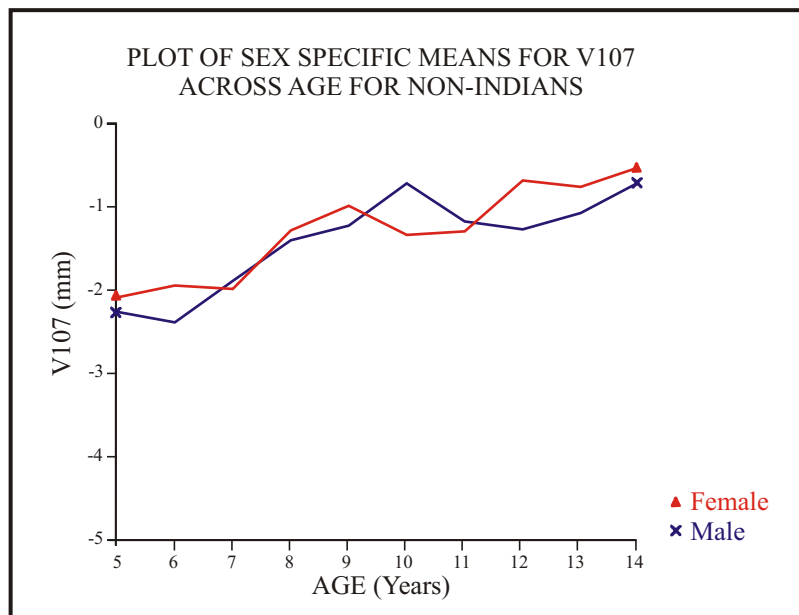
3 \perp 38-4

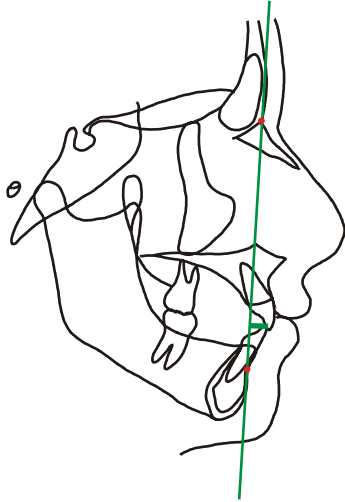
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	-2.9798	-1.3381	-2.2672	.65430	.438	-1.216
6	7	-3.2952	-1.1097	-2.3949	.82304	.303	-1.176
7	7	-3.2656	.27864	-1.8943	1.2298	.698	-.584
8	10	-2.7942	.44319	-1.4041	1.2812	.321	-1.581
9	9	-3.1195	.74179	-1.2274	1.3225	.129	-1.148
10	7	-2.6590	.92868	-.71713	1.1874	-.108	-.636
11	9	-2.8754	1.0387	-1.1765	1.3528	.331	-1.079
12	9	-2.9417	.96530	-1.2721	1.4077	.249	-1.237
13	9	-2.6199	2.0138	-1.0746	1.5738	.764	-.553
14	4	-2.2142	.36166	-.70518	1.0830	-.666	-.904

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	-3.1845	-.18482	-2.0946	1.7987	.704	-1.500
6	7	-4.4318	.78263	-1.9500	1.5776	-.253	-1.086
7	13	-4.3273	1.0027	-1.9915	1.4108	.647	-.054
8	12	-3.1230	.29087	-1.2852	1.1728	-.237	-1.213
9	9	-2.9584	.12538	-.98728	1.0658	-1.031	-.404
10	13	-4.1760	.17754	-1.3390	1.4877	-.850	-.617
11	13	-4.2952	.94963	-1.2961	1.5546	-.598	-.529
12	12	-3.2175	2.0180	-.68184	1.3720	.247	-.011
13	11	-3.4158	.99196	-.75919	1.2952	-.672	-.207
14	10	-1.7575	.74399	-.52365	.91326	-.203	-1.355





LINEAR MEASUREMENT VARIABLE 108

**Lower Incisor Incisal Edge
Perpendicular to Nasion-
B Point**

LIE_⊥N-B

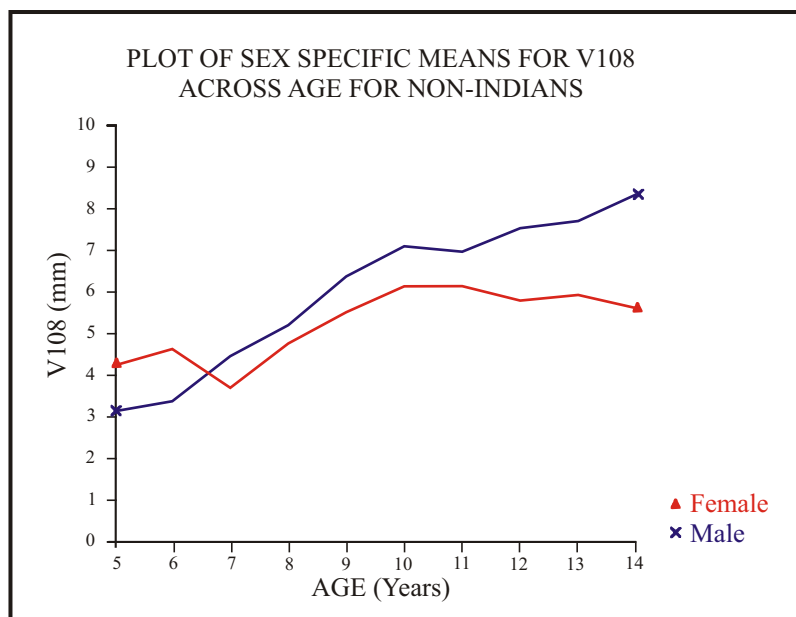
6_⊥38-4

Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	.98590	5.7672	3.2560	1.7045	.232	-.544
6	7	2.2707	5.3458	3.4998	1.1078	.398	-.874
7	7	3.4377	5.7027	4.5884	.91514	-.186	-1.675
8	10	3.0345	6.5218	5.3368	1.0998	-.880	-.166
9	9	5.2322	7.7837	6.5136	.89093	-.142	-1.215
10	7	6.0972	8.6433	7.2417	.79346	.441	-.221
11	9	5.4389	8.8664	7.1099	1.2587	.061	-1.238
12	9	5.2529	9.7819	7.6781	1.5706	-.065	-1.203
13	9	6.4887	9.8246	7.8511	1.3532	.623	-1.411 *
14	4	6.5676	10.046	8.4934	1.6162	-.225	-1.615 **

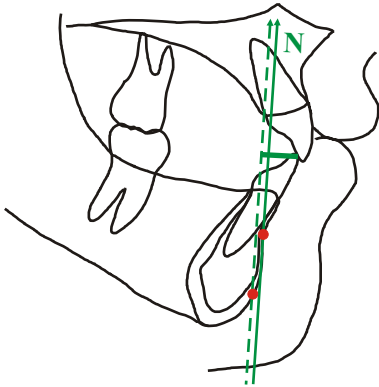
Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	3.1575	5.5344	4.3618	1.1888	-.049	-1.500
6	7	2.7876	6.5845	4.7603	1.3679	-.014	-1.244
7	13	.61735	7.1911	3.8242	1.9747	.308	-.756
8	12	2.0130	8.5729	4.8939	2.2403	.226	-1.071
9	9	2.6508	9.0362	5.6494	1.8301	.017	.009
10	13	3.0758	8.8873	6.2745	1.7881	-.489	-.476
11	13	2.4027	9.2395	6.2786	1.9660	-.445	-.363
12	12	2.3682	9.3951	5.9300	2.2887	-.202	-.902
13	11	2.5027	9.6369	6.0661	2.2844	-.109	-1.033
14	10	3.4884	7.9474	5.7476	1.6329	-.053	-1.319



LINEAR MEASUREMENT

VARIABLE 109



**Lower Incisor Incisal Edge
Perpendicular to Pogonion
parallel to Nasion-B Point**

LIE \perp N-B/PG \perp N-B

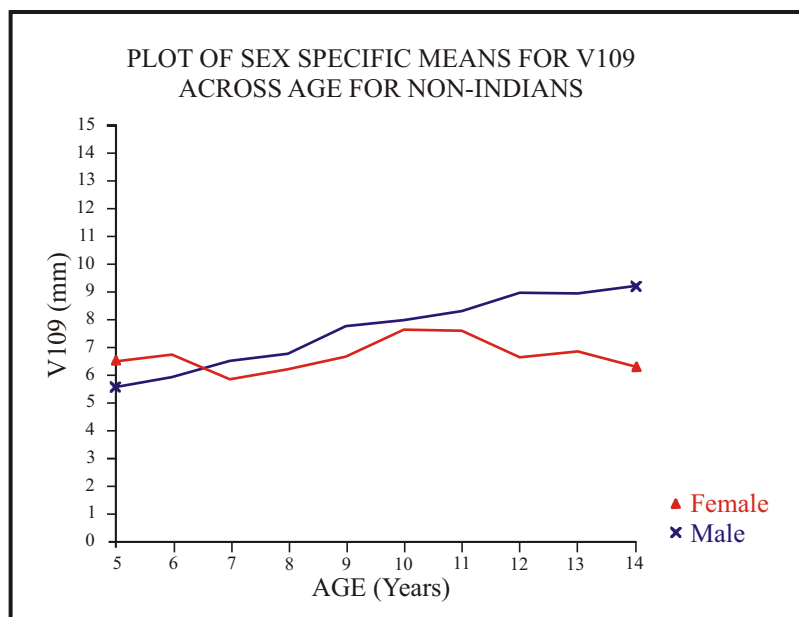
**6 \perp 38-4/
3 \perp 38-4**

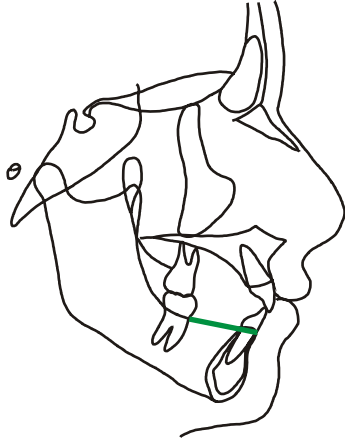
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	2.8639	8.3898	5.5240	2.1054	.104	-1.080
6	7	3.3813	7.6149	5.8950	1.5845	-.339	-1.144
7	7	4.3306	8.7152	6.4832	1.6431	.261	-1.320
8	10	4.2790	9.1927	6.7412	1.7910	.232	-1.458
9	9	4.6178	9.8772	7.7413	1.8386	-.250	-1.068
10	7	5.5519	10.343	7.9592	1.4011	-.026	.324
11	9	4.4007	11.266	8.2868	2.0076	-.449	-.141
12	9	4.2881	12.724	8.9506	2.5277	-.400	-.502
13	9	4.4751	12.445	8.9260	2.4247	-.322	-.451
14	4	6.2061	12.260	9.1988	2.5936	.038	-1.332

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	4.4128	8.7195	6.4571	2.1616	.183	-1.500
6	7	2.7101	10.564	6.7107	2.6737	.082	-.886
7	13	1.4503	10.022	5.8163	2.5141	.081	-.639
8	12	1.9923	11.696	6.1796	3.0346	.343	-.648
9	9	2.9036	11.995	6.6370	2.7196	.575	-.064
10	13	2.8985	12.656	7.6137	2.9543	.102	-.721
11	13	2.1221	12.965	7.5751	3.2112	.169	-.537
12	12	2.0805	12.613	6.6123	3.2391	.245	-.890
13	11	2.4964	13.053	6.8258	3.0892	.338	-.334
14	10	2.7446	9.3162	6.2717	2.2992	-.038	-1.251





LINEAR MEASUREMENT VARIABLE 110

**Infradentale perpendicular to
Lower Molar Mesial Cemento-
Enamel Junction**

ID-LMJ

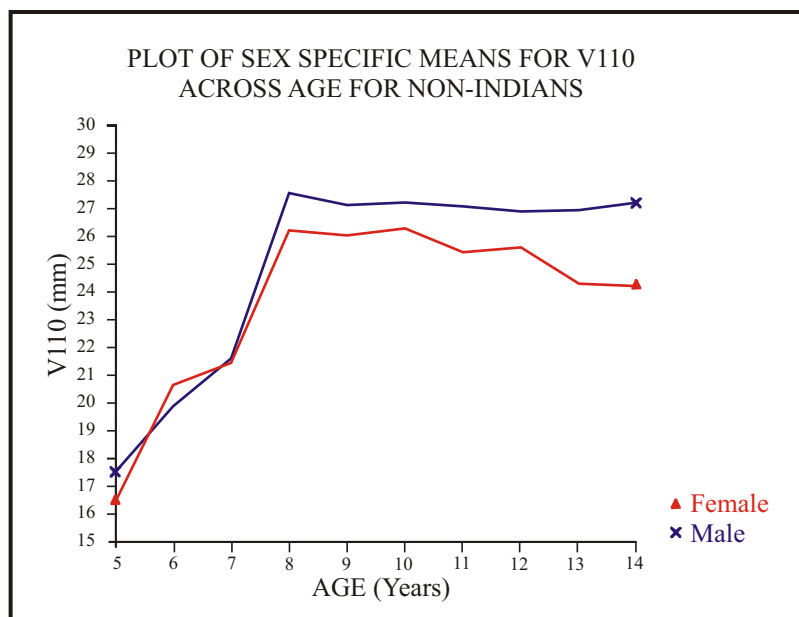
5-17

Male Non-Indian

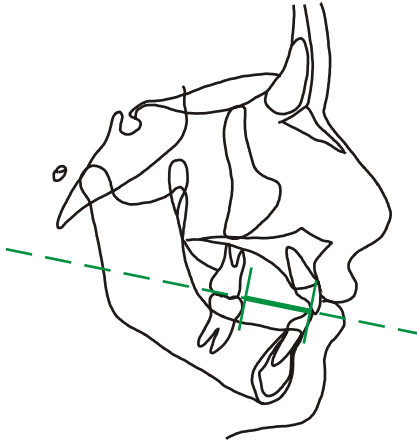
Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	17.099	18.113	17.593	.43356	.116	-1.581
6	7	15.728	27.800	19.985	4.7780	.831	-.993
7	7	16.124	28.184	21.718	5.8514	.261	-1.889
8	10	25.734	28.737	27.708	.93587	-.728	-.083 **
9	9	25.933	29.236	27.274	.94394	.727	.292 *
10	7	25.550	28.734	27.366	1.0927	-.263	-.729
11	9	23.137	29.453	27.226	1.8564	-1.114	.705 *
12	9	23.489	29.699	27.042	1.8551	-.304	-.674
13	9	23.589	29.634	27.090	1.7147	-.539	-.339 **
14	4	25.694	28.309	27.364	1.1984	-.742	-1.070 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	15.764	17.222	16.508	.72948	-.074	-1.500
6	7	15.856	27.859	20.757	5.4142	.314	-1.778
7	13	15.001	27.230	21.558	5.7471	-.157	-1.947
8	12	24.315	27.895	26.356	1.0362	-.540	-.438
9	9	24.351	27.251	26.174	.97690	-.582	-.637
10	13	23.804	28.427	26.428	1.1934	-.530	.091
11	13	22.960	27.304	25.565	1.5568	-.510	-1.224
12	12	23.215	28.007	25.740	1.3899	-.307	-.655
13	11	21.583	26.519	24.425	1.7365	-.370	-1.326
14	10	22.835	26.905	24.338	1.3621	.511	-.712



LINEAR MEASUREMENT VARIABLE 111



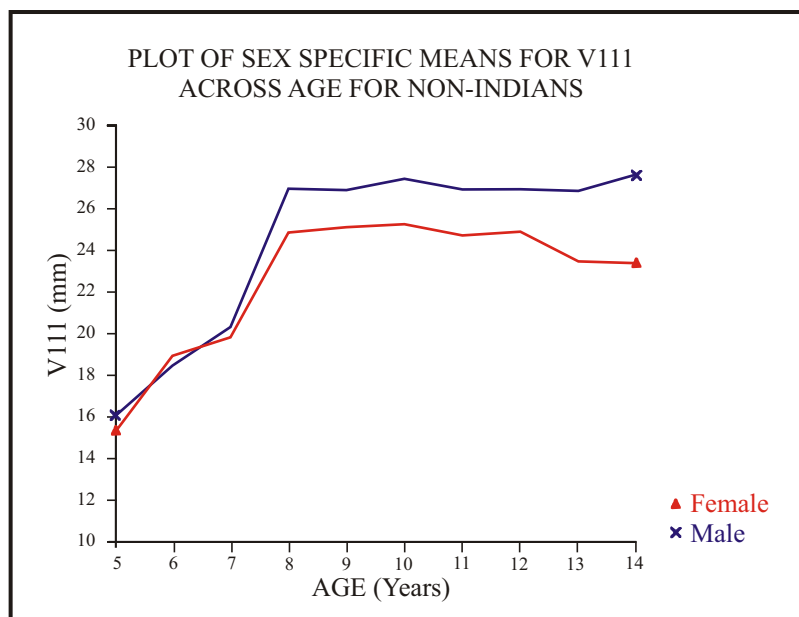
**Lower Molar Mesial Contact
Point perpendicular to Lower
Incisor Incisal Edge
on Downs Occlusal Plane**

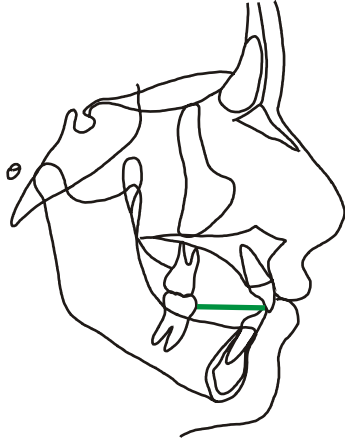
**ADP-PDP \perp LMC- 56-57 \perp 54-
ADP-PDP \perp LIE 56-57 \perp 6**

Male Non-Indian

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis	Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	14.268	17.349	16.114	1.1901	-.654	-.765	5	3	14.534	16.617	15.332	1.1239	.647	-1.500
6	7	14.024	25.486	18.582	4.5096	.657	-1.122	6	7	14.256	27.009	19.055	5.3822	.430	-1.581
7	7	14.404	27.039	20.446	5.7382	.239	-1.849	7	13	13.069	26.275	19.949	5.7819	-.140	-1.907
8	10	25.293	28.784	27.125	1.1700	-.340	-1.086 **	8	12	22.280	28.460	25.009	1.8485	.446	-.518
9	9	25.294	29.023	27.058	1.3853	.013	-1.429 **	9	9	22.454	26.783	25.267	1.3639	-.991	.078
10	7	24.458	29.541	27.604	1.7910	-.537	-.606 **	10	13	22.305	27.736	25.411	1.7129	-.352	-1.114
11	9	22.958	30.067	27.090	2.1470	-.619	-.378 **	11	13	22.536	27.948	24.869	1.7565	-.081	-1.044
12	9	22.400	31.015	27.100	2.7374	-.244	-.819	12	12	21.853	29.314	25.050	2.1370	.436	-.527
13	9	22.788	30.287	27.019	2.3312	-.343	-.698 **	13	11	20.727	26.859	23.615	1.8995	.022	-.749
14	4	26.335	29.008	27.814	1.3115	-.151	-1.777 **	14	10	21.679	25.384	23.529	1.3190	.112	-1.268





LINEAR MEASUREMENT VARIABLE 112

**Lower Incisor Incisal Edge-
Lower Molar Mesial Contact
Point**

LIE-LMC

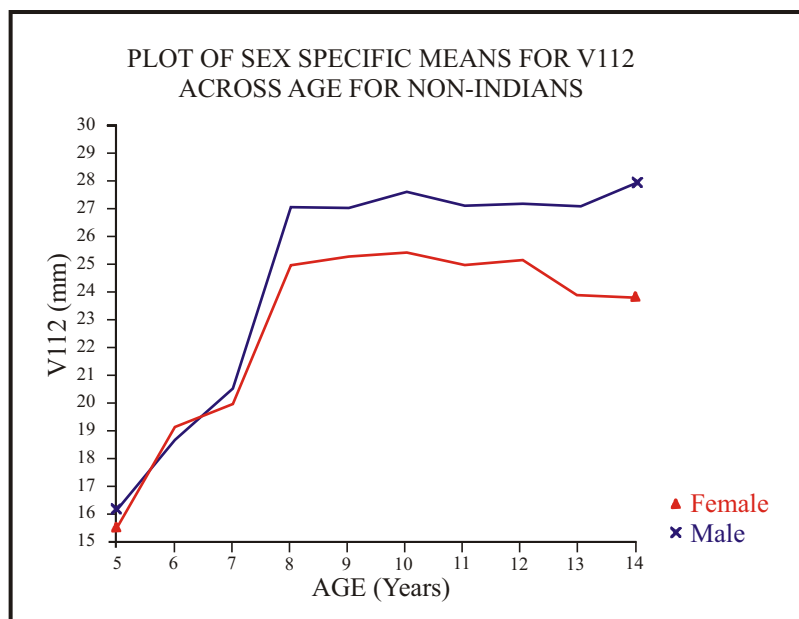
6-54

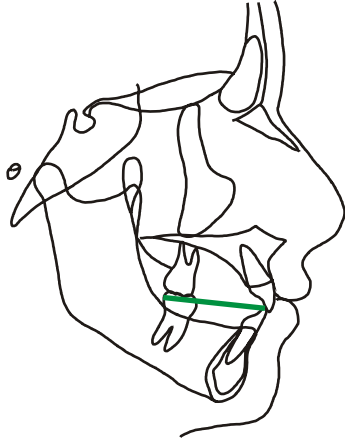
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	14.465	17.511	16.270	1.1525	-.660	-.655
6	7	14.432	25.486	18.804	4.4128	.634	-1.145
7	7	14.730	27.331	20.668	5.7574	.252	-1.858
8	10	25.421	28.787	27.237	1.1757	-.456	-1.123 **
9	9	25.358	29.038	27.208	1.3800	-.067	-1.453 **
10	7	24.486	29.747	27.792	1.8136	-.692	-.387 **
11	9	23.177	30.090	27.289	2.1065	-.704	-.339 **
12	9	22.699	31.075	27.361	2.6809	-.313	-.820
13	9	23.131	30.380	27.268	2.2841	-.388	-.740 **
14	4	26.699	29.536	28.150	1.3328	-.043	-1.736 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	14.677	17.180	15.620	1.3607	.661	-1.500
6	7	14.370	27.096	19.274	5.3328	.414	-1.592
7	13	13.315	26.366	20.107	5.7340	-.138	-1.908
8	12	22.492	28.577	25.133	1.8339	.490	-.531
9	9	22.705	27.000	25.448	1.3517	-.935	-.050
10	13	22.670	27.880	25.593	1.6762	-.283	-1.202
11	13	22.885	28.226	25.141	1.6386	.090	-.853
12	12	22.258	29.652	25.321	2.1288	.562	-.467
13	11	21.035	27.118	23.892	1.8496	.050	-.705
14	10	22.191	25.553	23.881	1.2467	-.026	-1.431





LINEAR MEASUREMENT VARIABLE 113

**Lower Incisor Incisal Edge-
Lower Molar Distal Contact
Point**

LIE -LDC

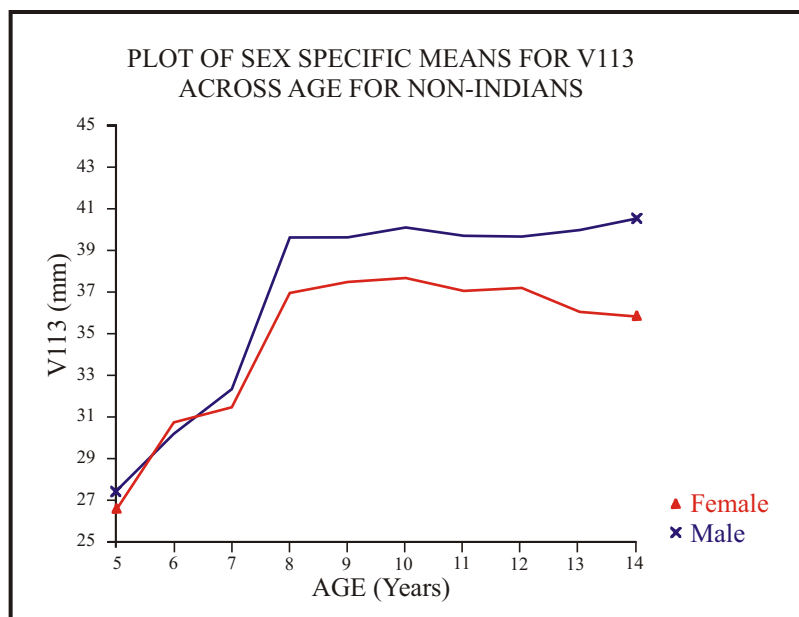
6-25

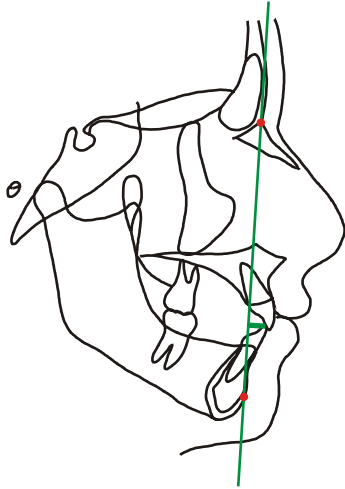
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	26.797	28.703	27.710	.77168	.179	-1.401
6	7	25.406	37.523	30.492	4.7712	.647	-1.156
7	7	26.253	39.996	32.648	6.4207	.276	-1.858
8	10	37.408	41.915	39.973	1.6366	-.486	-1.171 **
9	9	37.490	42.729	39.979	1.7214	.064	-1.056 *
10	7	37.115	42.798	40.456	2.1041	-.400	-1.213 **
11	9	35.722	42.418	40.055	2.2430	-.758	-.544 **
12	9	34.901	43.708	40.017	2.9262	-.565	-.848
13	9	35.288	43.225	40.332	2.6210	-.517	-.466 **
14	4	38.263	42.708	40.898	1.8845	-.697	-.918 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	25.952	27.774	26.788	.92027	.290	-1.500
6	7	25.452	39.499	31.043	5.8818	.376	-1.630
7	13	23.899	38.690	31.773	6.4698	-.154	-1.919
8	12	34.275	40.618	37.293	1.9687	.159	-.880
9	9	33.911	39.829	37.825	1.9531	-.949	-.277
10	13	35.113	40.188	38.015	1.6856	-.249	-1.205
11	13	34.681	39.930	37.393	1.9028	-.107	-1.231
12	12	33.934	41.347	37.537	1.9655	.178	-.199
13	11	33.061	39.761	36.380	1.9620	-.077	-.560
14	10	33.528	38.155	36.150	1.5565	-.645	-.649





LINEAR MEASUREMENT

VARIABLE 114

**Lower Incisor Incisal Edge
perpendicular to Nasion-
Pogonion**

LIE_⊥N-PG

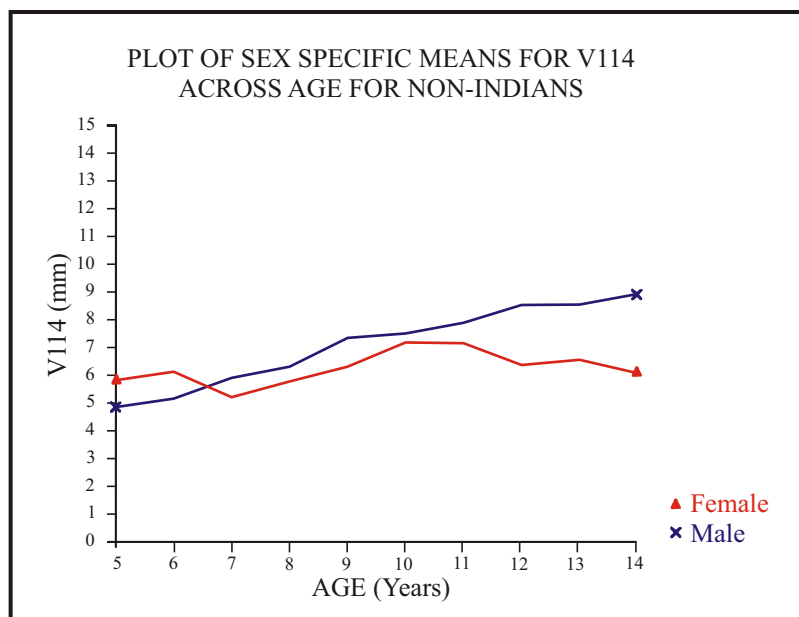
6138-3

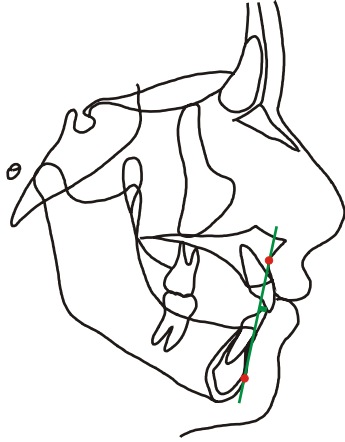
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	2.2909	7.6791	4.8868	2.0124	.125	-.948
6	7	3.0531	6.9478	5.1934	1.4238	-.163	-1.236
7	7	4.0543	7.9176	5.9454	1.3912	.203	-1.250
8	10	4.2693	8.4670	6.3510	1.5384	.203	-1.429
9	9	4.8423	9.1723	7.3935	1.5157	-.317	-1.101
10	7	5.7064	9.6289	7.7554	1.1510	-.238	.319
11	9	4.7196	10.544	7.9414	1.7241	-.367	-.379
12	9	4.5878	11.866	8.5858	2.2001	-.378	-.579
13	9	5.0899	11.678	8.6002	2.0385	-.082	-.616
14	4	6.3219	11.582	8.9842	2.2805	-.038	-1.401*

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	4.4068	7.8325	5.8601	1.7709	.492	-1.500
6	7	2.7317	9.3356	6.1675	2.2738	.058	-.909
7	13	1.7257	9.1622	5.2461	2.2772	.248	-.649
8	12	2.0005	10.828	5.8157	2.7880	.327	-.702
9	9	2.8335	11.124	6.3519	2.4422	.456	-.031
10	13	2.9487	11.550	7.2279	2.5832	-.036	-.626
11	13	2.2032	11.895	7.2011	2.8183	.055	-.516
12	12	2.1843	11.633	6.4119	2.9166	.167	-.929
13	11	2.6347	12.007	6.6005	2.8072	.206	-.523
14	10	2.9652	8.7852	6.1157	2.0809	-.051	-1.284





LINEAR MEASUREMENT

VARIABLE 115

**Lower Incisor Incisal Edge
perpendicular to A Point-
Pogonion
Ricketts Analysis**

LIE⊥A-PG

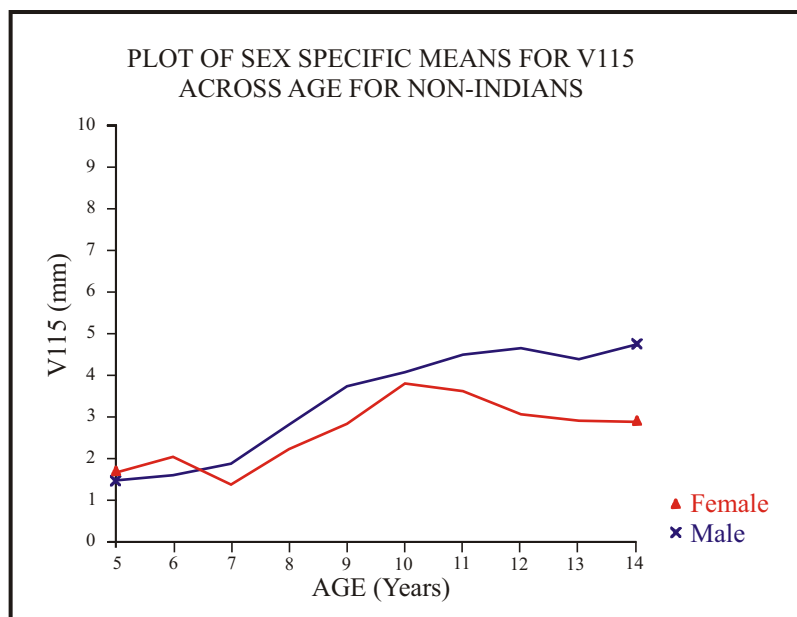
6┆9-3

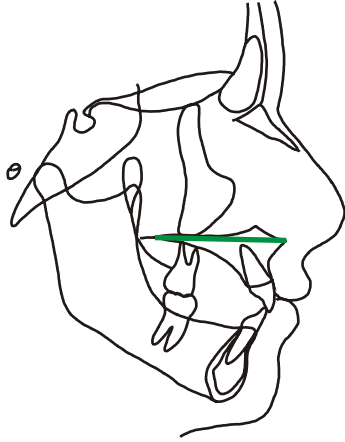
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	-.63474	3.9064	1.4279	1.9627	.266	-1.586
6	7	-.15718	5.3098	1.5551	1.8545	1.213	.547
7	7	.22113	5.2932	1.8339	1.7184	1.297	.397
8	10	1.1467	6.6794	2.7763	1.6679	1.316	.942
9	9	1.8932	6.4085	3.7026	1.4674	.430	-.754
10	7	1.6855	5.1950	4.0429	1.0969	-1.564	1.389
11	9	1.9457	9.0678	4.4658	2.1886	.868	.298
12	9	1.6923	9.1259	4.6231	2.2542	.768	-.114
13	9	2.0989	9.6362	4.3562	2.5205	1.024	.079
14	4	3.0170	6.9941	4.7153	1.7700	.408	-1.345

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	.50288	2.8401	1.6126	1.1730	.189	-1.500
6	7	.66651	4.0219	1.9985	1.2667	.532	-1.141
7	13	-1.1783	3.8102	1.3290	1.4998	.027	-.978
8	12	-.30520	5.6336	2.1851	1.7359	.377	-.690
9	9	.97394	5.0887	2.7960	1.3389	.381	-.649
10	13	.84484	6.3648	3.7697	1.6337	-.140	-.620
11	13	.69622	7.6155	3.5848	2.0521	.344	-.767
12	12	-.43516	5.0648	3.0260	1.8154	-.475	-.987
13	11	-.60208	4.9267	2.8710	1.8372	-.410	-.972
14	10	.19801	4.8739	2.8428	1.6697	-.540	-1.053





LINEAR MEASUREMENT VARIABLE 116

**Posterior Nasal Spine-Anterior
Nasal-Spine**

PNS-ANS

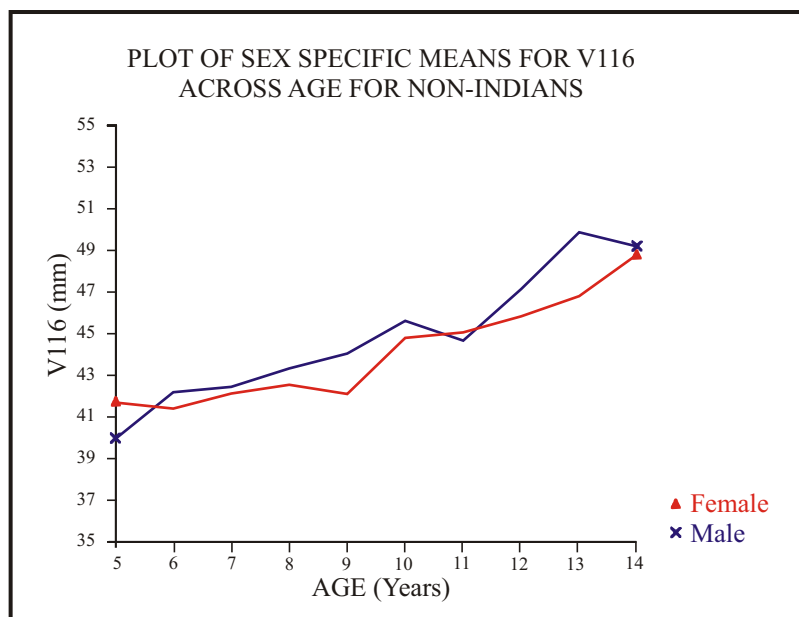
45-10

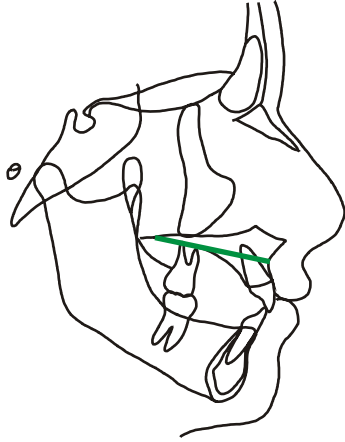
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	38.240	42.704	40.204	1.7031	.378	-.932
6	7	38.141	46.881	42.461	2.7119	.026	-.325
7	7	39.064	49.626	42.721	3.7343	.912	-.374
8	10	39.688	47.820	43.610	2.6956	.179	-1.092
9	9	42.145	50.027	44.329	2.4053	1.571	1.641
10	7	41.918	49.974	45.908	2.7794	.029	-1.096
11	9	39.654	49.454	44.954	2.6919	-.398	.290
12	9	43.576	53.481	47.444	3.7376	.653	-1.097
13	9	47.043	52.540	50.186	2.1500	-.359	-1.480 **
14	4	43.347	57.323	49.500	5.8346	.466	-1.011

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	40.551	44.305	41.964	2.0422	.663	-1.500
6	7	36.757	44.072	41.671	2.4599	-1.211	.347
7	13	36.442	46.637	42.398	2.9911	-.465	-.591
8	12	39.651	48.418	42.821	2.6168	.774	-.281
9	9	39.114	46.352	42.377	2.2134	.209	-.653
10	13	40.580	49.289	45.085	3.1067	.071	-1.382
11	13	41.208	49.190	45.351	2.5243	-.117	-1.063
12	12	41.961	50.390	46.127	2.6141	.014	-1.169
13	11	42.174	50.110	47.102	2.7873	-.537	-1.070
14	10	43.278	58.699	49.113	4.2663	.890	.771





LINEAR MEASUREMENT VARIABLE 117

Posterior Nasal Spine-A Point

PNS-A

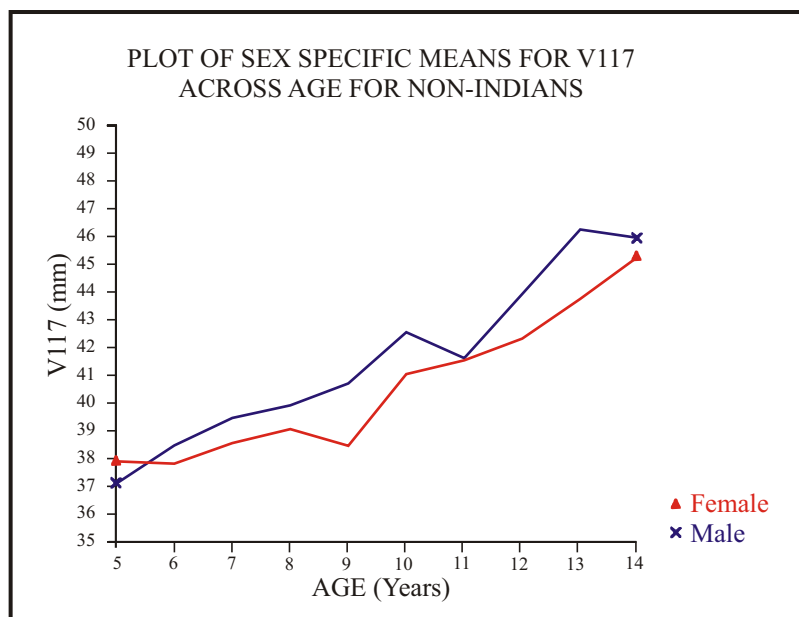
45-9

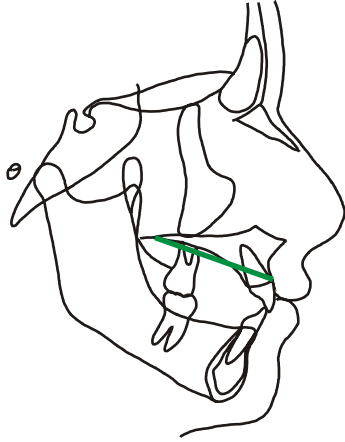
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	34.989	38.536	37.038	1.6008	-.412	-1.659
6	7	35.004	41.916	38.762	2.1180	-.432	-.086
7	7	37.070	44.313	39.757	2.4826	.806	-.429
8	10	36.733	45.058	40.214	2.4380	.474	-.346
9	9	39.374	45.541	41.007	1.9067	1.590	1.652 *
10	7	40.002	45.808	42.862	1.9315	-.062	-.799
11	9	36.518	44.927	41.924	2.3996	-1.147	1.074
12	9	41.235	49.074	44.247	3.1235	.764	-1.131
13	9	43.326	49.289	46.583	2.2319	-.166	-1.519 *
14	4	41.636	52.748	46.278	4.6689	.637	-.924

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	36.687	40.012	38.185	1.6869	.344	-1.500
6	7	35.272	40.326	38.102	1.7857	-.241	-.953
7	13	35.275	41.986	38.847	2.2099	-.20	-.973
8	12	36.065	43.079	39.353	2.0858	.062	-.783
9	9	36.578	41.827	38.749	1.8784	.237	-1.226
10	13	37.104	45.341	41.345	2.7688	-.089	-1.269
11	13	38.017	45.322	41.845	2.3366	-.196	-.806
12	12	38.934	46.916	42.632	2.3496	.346	-.816
13	11	39.028	48.060	44.070	2.6152	-.311	-.481
14	10	40.690	54.220	45.603	4.0026	.804	.261





LINEAR MEASUREMENT VARIABLE 118

**Posterior Nasal Spine-
Supradentale**

PNS-SD

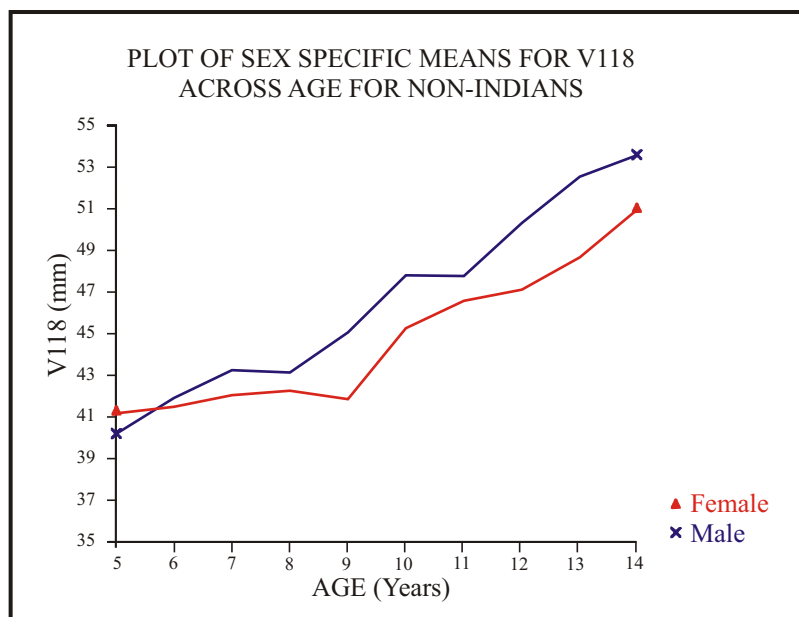
45-8

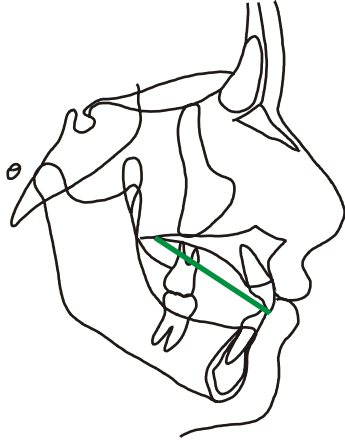
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	38.765	41.724	40.168	1.2744	.014	-.1567
6	7	38.964	44.212	41.905	1.8001	-.596	-.813
7	7	40.473	47.596	43.249	2.2911	.931	-.009
8	10	39.977	48.612	43.136	2.8419	.966	-.293
9	9	41.675	48.597	45.071	1.9866	.080	-.255 **
10	7	44.180	52.032	47.830	2.5503	.183	-.615 *
11	9	40.902	52.088	47.795	3.3962	-.682	-.067
12	9	46.862	57.812	50.356	3.8235	.878	-.531 **
13	9	49.309	56.866	52.595	2.6251	.060	-1.215 **
14	4	47.173	60.086	53.645	5.3099	-.010	-1.056

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	38.613	43.536	41.162	2.4660	-.129	-1.500
6	7	39.598	45.430	41.479	1.9705	1.210	.383
7	13	39.489	44.497	42.041	1.7628	-.179	-1.331
8	12	36.881	46.090	42.256	2.5964	-.439	-.054
9	9	38.397	45.972	41.849	2.6035	.006	-1.098
10	13	40.358	48.432	45.276	2.4899	-.551	-.684
11	13	40.900	51.881	46.598	2.9454	-.410	-.144
12	12	41.752	50.621	47.137	2.5314	-.617	-.277
13	11	42.403	52.352	48.700	2.7724	-.929	.469
14	10	46.468	58.456	51.028	3.4158	.802	.384





LINEAR MEASUREMENT VARIABLE 119

**Posterior Nasal Spine-Upper
Incisor Incisal Edge**

PNS-UIE

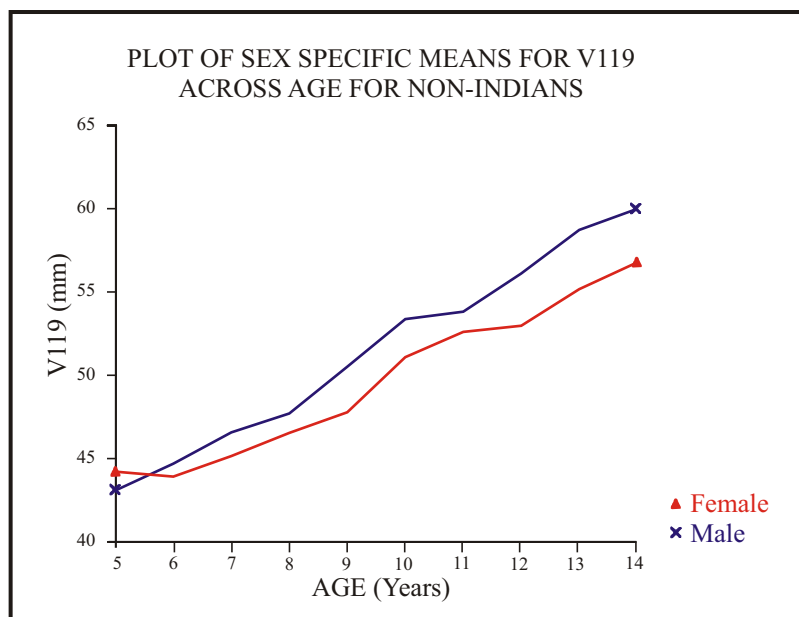
45-7

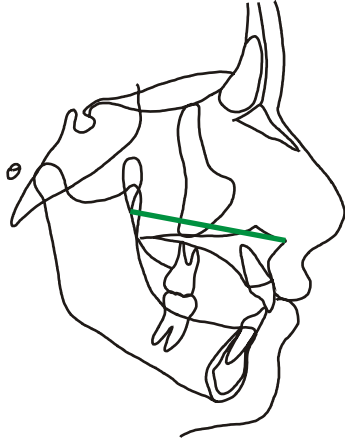
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	40.141	45.137	43.049	1.9819	-.498	-1.085
6	7	41.109	48.506	44.668	2.6469	-.157	-1.051
7	7	42.160	50.686	46.556	2.6373	-.096	-.274
8	10	43.413	51.207	47.698	2.3886	-.162	-.697
9	9	46.610	54.090	50.522	2.0590	-.218	.161 *
10	7	49.270	58.130	53.394	2.8031	.344	-.431
11	9	46.103	59.400	53.843	3.8882	-.543	-.051
12	9	51.747	64.140	56.150	4.2937	.782	-.656 *
13	9	55.168	64.986	58.778	2.8261	1.060	.726 **
14	4	54.261	64.968	60.050	4.4036	-.337	-.981

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	42.809	45.712	44.186	1.4575	.185	-1.500
6	6	43.361	44.305	43.887	.32836	-.412	-.734
7	13	41.763	49.321	45.127	1.9814	.233	-.106
8	12	41.495	52.637	46.525	3.4072	.357	-.855
9	9	44.175	53.196	47.771	2.8919	.523	-.619
10	13	46.017	54.300	51.097	2.4488	-.722	-.394
11	13	46.606	58.828	52.622	3.1394	-.117	.097
12	12	47.240	55.606	52.994	2.4921	-1.138	.463
13	10	53.378	56.909	55.202	1.3762	-.104	-1.583
14	10	50.974	63.917	56.819	3.7629	.065	-.190





LINEAR MEASUREMENT VARIABLE 120

**Pterygo-Maxillary Fissure,
Inferior-Anterior Nasal Spine**

PTM-ANS

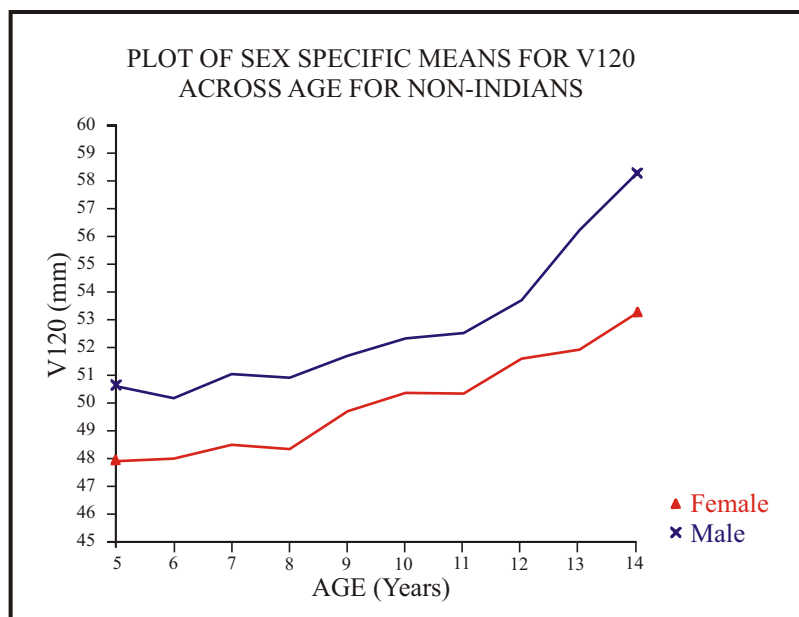
43-10

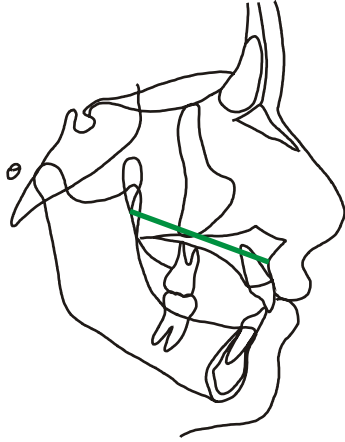
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	49.522	54.001	50.645	1.8973	1.418	.136
6	7	47.805	55.492	50.209	2.6038	1.319	.489
7	7	48.259	54.686	51.082	2.5002	.305	-1.480 *
8	10	47.179	56.145	50.950	2.4327	.676	.398 *
9	9	48.319	55.074	51.745	2.3648	-.133	-1.163
10	7	48.259	58.212	52.374	3.5124	.422	-.870
11	9	48.520	56.406	52.568	2.2115	-.033	.002 *
12	9	50.670	55.601	53.758	1.7408	-.670	-.825 **
13	9	51.724	63.807	56.297	3.5179	.841	.504 **
14	4	56.682	61.744	58.377	2.3831	.812	-1.005 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	45.044	49.922	47.926	2.5568	-.560	-1.500
6	7	45.411	50.728	48.019	1.7940	.013	-.995
7	13	44.132	52.466	48.520	2.1527	.128	.118
8	12	46.333	53.273	48.365	2.1477	.999	.150
9	9	47.359	52.821	49.736	1.6104	.640	-.190
10	13	48.004	53.598	50.401	1.7039	.224	-1.074
11	13	48.069	53.198	50.375	1.4220	.208	-.406
12	12	47.896	56.156	51.640	2.3405	.364	-.454
13	11	49.128	55.005	51.968	1.3794	.183	1.588
14	10	50.416	57.787	53.309	2.4131	.842	-.433





LINEAR MEASUREMENT VARIABLE 121

Pterygo-Maxillary Fissure Inferior-A Point

PTM-A

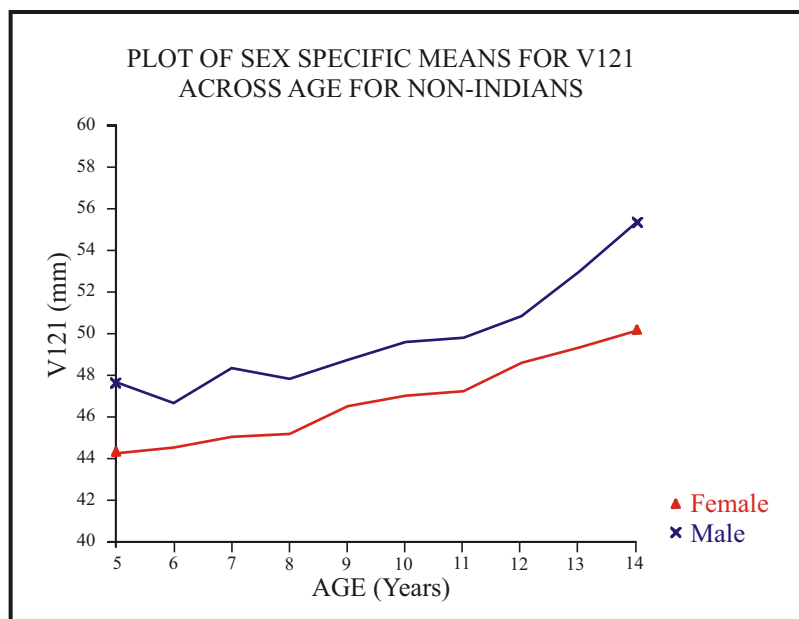
43-9

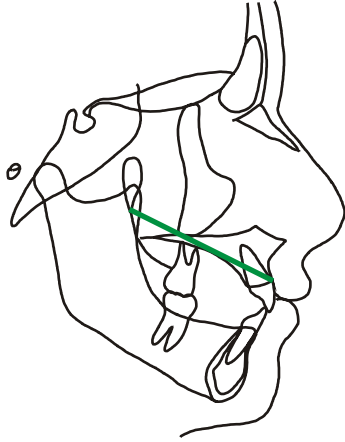
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	46.484	50.411	47.826	1.5815	.935	-.513 *
6	7	44.330	50.645	46.809	1.9211	1.029	.638 *
7	7	46.917	49.990	48.498	1.1186	.127	-1.216 **
8	10	43.722	51.385	47.978	2.1825	-.285	-.174 **
9	9	44.761	51.566	48.892	2.2389	-.626	-.652 *
10	7	44.684	52.677	49.757	2.9216	-.643	-.781 *
11	9	45.409	52.660	49.964	2.1488	-.851	.375 **
12	9	47.097	54.495	51.010	2.0655	-.265	.035 **
13	9	47.910	59.939	53.169	3.4228	.525	.038 **
14	4	53.421	57.517	55.579	2.0294	-.068	-1.853 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	42.504	45.884	44.378	1.7197	-.375	-1.500
6	7	43.254	46.019	44.659	.94113	-.031	-.961
7	13	42.894	48.558	45.176	1.6579	.695	-.439
8	12	42.826	48.446	45.318	1.5147	.386	-.031
9	9	43.944	48.728	46.656	1.4081	-.428	-.180
10	13	45.491	48.669	47.163	1.2308	-.192	-1.677
11	13	44.857	49.591	47.382	1.3359	-.059	-.761
12	12	45.914	51.310	48.752	1.5625	-.193	-.670
13	11	46.764	52.251	49.495	1.7165	.133	-.667
14	10	48.244	55.091	50.316	2.3558	1.253	.010





LINEAR MEASUREMENT VARIABLE 122

**Pterygo-Maxillary Fissure,
Inferior-Supradentale**

PTM-SD

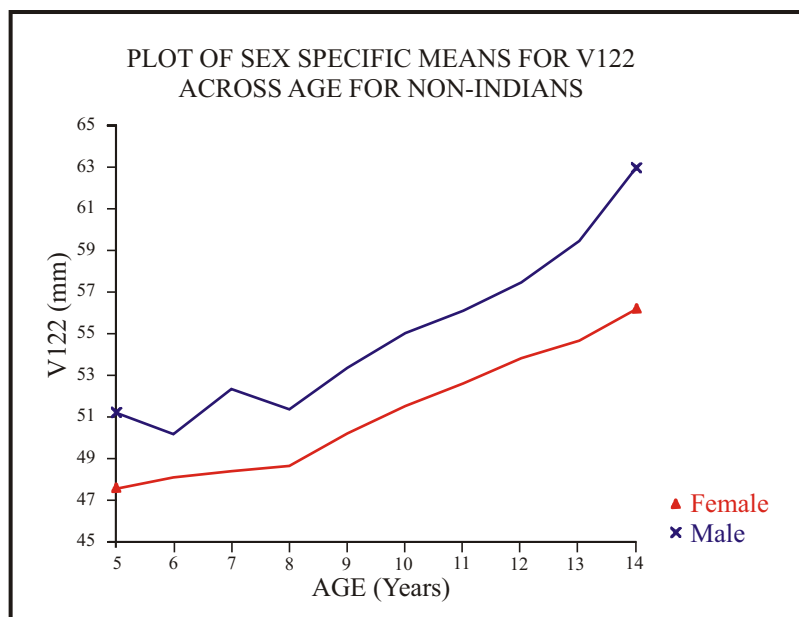
43-8

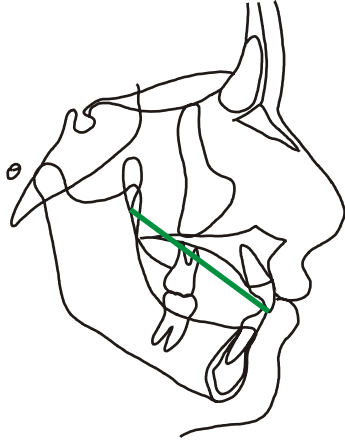
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	49.954	54.060	51.355	1.6130	1.062	-.299 *
6	7	47.955	54.001	50.311	2.0472	.701	-.488
7	7	50.611	53.718	52.489	1.2601	-.401	-1.423 **
8	10	46.872	54.685	51.509	2.3448	-.546	-.206 **
9	9	48.720	56.505	53.512	2.7972	-.877	-.692 **
10	7	50.405	57.823	55.190	2.9491	-.592	-1.239 **
11	9	50.356	58.473	56.272	2.6602	-1.261	.666 **
12	9	52.228	61.454	57.638	3.0924	-.400	-1.032 **
13	9	52.520	64.094	59.640	3.4156	-.712	.324 **
14	4	61.144	65.186	63.247	1.7202	-.139	-1.275 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	46.362	49.659	47.665	1.7542	.612	-1.500
6	7	47.054	50.178	48.221	1.1972	.677	-1.040
7	13	45.082	52.709	48.521	2.0159	.359	-.152
8	12	46.433	51.034	48.776	1.3647	-.050	-.807
9	9	45.987	52.349	50.344	1.7667	-1.747	2.465
10	13	48.398	56.444	51.668	2.2147	.725	-.117
11	13	49.149	57.764	52.761	2.2083	.498	.370
12	12	50.108	57.180	53.978	2.1372	-.520	-.631
13	11	51.186	58.285	54.825	2.3600	-.191	-1.129
14	10	53.794	59.226	56.374	1.6992	.027	-.861





LINEAR MEASUREMENT VARIABLE 123

**Pterygo-Maxillary Fissure,
Inferior-Upper Incisor Incisal
Edge**

PTM-UIE

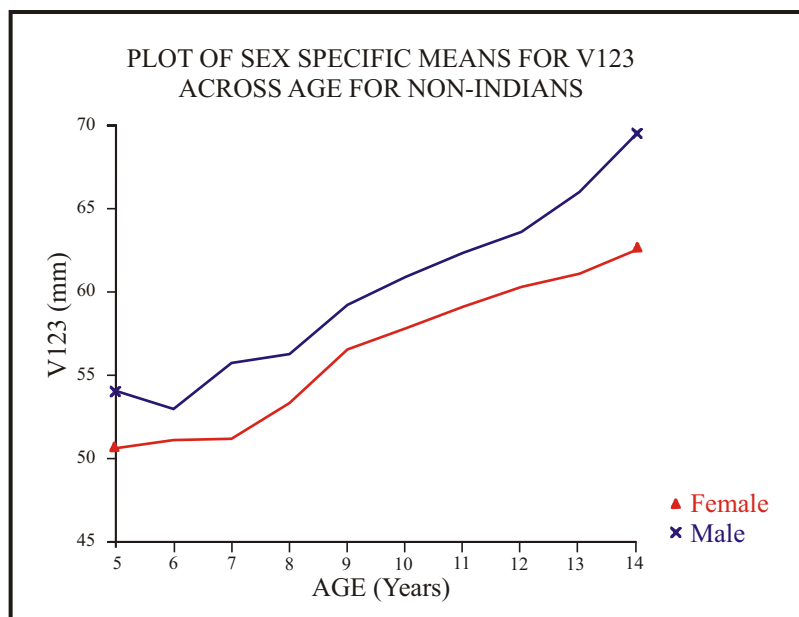
43-7

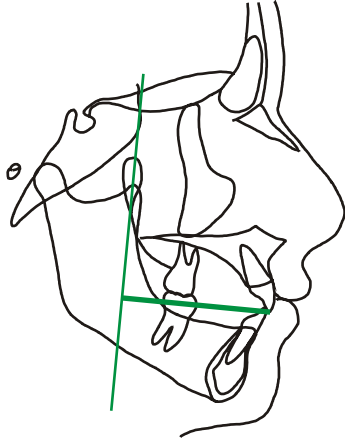
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	50.002	57.310	54.090	2.7839	-.403	-.941
6	7	48.331	56.258	52.991	2.8666	-.415	-1.083
7	7	52.207	57.309	55.769	1.9675	-.879	-.630 **
8	10	51.719	60.121	56.305	2.8130	-.236	-1.324 *
9	9	53.917	62.752	59.275	3.2340	-.718	-.917
10	7	54.600	63.953	60.960	3.5644	-.827	-.721 *
11	9	56.730	66.200	62.427	2.9379	-.722	-.449 **
12	9	57.349	68.099	63.682	3.5240	-.510	-.837 **
13	9	59.031	70.277	66.090	3.5429	-.823	-.214 **
14	4	68.889	70.262	69.654	.63844	-.241	-1.603 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	49.091	51.802	50.621	1.3885	-.432	-1.500
6	7	48.827	52.746	51.114	1.2930	-.479	-.400
7	12	49.209	52.578	51.192	1.0895	-.543	-.833
8	12	49.645	58.307	53.351	2.5282	.453	-.692
9	9	52.296	59.728	56.586	2.0361	-.714	.629
10	13	53.880	63.584	57.854	2.6675	.734	-.073
11	13	54.191	65.076	59.171	2.7552	.307	.125
12	12	55.535	63.118	60.360	2.1948	-.843	.035
13	11	56.777	64.836	61.156	2.7318	-.395	-1.014
14	10	58.533	65.643	62.618	2.4739	-.318	-.940





LINEAR MEASUREMENT VARIABLE 124

**Upper Incisor Incisal Edge
perpendicular to PM Vertical**

UIE_⊥SE-PTM

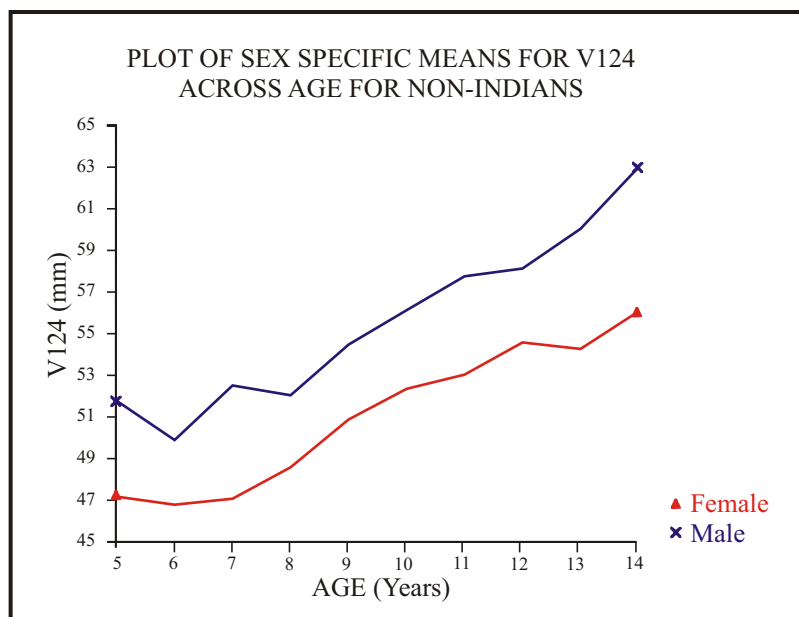
7_⊥36-43

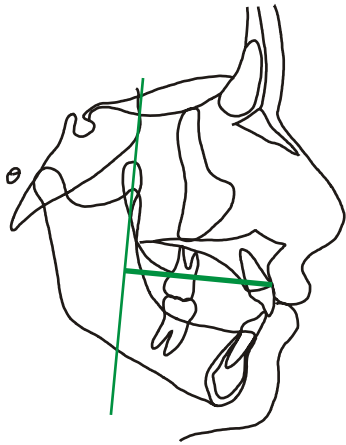
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	47.720	55.196	51.749	3.3829	-.074	-1.650 *
6	7	46.567	54.939	49.853	3.3902	.551	-1.243
7	7	49.699	55.828	52.488	2.4961	-.049	-1.624 **
8	10	47.378	57.627	52.015	3.3857	.111	-.962 *
9	9	49.981	61.232	54.461	3.4593	.463	-.149 **
10	7	50.713	61.570	56.122	3.5965	-.047	-.837 **
11	9	52.125	64.922	57.760	3.8297	.342	-.395 **
12	9	52.049	65.542	58.137	4.2856	.206	-.871 **
13	9	54.141	67.120	60.053	4.6842	.337	-1.313 **
14	4	61.482	66.173	63.028	2.1942	.885	-.926 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	46.331	47.536	47.120	.68390	-.704	-1.500
6	7	44.393	48.692	46.730	1.6555	-.245	-1.305
7	13	42.447	52.036	47.020	2.1670	.207	1.487
8	12	44.359	53.382	48.537	3.0307	-.068	-1.319
9	9	48.252	54.688	50.844	2.2868	.253	-1.170
10	13	47.764	57.486	52.325	2.3020	.289	.812
11	13	46.934	59.887	53.012	2.9330	.292	1.473
12	12	51.253	60.079	54.566	2.4595	.683	.233
13	11	50.449	57.651	54.252	2.0750	-.074	-.556
14	10	52.690	57.731	56.066	1.7883	-.833	-.828





LINEAR MEASUREMENT

VARIABLE 125

Supradentale perpendicular to PM Vertical

SD_⊥SE-PTM

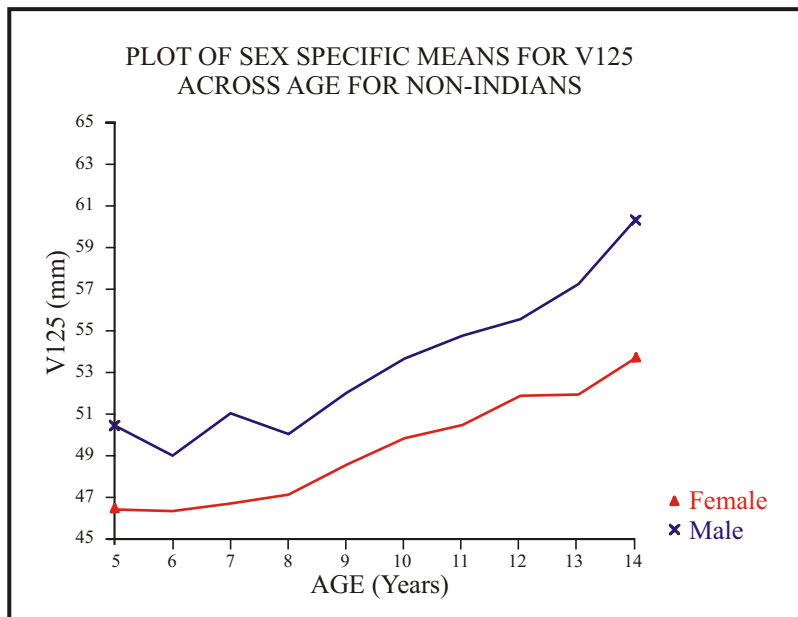
8_⊥36-43

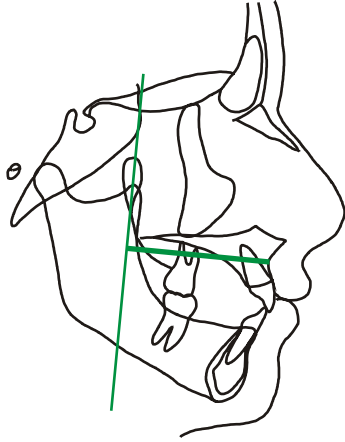
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	48.289	53.564	50.617	1.9752	.459	-.832 **
6	7	46.877	53.463	49.161	2.4207	.868	-.631 *
7	7	49.317	52.791	51.204	1.5119	-.160	-1.761 **
8	10	46.100	52.575	50.202	2.2053	-.790	-.795 **
9	9	48.153	54.514	52.193	2.3885	-.993	-.631 **
10	7	49.685	57.670	53.846	2.6919	-.084	-.966 **
11	9	49.390	58.432	54.953	2.6987	-.743	.130 **
12	9	50.865	60.106	55.752	3.0946	-.064	-1.227 **
13	9	51.364	63.570	57.446	3.6524	.097	-.566 **
14	4	58.066	64.184	60.619	2.5790	.630	-.946 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	45.718	48.038	46.559	1.2854	.687	-1.500
6	7	44.824	48.147	46.482	1.2590	.082	-1.500
7	13	43.421	50.914	46.848	1.9306	.230	.200
8	12	44.268	49.647	47.278	1.5915	-.291	-.716
9	9	45.592	50.983	48.719	1.5837	-.632	-.153
10	13	47.464	54.448	50.000	1.8994	.861	.335
11	13	46.897	55.987	50.640	2.2890	.663	.547
12	12	49.085	56.429	52.052	2.1716	.168	-.389
13	11	49.693	54.906	52.111	1.8268	.155	-1.281
14	10	51.993	55.923	53.900	1.2882	.056	-1.264





LINEAR MEASUREMENT VARIABLE 126

**A Point perpendicular to PM
Vertical**

A₁SE-PTM

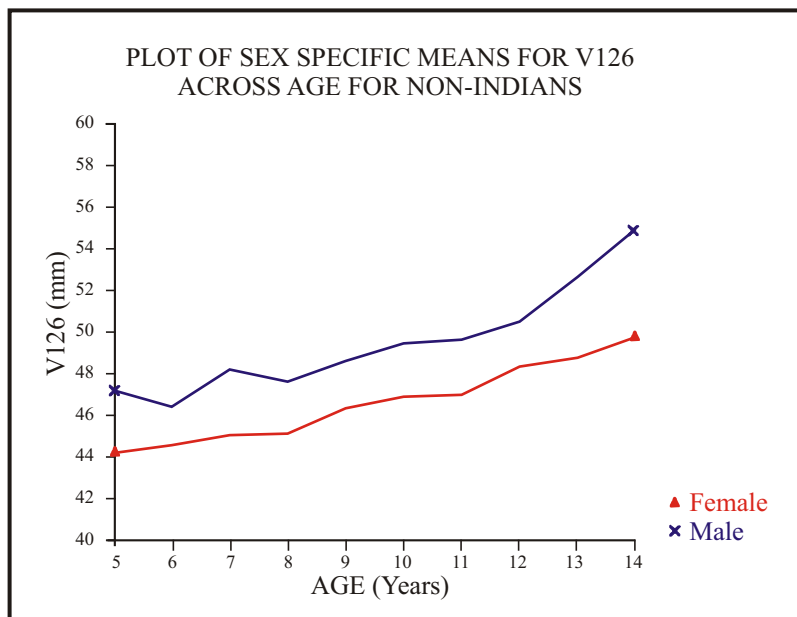
9₁36-43

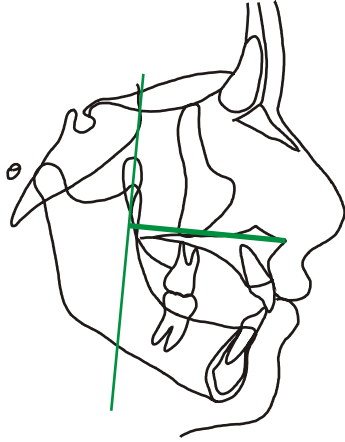
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	45.311	50.173	47.267	1.9161	.549	-.892
6	7	44.249	50.406	46.474	1.9853	1.037	.396
7	7	46.553	49.863	48.274	1.1858	.038	-1.158 **
8	10	43.718	51.071	47.687	2.0448	-.252	-.157 **
9	9	44.761	51.364	48.686	2.1093	-.605	-.556 **
10	7	44.683	52.561	49.536	2.8112	-.534	-.744 *
11	9	45.406	52.420	49.715	2.0723	-.720	.302 **
12	9	47.008	53.507	50.587	1.8747	-.309	-.128 **
13	9	47.811	59.915	52.744	3.4593	.769	.247 **
14	4	52.668	57.509	55.053	2.3242	.024	-1.800 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	42.277	45.863	44.242	1.8174	-.334	-1.500
6	7	43.252	45.960	44.619	.93666	-.020	-1.027
7	13	42.575	48.532	45.104	1.6888	.628	-.399
8	12	42.447	48.364	45.178	1.6033	.282	-.216
9	9	43.932	48.639	46.401	1.4094	-.001	-.490
10	13	45.447	48.414	46.960	1.1795	-.144	-1.699
11	13	44.515	49.218	47.052	1.3882	-.169	-1.006
12	12	45.726	51.305	48.415	1.6032	-.017	-.628
13	11	46.666	51.673	48.842	1.5145	.460	-.493
14	10	47.888	54.512	49.838	2.2689	1.255	.073





LINEAR MEASUREMENT VARIABLE 127

**Anterior Nasal Spine
perpendicular to PM Vertical**

ANS₁SE-PTM

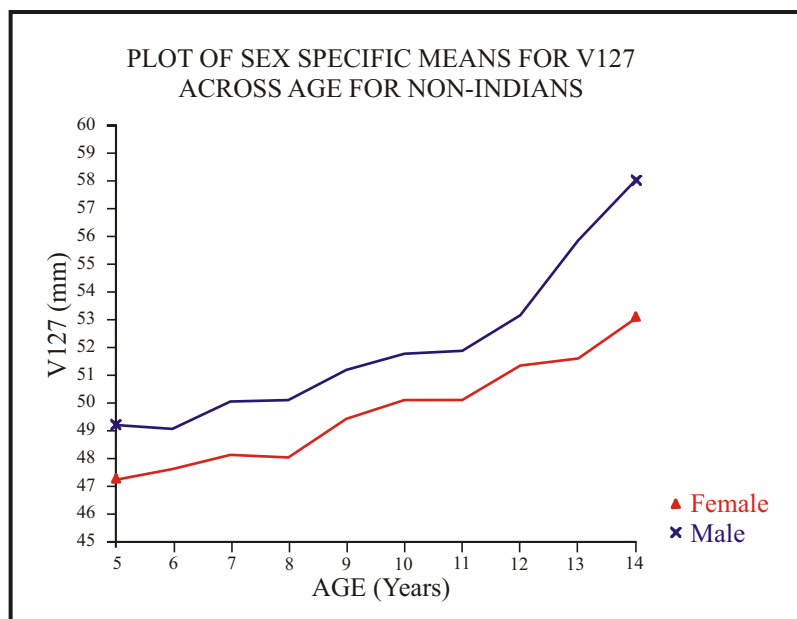
10₁36-43

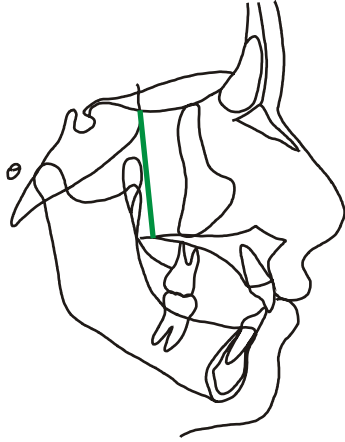
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	47.053	52.662	49.367	2.1584	.567	-.821
6	7	46.286	53.966	49.224	2.6026	.737	-.414
7	7	46.671	53.468	50.215	2.7530	-.041	-1.643
8	10	46.937	54.847	50.267	2.3601	.524	-.482
9	9	47.964	55.045	51.360	2.5789	.098	-1.388
10	7	47.887	57.014	51.945	3.4218	.167	-1.239
11	9	48.206	55.734	52.052	2.3563	-.031	-.768
12	9	50.526	55.421	53.339	1.9460	-.424	-1.329**
13	9	51.577	63.251	56.054	3.5363	.603	.118**
14	4	56.601	61.379	58.255	2.2360	.759	-1.063**

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	44.380	49.742	47.370	2.7339	-.395	-1.500
6	7	45.406	50.662	47.768	1.7745	.310	-.881
7	13	44.132	52.330	48.283	2.1113	.280	.102
8	12	45.624	53.169	48.189	2.1512	.971	.306
9	9	47.034	52.733	49.588	1.6828	.545	-.278
10	13	47.963	53.475	50.268	1.7798	.146	-1.218
11	13	48.068	53.198	50.271	1.4213	.360	-.307
12	12	47.884	55.955	51.518	2.3052	.307	-.549
13	11	49.109	54.984	51.775	1.3986	.516	1.527
14	10	50.341	57.777	53.242	2.4224	.846	-.432





LINEAR MEASUREMENT VARIABLE 128

**Ethmoid Registration Point-
Posterior Nasal Spine**

SE-PNS

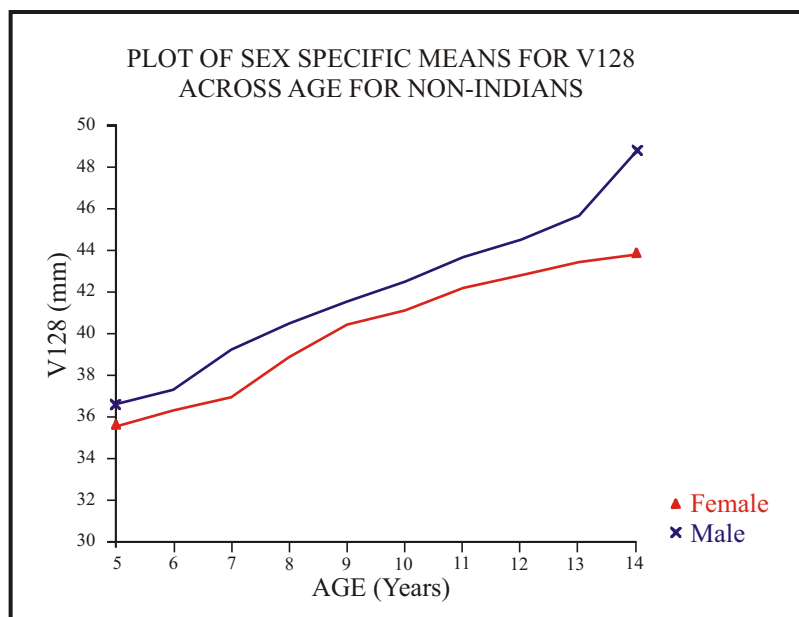
36-45

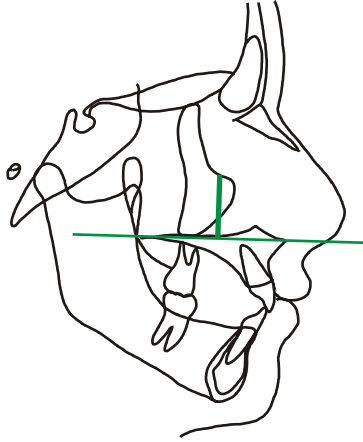
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	34.576	38.791	36.737	1.5636	-.121	-.912
6	7	33.141	41.289	37.438	2.9053	-.024	-1.071
7	7	36.226	41.935	39.374	1.8559	-.350	-.542
8	10	37.455	43.117	40.640	1.6501	-.265	-.183
9	9	37.407	44.081	41.700	2.1924	-.640	-.411
10	7	37.137	44.928	42.662	2.5546	-1.652	1.397
11	9	38.441	46.148	43.843	2.3552	-1.345	1.158
12	9	40.215	48.438	44.688	2.2638	-.424	.300
13	9	41.068	49.080	45.847	2.4254	-.534	-.179
14	4	48.337	50.093	48.989	.76367	.899	-.816 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	34.246	37.056	35.653	1.4049	-.006	-1.500
6	7	32.317	39.584	36.439	2.2915	-.597	-.218
7	13	33.282	41.210	37.077	2.8606	.183	-1.279
8	12	32.240	43.629	39.018	3.3456	-.570	-.402
9	9	34.914	47.283	40.586	3.9894	.008	-.793
10	13	36.168	47.818	41.272	3.3875	.111	-.594
11	13	36.055	47.938	42.354	3.3848	-.241	-.524
12	12	38.566	49.608	42.969	3.4407	.442	-.742
13	11	38.620	48.074	43.605	3.2682	-.033	-1.286
14	10	39.272	48.902	43.973	3.2480	-.054	-1.296





LINEAR MEASUREMENT VARIABLE 129

**Orbitale perpendicular to
Palatal Plane**

OR⊥PNS-ANS

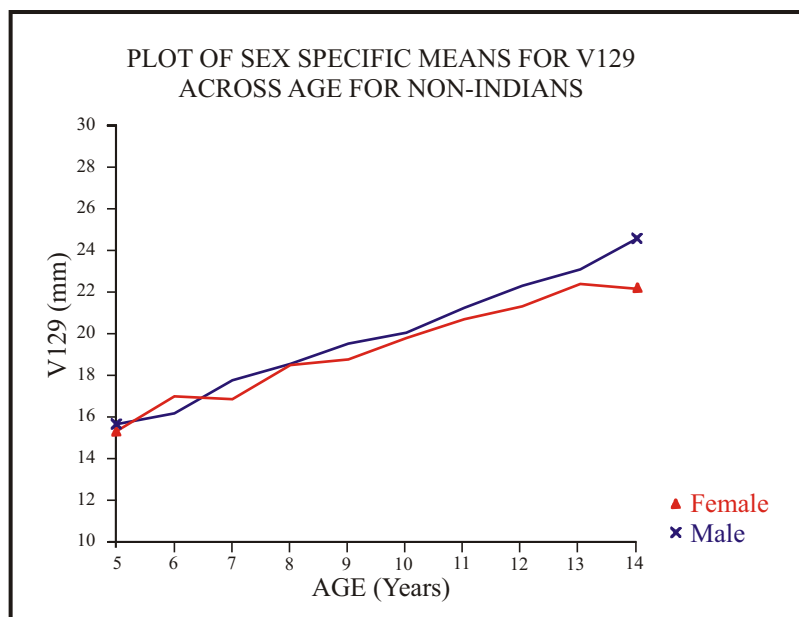
40⊥45-10

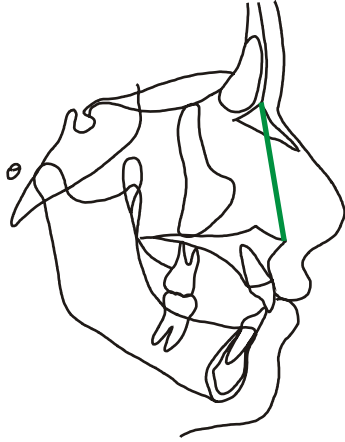
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	13.493	18.165	15.497	1.7884	.454	-.894
6	7	12.475	19.795	16.021	2.2682	.085	-.285
7	7	15.078	20.499	17.618	1.8524	.059	-.904
8	10	14.973	20.455	18.410	1.6001	-.937	.222
9	9	16.541	22.390	19.389	1.8889	-.019	-1.060
10	7	17.674	20.912	19.916	1.1780	-1.050	-.205
11	9	17.745	23.472	21.118	1.8787	-.741	-.647
12	9	19.832	23.679	22.182	1.1471	-.693	.070
13	9	19.483	26.039	22.973	2.1235	-.425	-.866
14	4	23.418	25.215	24.495	.84763	-.406	-1.467 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	13.024	16.289	15.157	1.8489	-.703	-1.500
6	7	15.109	20.213	16.842	1.8008	.818	-.241
7	13	14.007	21.132	16.705	2.1393	.668	-.433
8	12	15.249	21.003	18.353	1.6638	-.642	-.194
9	9	15.148	21.840	18.625	2.2184	-.241	-1.015
10	13	16.362	22.691	19.657	1.8999	-.247	-.792
11	13	17.531	23.431	20.567	2.0706	-.025	-1.413
12	12	16.826	24.458	21.189	2.3843	-.496	-.900
13	11	19.578	25.464	22.270	1.8553	.123	-.820
14	10	19.513	25.121	22.030	2.1537	.384	-1.625





LINEAR MEASUREMENT VARIABLE 130

Anterior Nasal Spine-Nasion

ANS-N

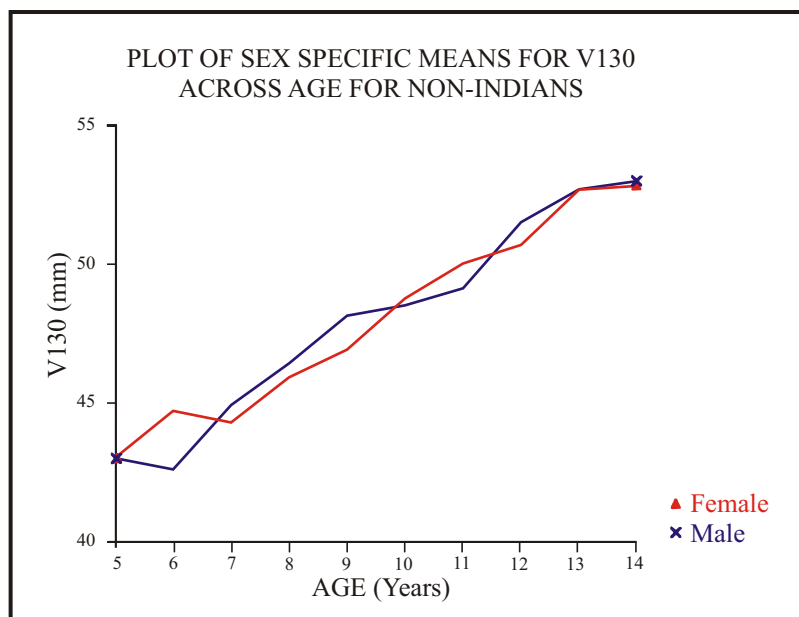
10-38

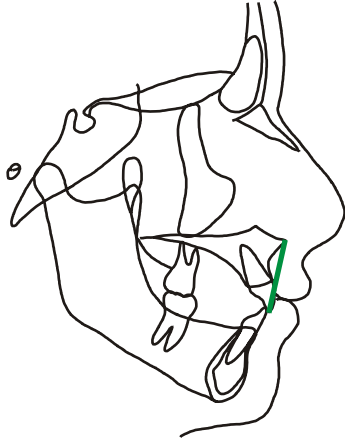
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	41.778	45.003	43.454	1.4215	-.046	-1.637
6	7	40.402	46.470	43.048	2.0175	.379	-.651 *
7	7	42.297	48.239	45.378	2.2068	.014	-1.346
8	10	43.759	49.624	46.890	1.7308	-.169	-.533
9	9	44.731	51.107	48.616	2.0491	-.923	-.330
10	7	46.369	52.846	48.991	2.4721	.512	-1.287
11	9	46.337	51.997	49.608	2.1485	-.413	-1.356
12	9	48.628	56.741	52.002	2.4003	.496	-.038
13	9	50.699	56.210	53.192	2.3739	.133	-1.753
14	4	50.664	56.339	53.492	2.8905	.003	-1.919

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	42.206	45.150	43.468	1.5159	.469	-1.500
6	7	43.599	47.124	45.168	1.0623	.516	.178
7	13	39.218	48.417	44.748	2.5038	-.758	.205
8	12	41.810	51.229	46.384	2.7331	-.067	-.804
9	9	44.222	51.130	47.387	2.4914	.030	-1.359
10	13	43.993	52.620	49.242	2.4660	-.609	-.374
11	13	47.377	54.010	50.507	2.1475	-.089	-1.067
12	12	45.190	54.067	51.179	2.6521	-.944	.177
13	11	50.225	55.880	53.179	2.0454	-.327	-1.411
14	10	49.519	55.944	53.317	2.0879	-.607	-.790





LINEAR MEASUREMENT VARIABLE 131

Anterior Nasal Spine-Upper Incisor Incisal Edge

ANS-UIE

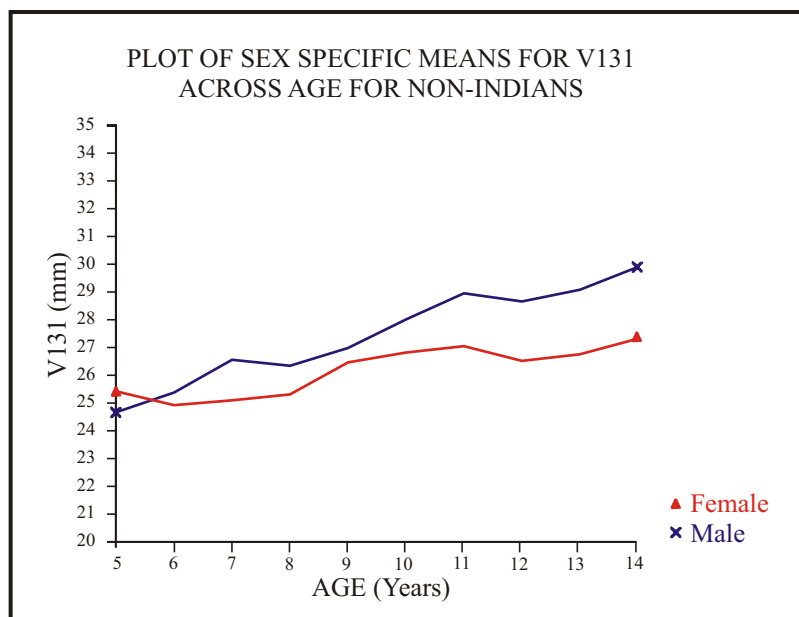
10-7

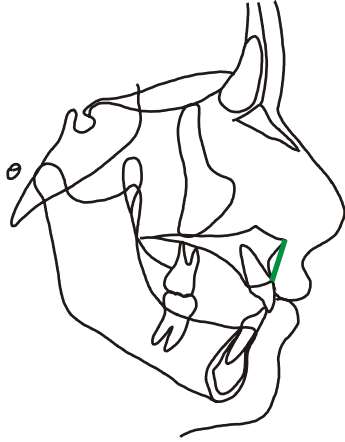
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	19.138	28.224	24.691	3.4130	-.853	-.427
6	7	16.998	28.948	25.406	3.9370	-1.548	1.229
7	7	24.418	29.280	26.593	1.5402	.367	-.336 *
8	10	24.326	28.807	26.376	1.2629	.268	-.352
9	9	24.992	28.939	27.020	1.3206	-.052	-1.263
10	7	26.364	29.399	28.053	1.2047	-.257	-1.408
11	9	26.841	30.383	29.001	1.0307	-.884	.290 **
12	9	26.816	30.307	28.705	1.0812	-.339	-.717 **
13	9	27.545	30.583	29.130	.90297	-.099	-.526 **
14	4	28.461	30.698	29.955	1.0211	-.994	-.800 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	24.014	27.311	25.451	1.6887	.432	-1.500
6	7	22.868	26.905	24.949	1.4149	.003	-1.012
7	13	22.881	26.757	25.124	1.1660	-.440	-.836
8	11	23.191	27.739	25.338	1.3156	.187	-.775
9	9	23.906	30.515	26.498	2.0588	.568	-.283
10	13	24.498	31.396	26.855	1.8675	.888	.726
11	13	23.585	31.433	27.086	1.9497	.296	.426
12	12	23.754	28.192	26.553	1.4013	-.695	-.588
13	11	23.309	29.788	26.792	1.9906	-.350	-.381
14	10	23.633	29.930	27.358	2.0625	-.489	-.691





LINEAR MEASUREMENT VARIABLE 132

**Anterior Nasal Spine-
Supradentale**

ANS-SD

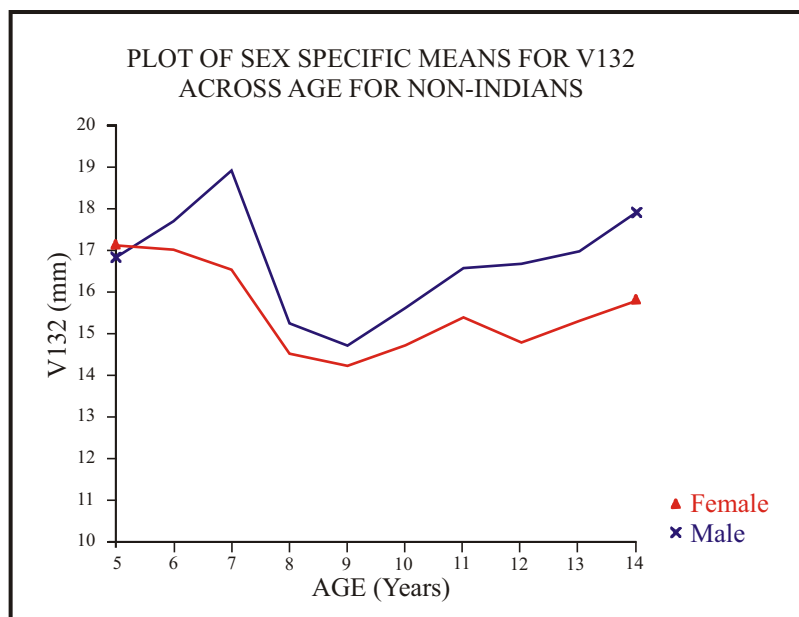
10-8

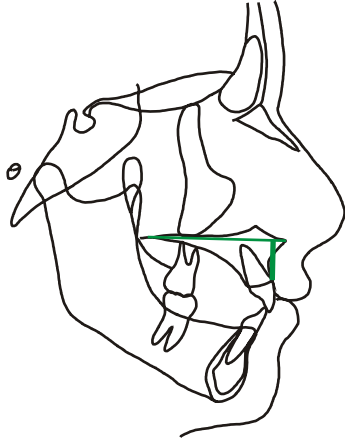
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	14.621	19.280	16.803	1.6970	.263	-.721
6	7	13.513	20.533	17.683	2.2052	-.725	.123
7	7	17.688	21.424	18.906	1.2163	1.361	.807**
8	10	12.061	20.437	15.216	2.6550	.815	-.527
9	9	12.869	16.329	14.679	1.2056	-.228	-1.271
10	7	14.582	16.503	15.589	.61402	-.190	-.569*
11	9	14.890	18.222	16.550	1.0582	-.201	-.917
12	9	14.785	17.992	16.654	1.1826	-.395	-1.259**
13	9	14.861	18.491	16.956	1.0673	-.460	-.119*
14	4	16.187	19.707	17.914	1.4788	.069	-1.206*

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	15.464	18.920	17.099	1.7353	.194	-1.500
6	7	14.911	19.711	16.995	1.4915	.618	-.083
7	13	11.306	19.369	16.512	2.5003	-1.027	-.186
8	12	9.3759	18.371	14.484	2.6686	-.100	-.561
9	9	11.651	17.945	14.190	2.0813	.497	-.820
10	12	12.827	16.121	14.686	1.0167	-.598	-.650
11	13	11.355	19.553	15.360	1.9450	.123	.688
12	12	11.408	17.375	14.754	1.5374	-.514	.292
13	11	11.102	18.238	15.276	2.0201	-.493	-.169
14	10	12.207	18.517	15.768	1.9644	-.243	-.855





LINEAR MEASUREMENT VARIABLE 133

**Supradentale perpendicular to
Palatal Plane**

SD_LANS-PNS

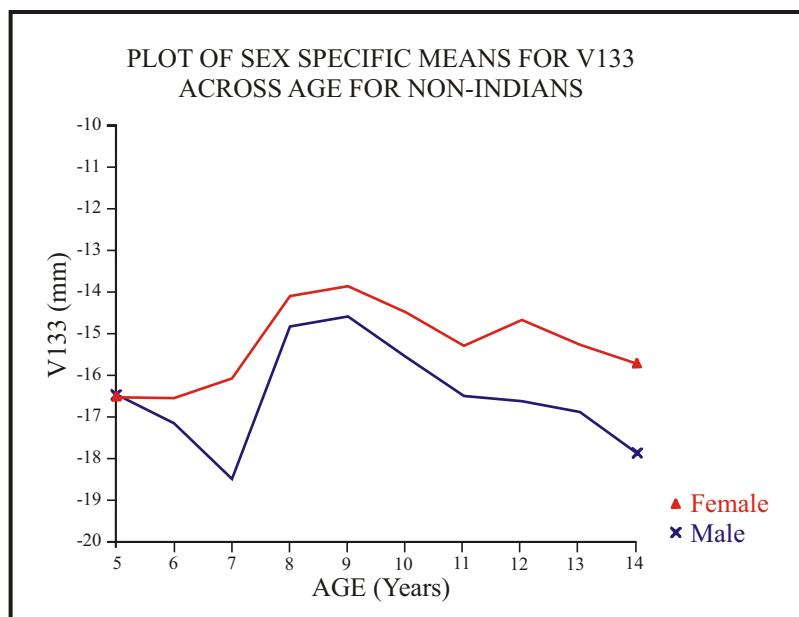
8_L10-45

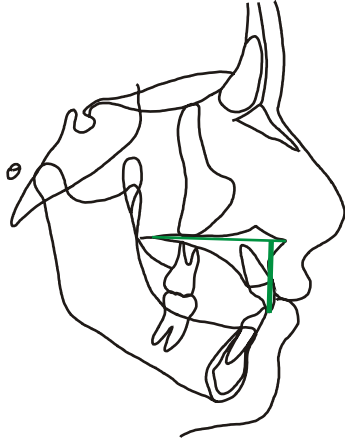
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	-18.531	-14.364	-16.406	1.5172	-.089	-.764
6	7	-19.587	-13.324	-17.106	1.9567	.892	.254
7	7	-20.378	-17.551	-18.451	.89811	-1.571	1.332 **
8	10	-20.123	-11.416	-14.769	2.7501	-.816	-.576
9	9	-16.327	-12.819	-14.527	1.2440	.003	-1.294
10	7	-16.485	-14.563	-15.505	.59792	-.073	-.337 **
11	9	-18.021	-14.870	-16.447	1.0144	.237	-.959
12	9	-17.852	-14.615	-16.573	1.1894	.517	-1.204 **
13	9	-18.268	-14.638	-16.834	1.0957	.566	-.070 *
14	4	-19.463	-16.169	-17.847	1.3898	.067	-1.235 *

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	-17.689	-15.313	-16.479	1.1887	-.067	-1.500
6	7	-19.662	-14.205	-16.499	1.6411	-.790	.430
7	13	-18.842	-10.663	-16.024	2.5674	1.014	-.266
8	12	-18.164	-8.5795	-14.035	2.8414	.079	-.606
9	9	-17.890	-11.121	-13.796	2.2552	-.472	-.770
10	12	-15.879	-12.338	-14.428	1.0785	.553	-.746
11	13	-19.510	-11.237	-15.235	1.9820	-.171	.584
12	12	-17.318	-11.272	-14.611	1.5815	.411	.036
13	11	-18.032	-11.065	-15.209	2.0042	.526	-.226
14	10	-18.245	-11.929	-15.677	1.9889	.353	-.742





LINEAR MEASUREMENT

VARIABLE 134

**Upper Incisor Incisal Edge
perpendicular to Palatal
Plane**

UIE_⊥ANS-PNS

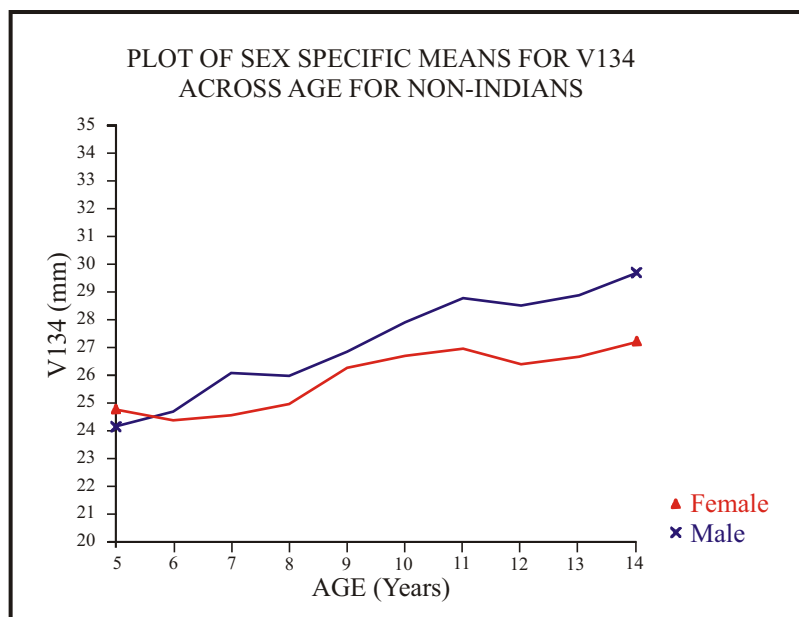
7_⊥10-45

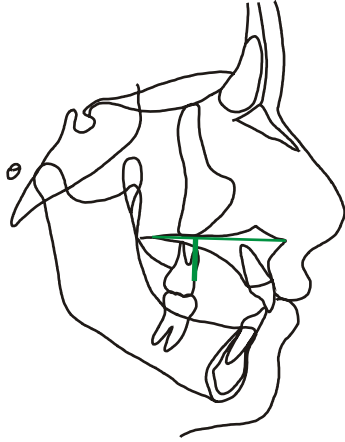
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	18.530	27.386	24.204	3.3957	-1.026	-.294
6	7	16.290	27.808	24.745	3.8966	-1.681	1.434
7	7	23.919	28.285	26.143	1.3712	-.102	-.433*
8	10	23.910	27.945	26.039	1.1851	-.187	-.663
9	9	24.949	28.838	26.915	1.3076	-.009	-1.269
10	7	26.304	29.264	27.980	1.2406	-.307	-1.436
11	9	26.825	30.372	28.855	1.0038	-.667	.165**
12	9	26.716	30.298	28.586	1.0726	-.224	-.520**
13	9	27.485	30.581	28.959	.91243	.071	-.387**
14	4	28.223	30.698	29.773	1.1169	-.717	-1.078**

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	23.762	26.324	24.823	1.3365	.539	-1.500
6	7	22.208	26.377	24.429	1.5684	-.246	-1.212
7	13	22.741	26.242	24.612	1.1071	-.391	-1.079
8	11	22.832	27.683	25.019	1.3311	.379	-.210
9	9	23.762	30.515	26.331	2.1357	.588	-.285
10	13	24.495	31.389	26.764	1.9121	.881	.649
11	13	23.573	31.286	27.024	1.9278	.277	.342
12	12	23.751	28.106	26.460	1.4348	-.694	-.653
13	11	23.308	29.760	26.733	1.9779	-.295	-.405
14	10	23.623	29.851	27.268	2.0325	-.456	-.704





LINEAR MEASUREMENT VARIABLE 135

Upper Molar Mesial Cemento-Enamel Junction perpendicular to Palatal Plane

UMJ \perp ANS-PNS

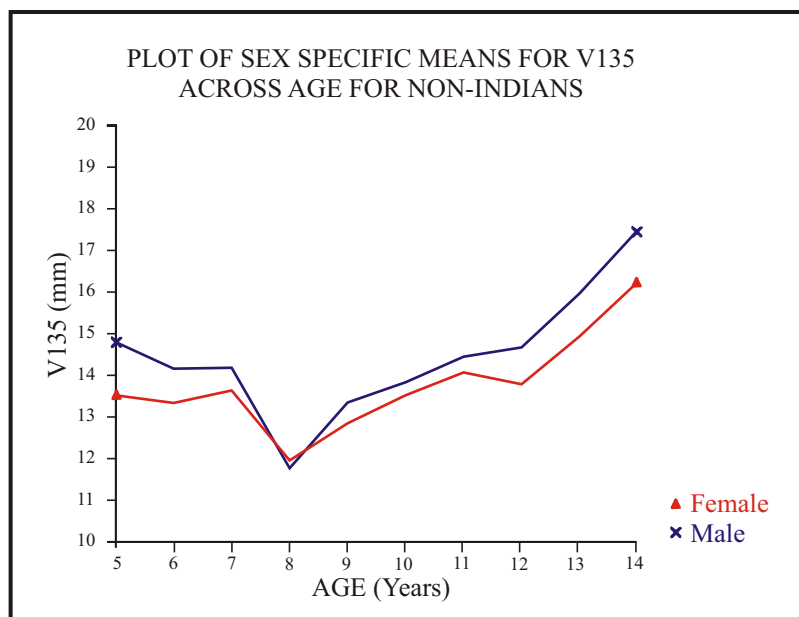
20 \perp 10-45

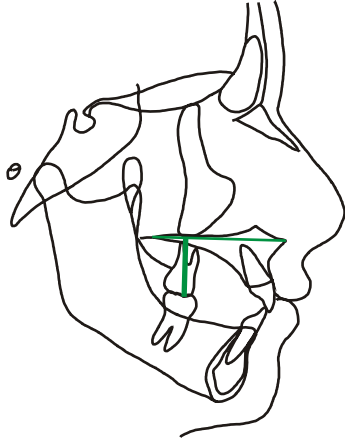
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	12.842	15.726	14.746	1.1054	-1.214	-.046
6	7	10.328	16.716	14.104	2.5101	-.602	-1.177
7	7	11.129	16.618	14.126	2.0991	-.201	-1.476
8	10	8.9301	12.931	11.701	1.3449	-1.045	-.272
9	9	11.757	15.933	13.287	1.4660	.661	-.836
10	7	11.344	15.841	13.776	1.8282	-.047	-1.638
11	9	12.587	16.564	14.393	1.3676	.304	-1.197
12	9	12.900	17.011	14.618	1.2186	.720	-.185 *
13	9	13.890	16.905	15.921	.92629	-1.116	.573
14	4	15.674	19.288	17.443	1.4989	0.83	-1.115

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	12.143	15.897	13.461	2.1120	.700	-1.500
6	7	9.5077	17.144	13.276	2.9149	.020	-1.304
7	13	9.1410	19.477	13.578	3.0954	.075	-.833
8	12	7.4896	15.430	11.889	2.0354	-.461	.379
9	9	8.4460	15.799	12.785	2.4631	-.602	-.972
10	13	10.265	16.139	13.462	1.6369	-.165	-.327
11	13	11.607	18.263	14.013	1.7470	.740	.934
12	12	12.623	15.131	13.728	.89684	.326	-1.300
13	11	11.821	17.557	14.884	1.6097	-.216	-.462
14	10	13.823	19.607	16.192	1.7659	.419	-.331





LINEAR MEASUREMENT

VARIABLE 136

**Upper Molar Mesial Cusp Tip
perpendicular to Palatal
Plane**

UMT_⊥ANS-PNS

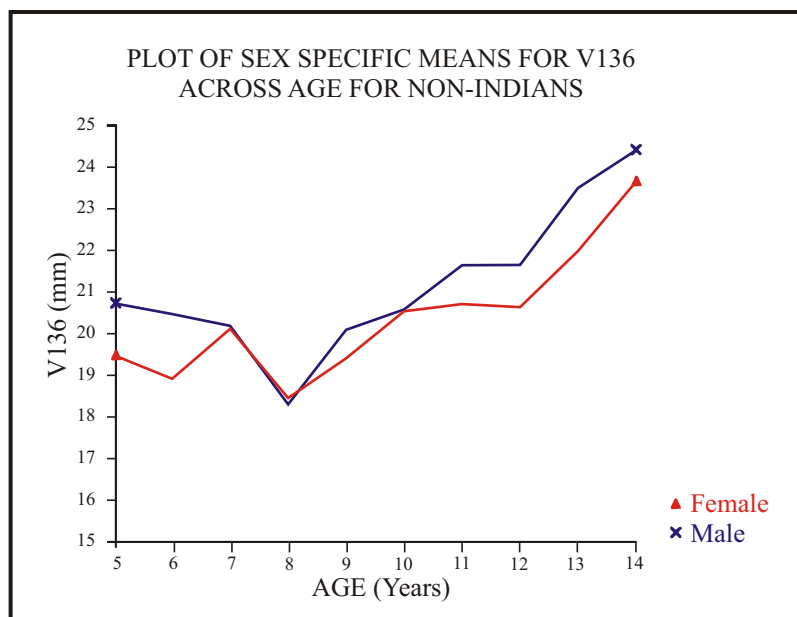
19_⊥10-45

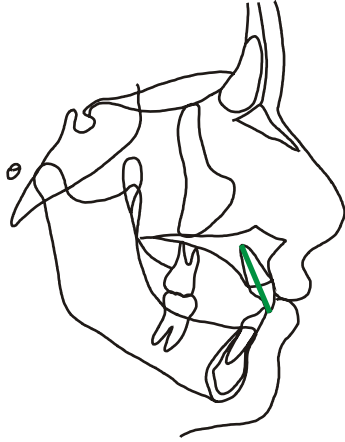
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	18.757	21.609	20.753	1.1623	-1.225	-.138
6	7	17.726	22.664	20.493	2.0317	-.403	-1.328
7	7	17.393	22.668	20.208	2.1621	-.196	-1.516
8	10	16.486	20.029	18.312	1.2535	.097	-1.465
9	9	18.495	22.619	20.112	1.2638	.706	-.271
10	7	17.790	23.603	20.604	2.0934	.110	-1.291
11	9	20.098	23.325	21.672	1.2352	.157	-1.381
12	9	19.652	23.615	21.679	1.4242	.201	-1.297
13	9	21.286	25.257	23.538	1.2423	-.386	-.585 *
14	4	22.763	25.947	24.449	1.4281	-.151	-1.538

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	18.269	21.273	19.497	1.5754	.562	-1.500
6	7	16.100	22.369	18.930	2.3627	.445	-1.242
7	13	15.644	25.744	20.136	3.0157	.113	-.883
8	12	15.127	21.913	18.465	1.8291	.133	-.292
9	9	15.558	22.278	19.425	2.0627	-.547	-.531
10	13	17.806	24.131	20.561	1.8081	.181	-.509
11	12	19.303	22.436	20.734	.96466	-.130	-.854
12	12	19.273	23.416	20.660	1.3749	.686	-.830
13	11	19.360	24.693	22.016	1.5773	-.006	-.817
14	10	20.561	26.963	23.692	1.9780	.111	-.721





LINEAR MEASUREMENT VARIABLE 137

**Upper Incisor Incisal Edge-
Upper Incisor Apex**

UIE-UIA

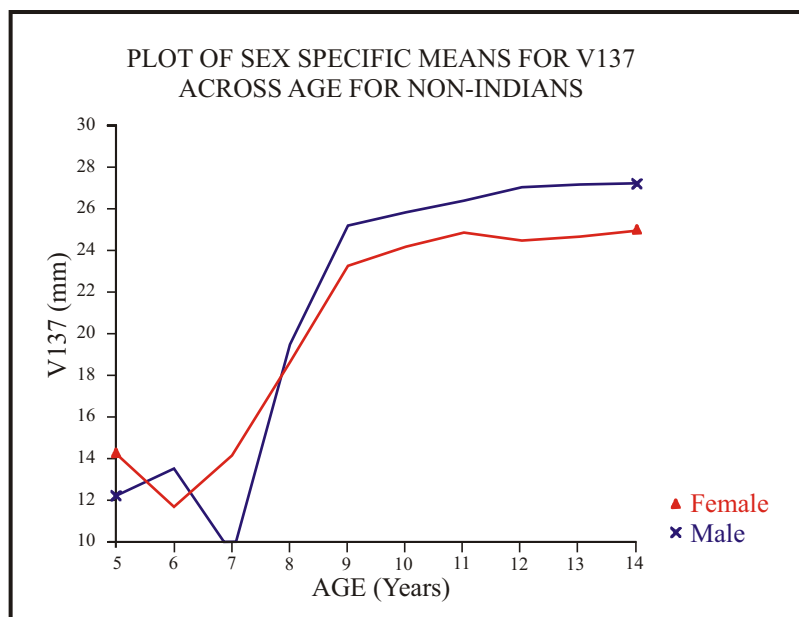
7-12

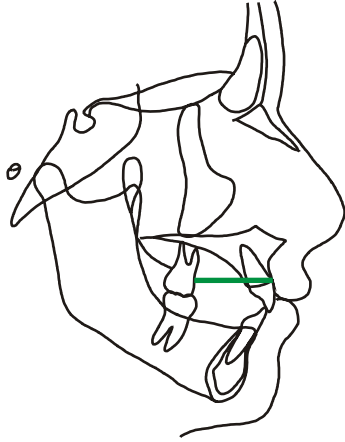
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	6.4011	14.450	12.098	3.3085	-1.251	-.129
6	7	11.217	17.059	13.412	1.8241	1.075	.550
7	7	6.9873	12.386	9.3614	2.3169	.345	-1.576 **
8	10	6.9673	26.211	19.406	8.1351	-.809	-1.253
9	9	22.828	27.565	25.147	1.5145	-.178	-.709 *
10	7	23.655	28.040	25.788	1.3940	.074	-.525 *
11	9	23.946	28.786	26.350	1.6298	-.055	-1.226 *
12	9	25.923	28.513	27.000	.80382	.386	-.379 **
13	9	25.461	28.826	27.131	1.1735	-.091	-1.268 **
14	4	25.522	28.439	27.191	1.2714	-.453	-1.234 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	12.940	14.973	14.134	1.0622	-.546	-1.500
6	7	6.4622	14.677	11.565	3.2152	-.820	-1.054
7	13	7.5025	24.912	14.044	6.2434	.993	-.585
8	12	7.7211	25.767	18.549	6.8000	-.649	-1.130
9	9	20.390	27.366	23.203	1.9905	.775	.365
10	13	20.264	27.312	24.128	2.0922	-.504	-.630
11	13	21.207	26.923	24.809	1.7151	-.607	-.553
12	12	20.882	27.214	24.424	1.9350	-.773	-.358
13	11	21.436	27.474	24.614	1.8339	.143	-.791
14	10	21.735	26.956	24.907	1.5497	-.614	-.039





LINEAR MEASUREMENT VARIABLE 138

Supradentale-Upper Molar Mesial Cemento-Enamel Junction

SD-UMJ

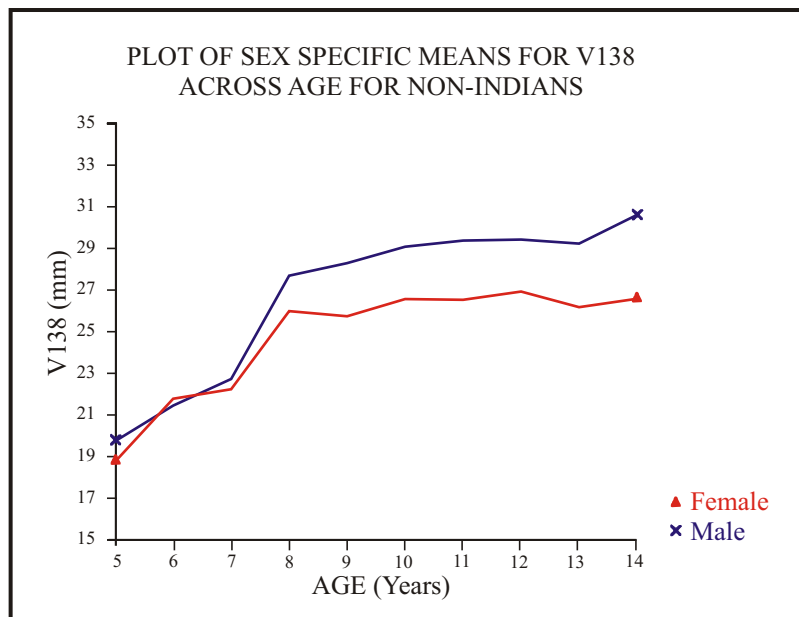
8-20

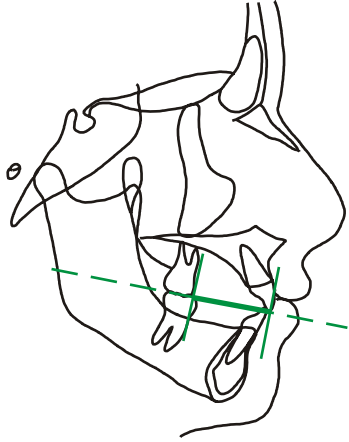
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	19.137	21.034	19.841	.81458	.570	-1.203
6	7	18.222	28.465	21.558	3.9235	.908	-.735
7	7	18.186	29.417	22.843	5.0306	.314	-1.786
8	10	26.536	29.785	27.832	1.0382	.371	-.732 **
9	9	26.311	30.079	28.438	1.2228	-.518	-.857 **
10	7	27.893	32.319	29.230	1.6104	1.036	-.106 **
11	9	25.390	31.700	29.527	1.9629	-.921	.214 **
12	9	25.439	32.264	29.576	2.1681	-.498	-.449 **
13	9	24.294	32.175	29.381	2.2504	-1.183	1.100 **
14	4	28.463	32.206	30.769	1.6086	-.844	-.834 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	17.597	20.542	18.853	1.5194	.480	-1.500
6	7	15.500	28.865	21.889	5.2259	.242	-1.523
7	13	15.062	27.976	22.348	4.5432	-.245	-1.596
8	12	23.916	27.898	26.120	1.3671	-.300	-1.308
9	9	23.739	27.623	25.872	1.4882	-.434	-1.392
10	13	24.182	28.978	26.703	1.4261	-.335	-.775
11	13	23.965	29.109	26.667	1.5732	-.271	-.934
12	12	24.242	30.202	27.065	1.7771	-.036	-.701
13	11	21.798	29.049	26.311	1.9918	-.924	.471
14	10	22.641	28.754	26.718	1.8472	-1.057	.408





LINEAR MEASUREMENT VARIABLE 139

**Upper Molar Mesial Contact
Point perpendicular to Upper
Incisor Incisal Edge
on Downs Occlusal Plane**

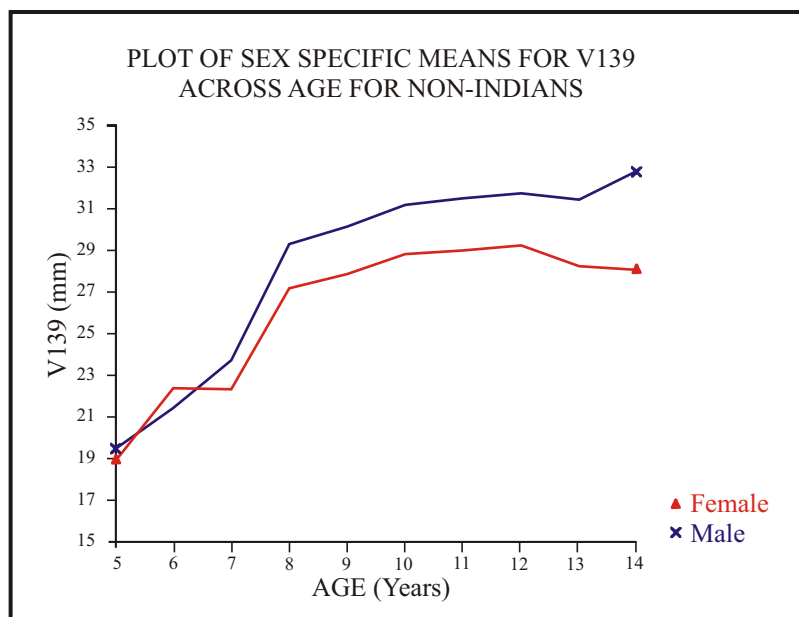
**ADP-PDP ⊥ UMC- 56-57 ⊥ 55-
ADP-PDP ⊥ UIE 56-57 ⊥ 7**

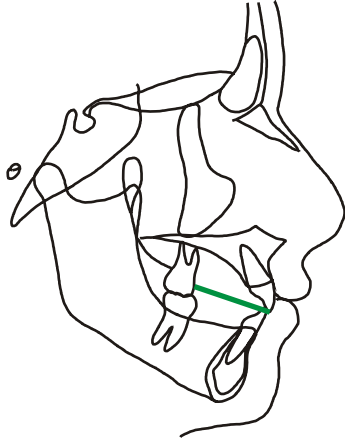
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	18.220	21.058	19.542	1.1391	.249	-1.346
6	7	17.874	26.616	21.522	3.3423	.623	-1.138
7	7	18.719	30.748	23.824	5.1711	.326	-1.686
8	10	27.911	31.102	29.436	1.2674	.057	-1.545 **
9	9	27.679	33.019	30.281	1.9194	-.005	-1.453 **
10	7	28.313	35.108	31.328	2.3532	.285	-.999 *
11	9	27.792	35.385	31.647	2.4497	-.057	-.979 **
12	9	26.842	35.612	31.887	3.0789	-.204	-1.244
13	9	26.383	34.744	31.582	2.8875	-.492	-.949 **
14	4	30.574	34.906	32.972	1.8985	-.320	-1.351 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	17.429	19.997	18.953	1.3498	-.571	-1.500
6	7	16.312	29.439	22.476	4.6842	.173	-1.237
7	13	15.193	27.889	22.425	5.2499	-.195	-1.821
8	12	24.631	30.693	27.300	1.8083	.495	-.778
9	9	25.619	30.554	27.989	1.7073	-.029	-1.072
10	13	26.486	31.739	28.952	1.6148	.019	-.919
11	13	26.463	32.314	29.129	1.9679	.124	-1.010
12	12	26.663	32.262	29.371	1.8227	.205	-.977
13	11	24.119	31.135	28.368	2.2164	-.551	-.699
14	10	24.754	30.943	28.189	1.8392	-.525	-.512





LINEAR MEASUREMENT VARIABLE 140

**Upper Incisor Incisal Edge-
Upper Molar Mesial Contact
Point**

UIE-UMC

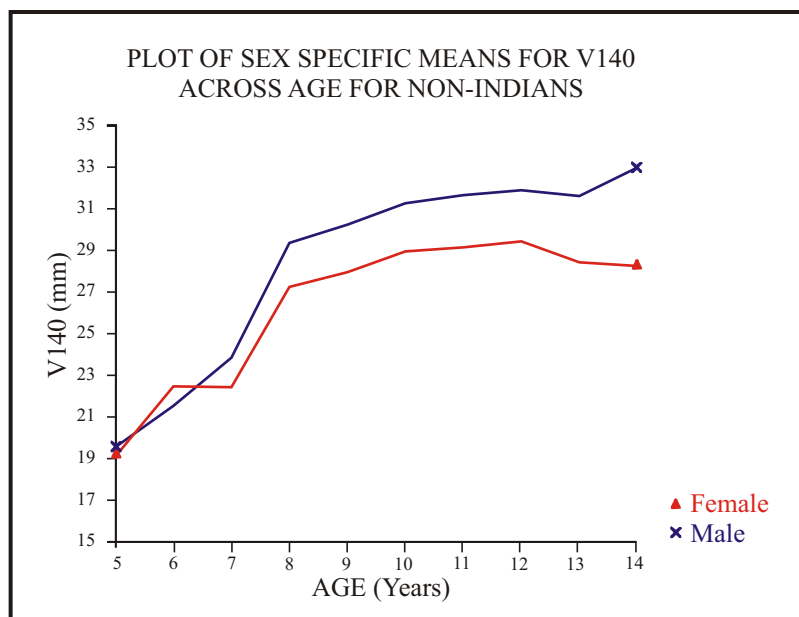
7-55

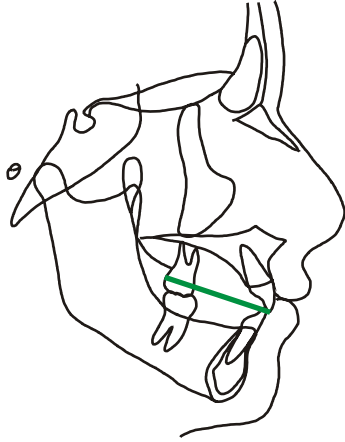
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	18.238	21.267	19.267	1.1811	.151	-1.229
6	7	17.988	26.909	21.699	3.3476	.610	-1.105
7	7	19.007	31.013	24.024	5.1583	.338	-1.681
8	10	27.938	31.381	29.567	1.2568	.144	-1.431 **
9	9	27.840	33.096	30.448	1.9046	-.035	-1.476 **
10	7	28.340	35.298	31.482	2.3602	.261	-.914 *
11	9	28.003	35.417	31.874	2.4086	-.129	-1.035 **
12	9	27.162	35.639	32.112	2.9980	-.224	-1.253
13	9	26.589	34.958	31.831	2.8599	-.549	-.883 **
14	4	30.904	35.065	33.206	1.7919	-.350	-1.252

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	17.779	20.451	19.254	1.3572	-.360	-1.500
6	7	16.413	29.626	22.639	4.7121	.156	-1.233
7	13	15.475	28.021	22.600	5.1874	-.192	-1.819
8	12	24.872	30.930	27.441	1.7971	.566	-.677
9	9	25.666	30.738	28.153	1.7363	-.048	-1.104
10	13	26.663	31.982	29.156	1.6404	.001	-.933
11	13	26.795	32.720	29.353	1.9604	.184	-.989
12	12	27.071	32.630	29.642	1.8017	.293	-.917
13	11	24.489	31.274	28.631	2.1728	-.575	-.727
14	10	25.048	31.118	28.452	1.8526	-.561	-.630





LINEAR MEASUREMENT VARIABLE 141

**Upper Incisor Incisal Edge-
Upper Molar Distal Contact
Point**

UIE-UDC

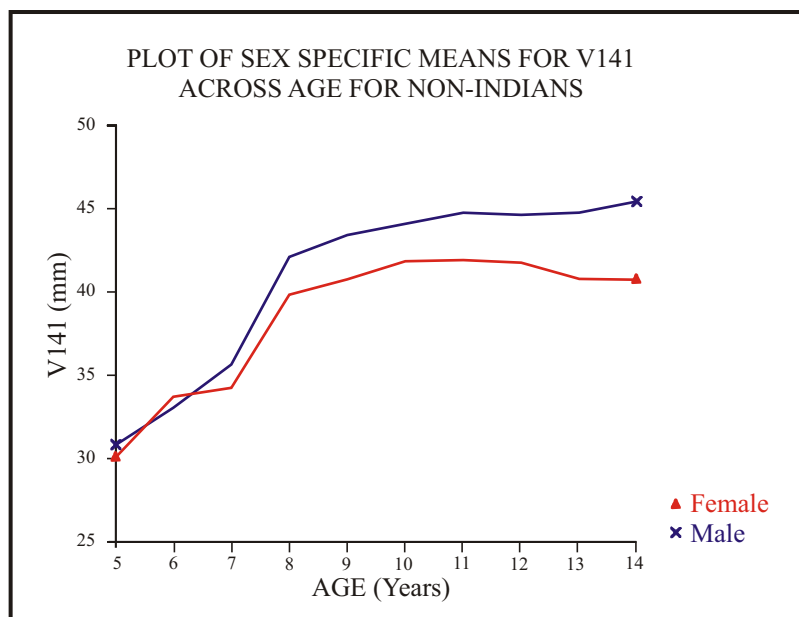
7-22

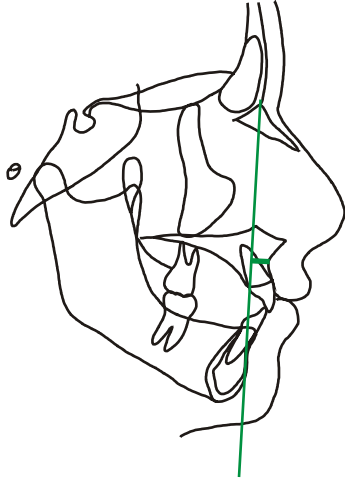
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	28.411	32.831	30.817	1.5794	-.407	-.490
6	7	28.058	38.443	33.076	3.9829	.359	-1.185
7	7	30.572	44.654	35.686	6.1945	.538	-1.484
8	10	39.580	44.091	42.181	1.5743	-.664	-.954 **
9	9	40.095	45.847	43.501	2.0716	-.412	-1.158 **
10	7	40.673	48.082	44.179	2.4765	.069	-.803 *
11	9	39.882	48.236	44.849	2.8231	-.513	-.903 **
12	9	39.554	48.772	44.720	3.3053	-.260	-1.272 *
13	9	39.123	49.426	44.854	3.3007	-.327	-.817 **
14	4	42.282	48.565	45.533	2.5807	-.143	-1.035 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	29.071	30.794	30.061	.88968	-.486	-1.500
6	7	29.019	40.961	33.739	5.0901	.367	-1.664
7	13	26.915	40.498	34.278	6.2873	-.157	-1.934
8	12	37.537	43.356	39.900	1.8181	.560	-.868
9	9	37.729	44.270	40.827	2.1380	.104	-1.031
10	13	39.170	45.558	41.919	1.7038	.313	-.062
11	13	39.065	45.347	41.990	2.0077	-.008	-1.200
12	12	38.148	45.098	41.833	1.9031	-.122	-.344
13	11	37.586	43.397	40.853	2.1010	-.209	-1.343
14	10	36.540	43.340	40.804	2.1294	-.819	-.337





LINEAR MEASUREMENT VARIABLE 142

**A Point perpendicular to
Nasion-Pogonion
Ricketts Analysis**

A₁N-PG

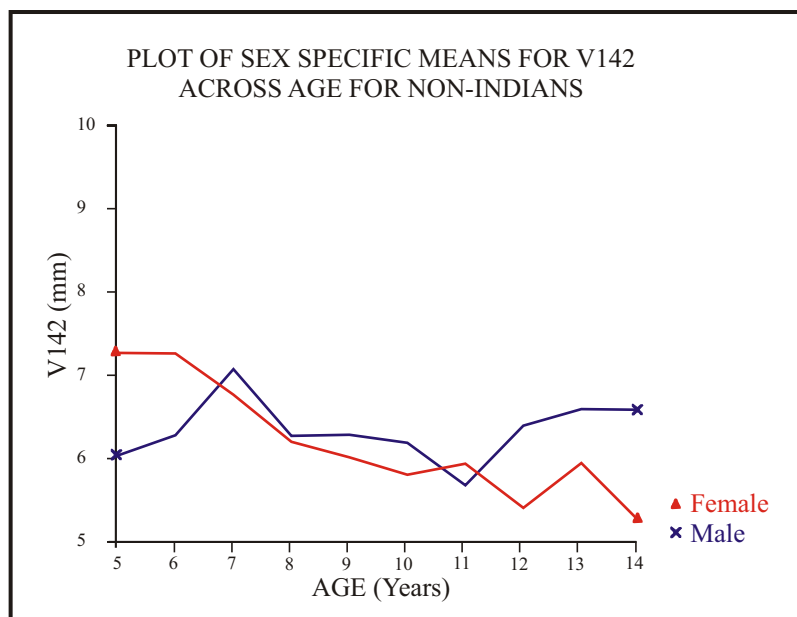
9₁38-3

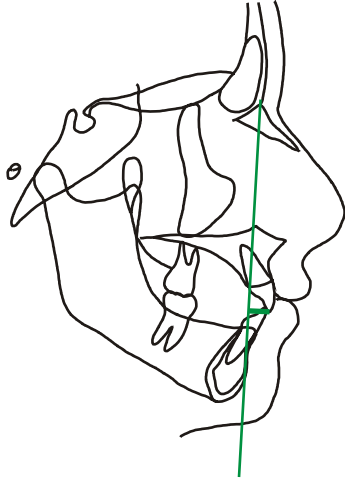
Male Non-ndian

Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	5	3.3144	8.2270	6.0318	1.9712	-.324	-1.285
6	7	2.5516	9.3528	6.2774	2.1763	-.351	-.492
7	7	3.8368	9.6647	7.0752	2.0363	-.316	-.981
8	10	3.1854	9.8353	6.2700	2.0513	.503	-.546
9	9	4.1961	8.7872	6.2833	1.7031	.106	-1.273
10	7	4.7029	8.9173	6.1861	1.3957	1.009	.220
11	9	2.5744	8.3982	5.6735	2.0165	-.035	-1.374
12	9	3.9664	8.8439	6.3933	1.7793	-.031	-1.458
13	9	3.3262	9.7596	6.5930	2.2262	.044	-1.135
14	4	4.0628	9.6818	6.5851	2.6863	.176	-1.714

Female Non-Indian

Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	3	6.2382	8.7729	7.2716	1.3306	.566	-1.500
6	7	3.1619	9.3070	7.2648	2.1999	-.871	-.322
7	13	4.2500	10.358	6.7670	1.7779	.377	-.562
8	12	2.2132	11.071	6.1984	2.3474	.375	-.028
9	9	3.2304	10.566	6.0109	2.1048	1.034	.649
10	13	2.3333	9.7565	5.8007	1.9711	.498	-.072
11	13	1.0061	9.9138	5.9340	2.1362	-.310	.959
12	12	1.0481	10.155	5.4006	2.2477	.221	.505
13	11	1.4088	11.122	5.9417	2.5737	.212	.032
14	10	-.77431	7.9305	5.2393	2.5312	-.906	-.172





LINEAR MEASUREMENT

VARIABLE 143

**Upper Incisor Incisal Edge
perpendicular to Nasion-
Pogonion**

UIE ⊥ N-PG

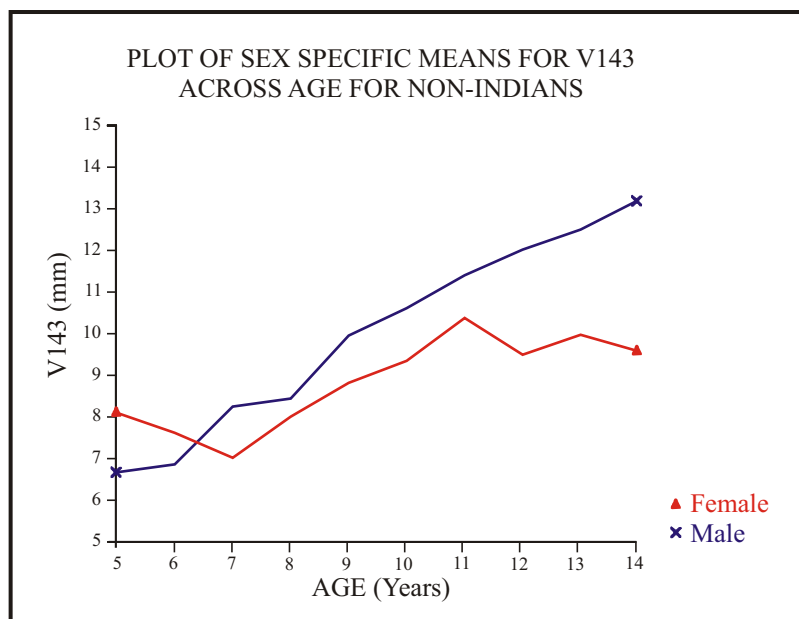
9 ⊥ 38-3

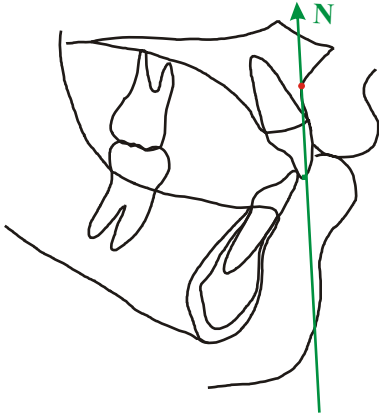
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	5.4170	9.5529	6.6607	1.6726	1.267	-.075
6	7	4.5031	10.024	6.8521	1.7053	.632	.075
7	7	6.7414	10.463	8.2477	1.3072	.493	-.817
8	10	6.2784	11.063	8.4413	1.5025	.523	-.769
9	9	7.0292	11.587	9.9622	1.4100	-.817	.124
10	7	9.6591	12.536	10.624	1.0427	.803	-.457
11	9	9.0285	13.530	11.418	1.4030	-.220	-.733
12	9	8.4625	15.914	12.038	2.2868	.026	-.624 *
13	9	8.3883	16.751	12.522	2.5095	.163	-.581 *
14	4	9.8210	17.848	13.235	3.4195	.533	-1.072

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	7.2836	9.3539	8.0976	1.1037	.618	-1.500
6	7	4.2734	10.739	7.6141	1.9848	-.139	-.220
7	13	3.2554	12.359	7.0112	2.5602	.262	-.311
8	12	4.4876	12.975	8.0039	2.9355	.329	-1.170
9	9	5.9561	13.494	8.8205	2.5392	.834	-.514
10	13	2.8379	13.204	9.3522	2.3577	.188	-1.033
11	13	6.1281	14.094	10.387	2.5920	.061	-1.063
12	12	6.1996	14.873	9.5001	2.6556	.678	-.430
13	11	6.3839	15.470	9.9814	2.8203	.421	-.574
14	10	7.0451	12.799	9.5827	1.9877	.222	-1.247





LINEAR MEASUREMENT

VARIABLE 144

**Upper Incisor Incisal Edge
perpendicular to Nasion-
A Point
Steiner Analysis**

UIE ⊥ N-A

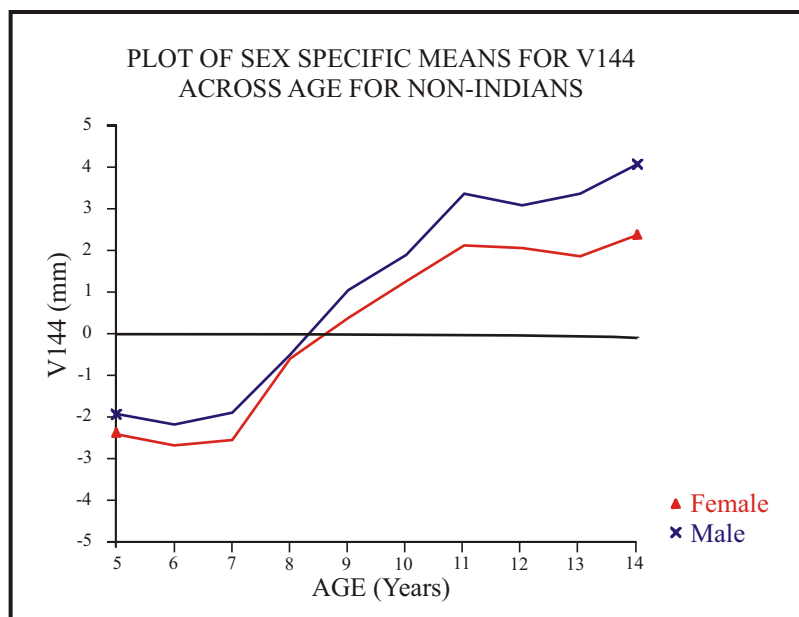
7 ⊥ 38-9

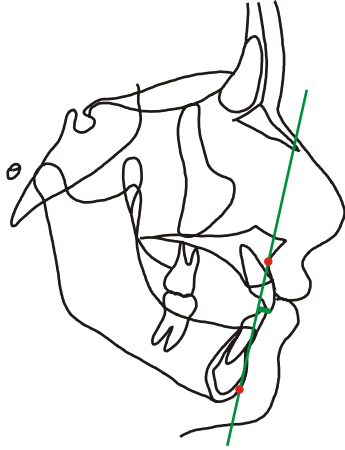
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	-4.3271	1.1584	-1.9543	2.0745	.484	-.845
6	7	-4.0736	2.8464	-2.2109	2.4547	1.340	.696
7	7	-5.3588	3.2929	-1.9243	2.7139	.854	.202
8	10	-3.2580	3.8223	-.52070	2.1497	.527	-.294
9	9	-1.2892	5.2030	1.0334	2.1817	.767	-.516
10	7	.16968	4.6953	1.8850	1.8330	.546	-1.232
11	9	-.17846	9.8657	3.3630	3.2558	.941	-.269
12	9	.87237	7.7079	3.0821	2.6577	1.070	-.563
13	9	1.1688	9.4947	3.3637	2.8705	1.336	.313
14	4	.68054	7.0459	4.0848	2.6171	-.288	-.999

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	-3.4973	-1.0088	-2.4462	1.2884	.501	-1.500
6	7	-5.7184	-.85396	-2.7152	1.9959	-.112	-1.134
7	13	-4.8933	-.46759	-2.5848	1.2900	.143	-.679
8	12	-3.7830	3.2870	-.61813	2.0519	.271	-.661
9	9	-2.5004	4.2221	.36128	1.9236	.613	.088
10	13	-2.0500	4.8364	1.2478	1.8124	.174	-.334
11	13	-2.1014	6.6667	2.1141	2.3532	.111	-.361
12	12	-.44461	4.7181	2.0505	1.5956	.103	-1.197
13	11	-.71838	4.5481	1.8517	2.0516	.083	-1.542
14	10	-2.7270	7.1539	2.3726	2.9175	-.175	-.499





LINEAR MEASUREMENT VARIABLE 145

**Upper Incisor Incisal Edge
perpendicular to A Point-
Pogonion
Ricketts Analysis**

UIE ⊥ A-PG

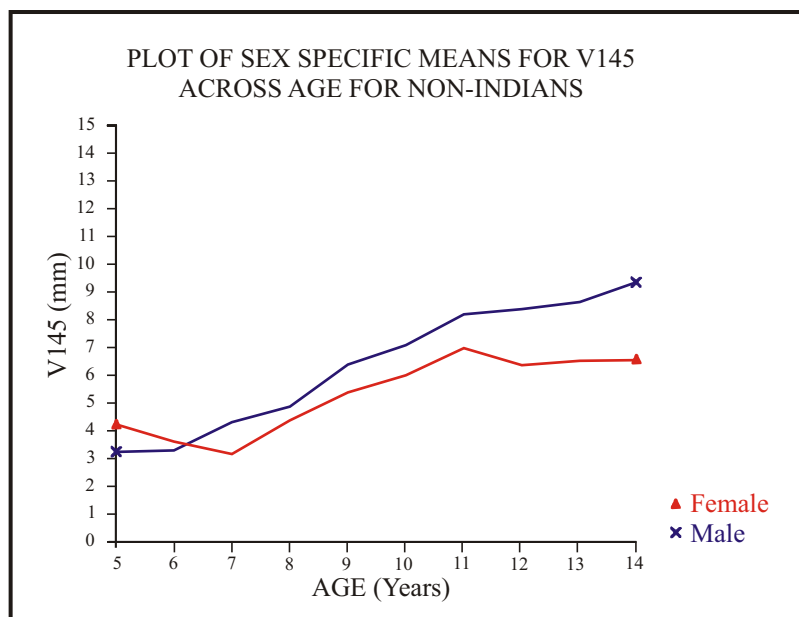
7 ⊥ 9-3

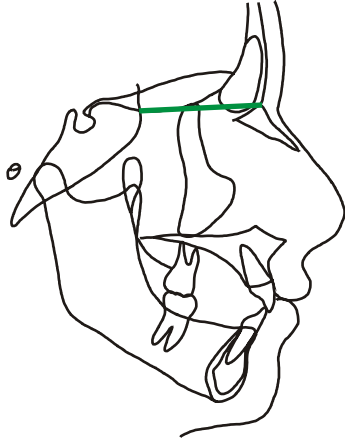
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	1.0632	4.9907	3.1975	1.5070	-.523	-1.049
6	7	.58706	5.1072	3.2519	1.5527	-.365	-.594
7	7	2.3353	6.3306	4.2746	1.2895	.216	-.613
8	10	3.4026	6.2685	4.8385	.99346	-.253	-1.286
9	9	4.5294	8.3102	6.3616	1.1870	-.051	-.847
10	7	5.9298	8.2511	7.0646	.90145	.177	-1.511 *
11	9	6.4817	11.995	8.1805	1.7855	1.191	.291
12	9	5.7962	11.295	8.3695	2.0198	.270	-1.309
13	9	5.6636	11.947	8.6270	2.1351	.304	-1.206 *
14	4	7.4043	11.997	9.3624	2.3080	.177	-1.767 *

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	3.5491	4.6761	4.1968	.58203	-.487	-1.500
6	7	1.4038	5.5677	3.5722	1.4425	-.025	-.993
7	13	.23089	6.5952	3.1206	1.6751	.155	-.183
8	12	1.5510	8.3549	4.3400	2.0045	.475	-.672
9	9	3.6419	9.1740	5.3519	1.7320	1.296	.638
10	13	3.3080	9.1681	5.9733	1.6332	.143	-.652
11	13	4.1635	10.899	6.9571	1.9924	.640	-.517
12	12	3.9064	8.9086	6.3390	1.5451	.201	-.819
13	11	4.1705	8.7124	6.4978	1.7017	-.234	-1.439
14	10	3.3051	8.3596	6.5227	1.6286	-.866	-.518





LINEAR MEASUREMENT VARIABLE 146

Ethmoid Registration Point-Nasion

SE-N

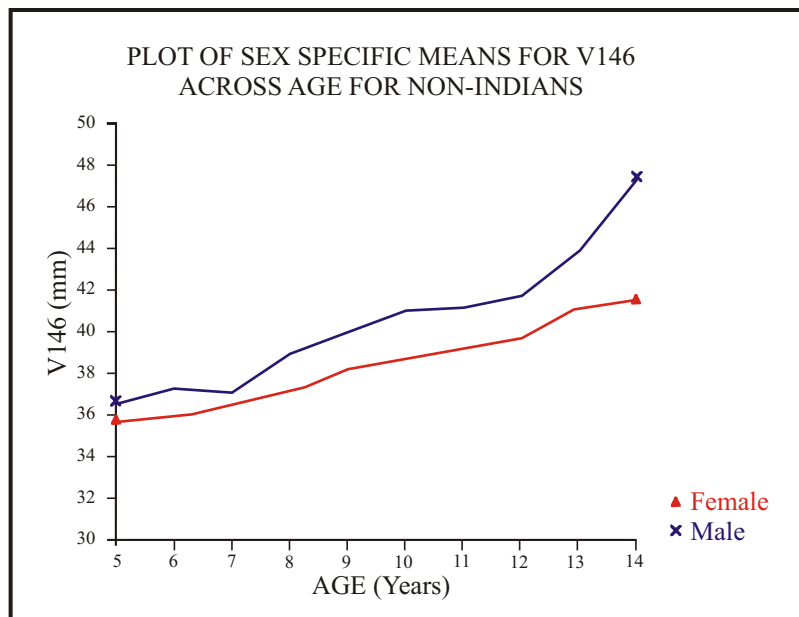
36-38

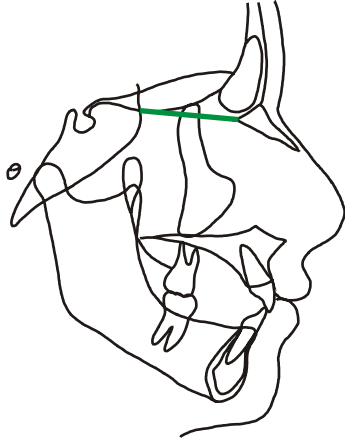
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	32.789	39.994	36.682	3.0686	-.273	-1.561
6	7	32.829	39.981	36.847	2.8886	-.150	-1.570
7	7	33.567	41.037	37.255	2.9596	.119	-1.549
8	10	33.836	42.911	39.124	3.2543	-.295	-1.276
9	9	33.070	43.701	39.698	3.4615	-.572	-.538
10	7	33.857	44.448	40.304	4.1271	-.522	-1.279
11	9	34.588	45.583	40.969	4.1457	-.450	-1.316
12	9	36.166	46.396	41.732	3.8529	-.355	-1.359
13	9	40.574	46.773	44.263	2.7288	-.416	-1.656 *
14	4	41.781	47.620	45.831	2.7276	-1.086	-.721 *

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	28.636	41.774	35.693	6.6228	-.265	-1.500
6	7	32.526	41.880	35.651	2.9984	1.361	.882
7	13	33.120	42.270	36.596	2.6536	.957	-.140
8	12	34.427	43.221	37.348	2.5074	1.103	.471
9	9	35.138	44.113	38.517	3.0049	.619	-.716
10	13	35.165	44.681	38.802	2.6372	.866	-.000
11	13	36.073	45.097	39.157	2.5756	1.049	.156
12	12	37.052	46.877	39.692	2.9119	1.372	1.051
13	11	38.419	46.738	41.113	3.0337	.798	-.973
14	10	38.757	47.731	41.297	3.1778	.861	-.525





LINEAR MEASUREMENT VARIABLE 147

Ethmoid Registration Point- Fronto-Maxillary Nasal Suture

SE-FMN

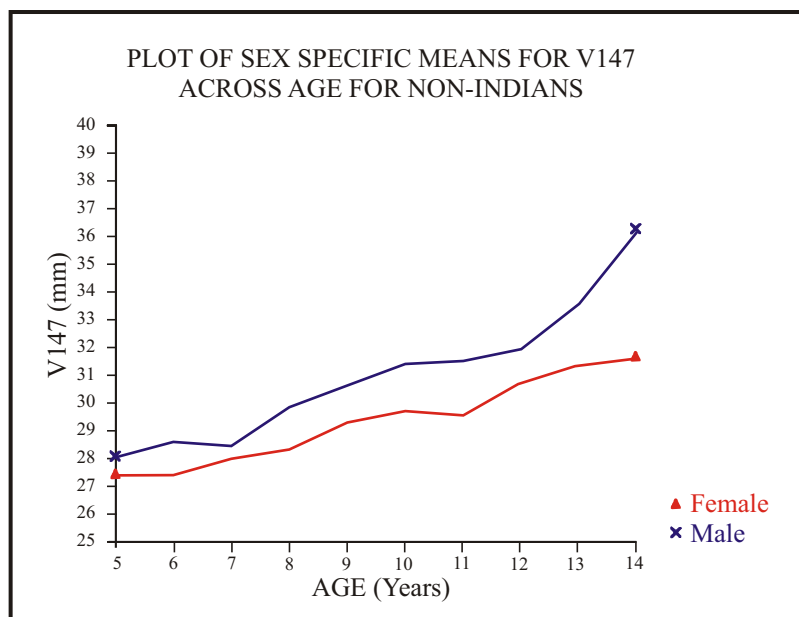
36-39

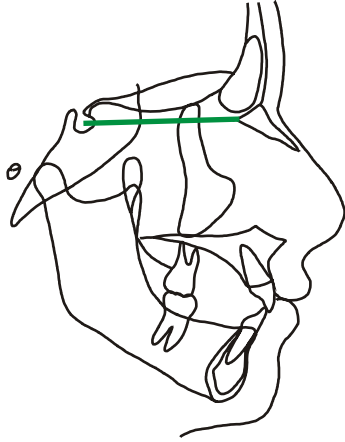
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	23.477	32.101	28.140	3.5939	-.183	-1.461
6	7	26.165	32.294	28.701	2.6780	.288	-1.665
7	7	23.632	34.072	28.553	3.7442	.214	-1.247
8	10	22.530	34.744	29.958	3.9163	-.488	-.750
9	9	23.665	35.208	30.744	3.7859	-.554	-.674
10	7	24.547	36.311	31.524	4.1506	-.468	-.909
11	9	25.526	36.596	31.632	4.3087	-.333	-1.526
12	9	25.524	36.242	32.061	3.8637	-.519	-1.130
13	9	29.216	37.144	33.703	3.0216	-.313	-1.351
14	4	31.334	39.196	36.314	3.4438	-.908	-.825 *

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	21.062	34.551	27.489	6.7669	.171	-1.500
6	7	23.909	34.203	27.498	3.3338	1.154	.503
7	13	24.670	34.008	28.090	2.5448	1.063	.514
8	12	25.685	34.919	28.426	2.8011	1.097	.375
9	9	25.277	34.865	29.403	3.6778	.582	-1.288
10	13	26.691	36.299	29.817	2.9185	.985	.001
11	12	26.414	33.987	29.662	2.2490	.524	-.547
12	12	26.614	38.195	30.527	3.2972	1.120	.419
13	11	27.747	38.294	31.138	3.5378	1.111	-.168
14	10	27.834	37.677	31.291	3.2554	.723	-.671





LINEAR MEASUREMENT VARIABLE 148

Sella-Fronto-Maxillary Nasal Suture

S-FMN

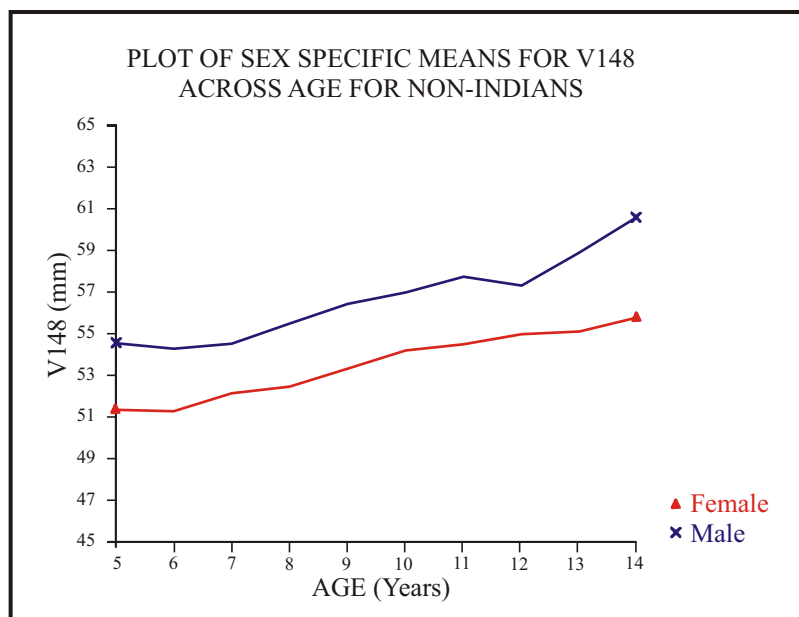
35-39

Male Non-Indian

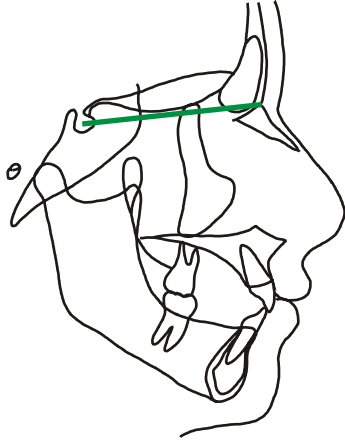
Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	51.273	56.644	54.626	2.0881	-.812	-.579
6	7	50.113	57.204	54.359	2.5943	-.375	-1.051 *
7	7	48.991	57.782	54.601	3.5984	-.502	-1.425
8	10	49.289	58.665	55.575	3.3892	-.841	-.808 **
9	9	51.414	60.865	56.523	3.2719	-.376	-1.184
10	7	53.585	61.277	57.076	2.8742	.052	-1.380 *
11	9	53.127	61.801	57.836	2.8985	-.582	-.880 **
12	9	53.377	61.414	57.408	2.7887	-.094	-1.263
13	9	51.999	62.955	59.012	3.6478	-.651	-.553 **
14	4	56.066	63.654	60.739	3.2664	-.836	-.848 *

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	46.785	56.633	51.409	4.9510	.219	-1.500
6	7	46.603	55.222	51.340	3.1515	-.277	-1.216
7	13	47.964	55.832	52.207	2.2327	.099	-.460
8	12	49.610	56.953	52.529	2.1164	.517	-.264
9	9	48.109	57.309	53.396	3.0191	-.337	-.884
10	13	50.324	58.338	54.275	2.4647	-.022	-.990
11	13	50.374	61.352	54.575	3.0753	.510	-.138
12	12	51.861	60.100	55.060	2.7574	.312	-1.098
13	11	50.067	60.509	55.192	2.7748	.155	.000
14	10	52.877	60.901	55.872	2.6678	.479	-.881



LINEAR MEASUREMENT VARIABLE 149



Sella-Nasion

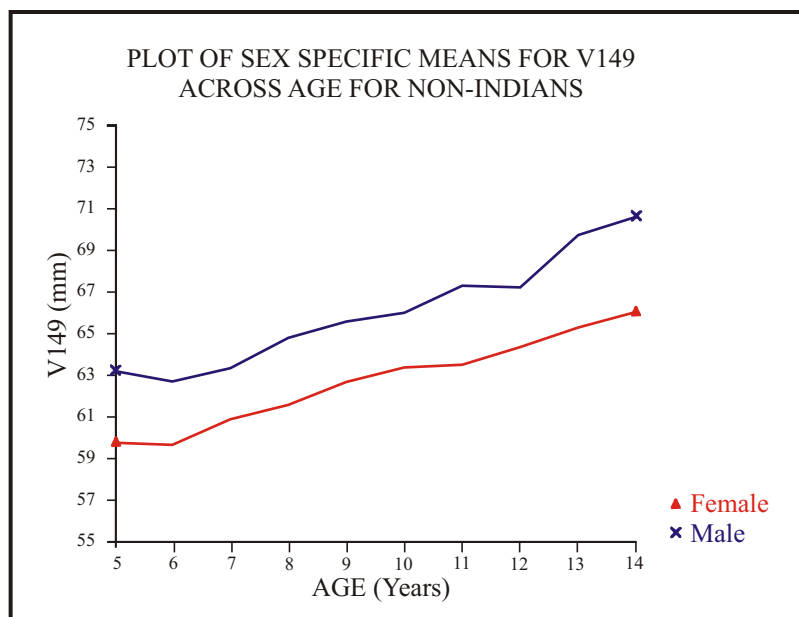
S-N

35-38

Male Non-Indian

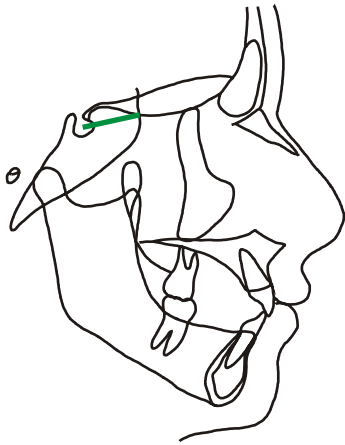
Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis	Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	60.400	65.744	63.199	2.1975	-.223	-1.466	5	3	54.685	63.778	59.734	4.6290	-.380	-1.500
6	7	57.944	66.167	62.692	3.0683	-.265	-1.253 *	6	7	55.415	62.999	59.631	2.6654	-.374	-.990
7	7	59.255	66.298	63.334	3.0868	-.301	-1.615	7	13	56.578	64.903	60.866	2.8109	.204	-1.434
8	10	60.168	68.309	64.799	2.8569	-.441	-1.210 **	8	12	58.325	65.367	61.562	2.2293	.193	-1.053
9	9	61.055	69.939	65.585	3.2069	-.160	-1.363	9	9	58.132	66.852	62.668	2.8573	-.069	-.969
10	7	61.489	70.456	66.009	3.3350	-.068	-1.384	10	13	59.965	66.901	63.369	2.4333	-.259	-1.044
11	9	62.081	70.418	67.317	3.1457	-.759	-1.066 **	11	13	59.624	67.880	63.501	2.5400	.102	-.991
12	9	62.763	71.039	67.236	2.8948	-.238	-1.343 **	12	12	60.732	68.892	64.355	2.4326	.127	-.781
13	9	63.448	75.233	69.764	3.4568	-.306	-.379 **	13	11	61.989	69.040	65.298	2.2923	-.025	-1.075
14	4	66.928	72.841	70.645	2.6354	-.788	-.983 **	14	10	62.765	71.108	66.053	2.6789	.429	-.786



LINEAR MEASUREMENT

VARIABLE 150



Sella-Ethmoid Registration Point

S-SE

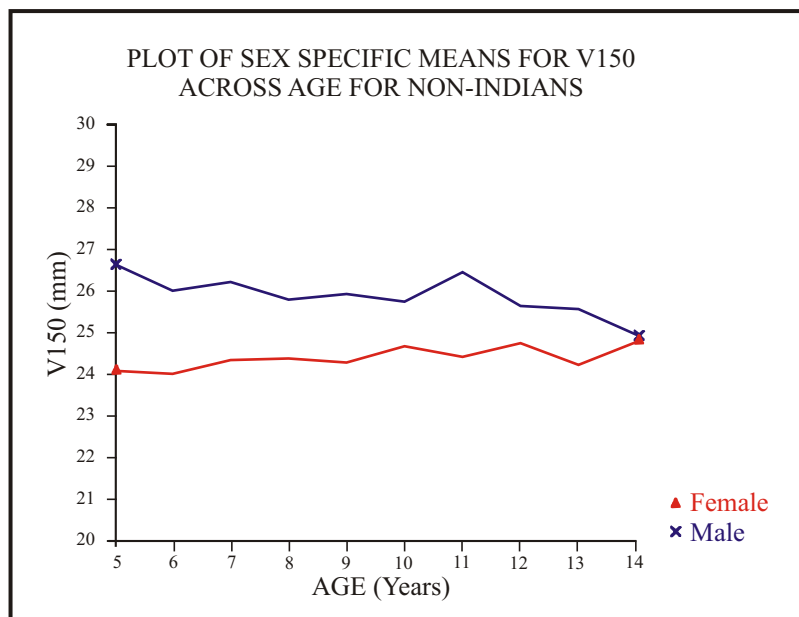
35-36

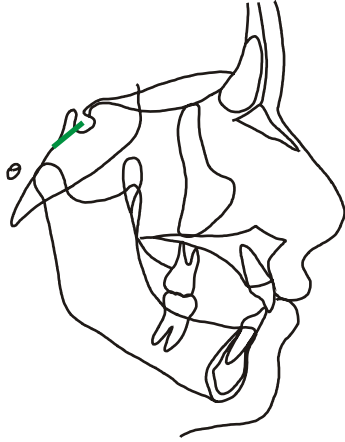
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	22.830	30.418	26.656	2.7920	-.021	-.852
6	7	22.478	30.550	26.013	2.6100	.446	-.461
7	7	23.231	29.972	26.224	2.4535	.274	-1.168
8	10	22.682	30.659	25.798	2.5120	.468	-.459
9	9	22.741	31.862	25.934	3.1476	.602	-.727
10	7	22.680	29.038	25.749	2.2627	-.018	-1.148
11	9	22.937	32.029	26.461	2.6378	.800	.399
12	9	22.769	31.032	25.645	2.6171	.904	-.046
13	9	22.898	31.816	25.570	2.9496	1.196	.224
14	4	23.176	26.175	24.910	1.2622	-.599	-.962

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	22.091	26.062	24.079	1.9856	-.004	-1.500
6	7	21.119	26.732	24.006	1.9068	-.026	-1.032
7	13	21.845	27.940	24.339	1.6580	.661	.025
8	12	22.148	26.971	24.377	1.6509	.170	-1.308
9	9	22.147	27.490	24.279	2.0538	.656	-1.347
10	13	22.223	27.098	24.673	1.4738	.381	-.765
11	13	22.491	26.930	24.416	1.6126	.353	-1.478
12	12	22.017	27.255	24.747	1.7184	.122	-1.325
13	11	21.301	26.989	24.223	1.7635	.082	-.693
14	10	23.380	27.149	24.819	1.2606	.764	-.484





LINEAR MEASUREMENT VARIABLE 151

Sella- Spheno-Occipital Synchondrosis

S-SOS

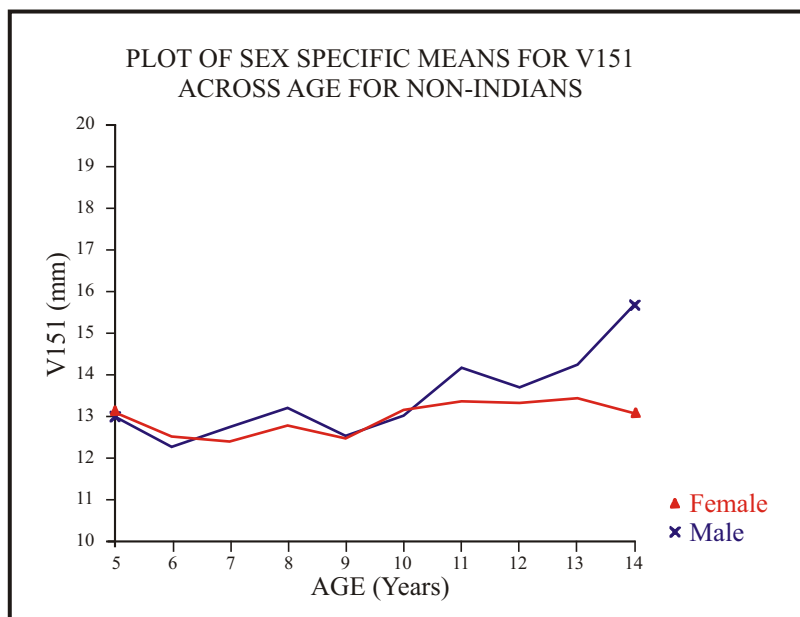
35-34

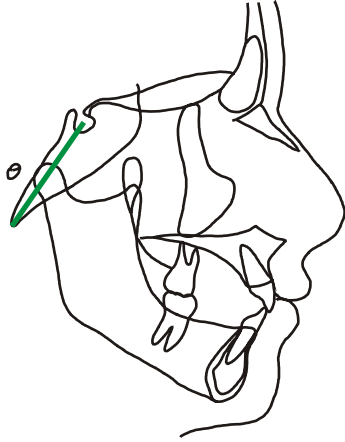
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	12.669	13.613	13.076	.48524	.380	-1.819
6	7	11.072	14.363	12.330	1.1457	.613	-.578
7	7	10.865	13.901	12.808	1.1500	-.633	-1.020
8	10	11.821	15.806	13.271	1.1656	.744	.355
9	9	11.211	14.067	12.596	.96404	-.164	-1.084
10	7	12.299	15.449	13.084	1.0937	1.693	1.337
11	9	12.383	17.943	14.241	1.7960	1.045	-.023
12	9	11.914	14.763	13.767	1.0755	-.718	-1.042
13	9	11.348	18.704	14.316	2.0903	.722	.430
14	4	14.628	17.995	15.794	1.5057	.980	-.792**

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	12.055	14.727	13.175	1.3875	.517	-1.500
6	7	10.507	14.225	12.580	1.3569	-.380	-1.218
7	13	10.905	14.213	12.459	1.1017	.160	-1.105
8	12	11.096	17.405	12.846	1.7594	1.404	1.748
9	9	11.040	13.790	12.534	.99948	-.273	-1.344
10	13	11.758	15.142	13.222	1.3194	.351	-1.407
11	13	10.841	17.074	13.430	1.6592	.582	-.065
12	12	10.894	16.841	13.391	1.5932	.610	.047
13	11	11.654	17.821	13.505	1.8707	1.110	.466
14	10	11.334	15.484	13.133	1.3969	.735	-.663





LINEAR MEASUREMENT VARIABLE 152

Sella-Basion

S-BA

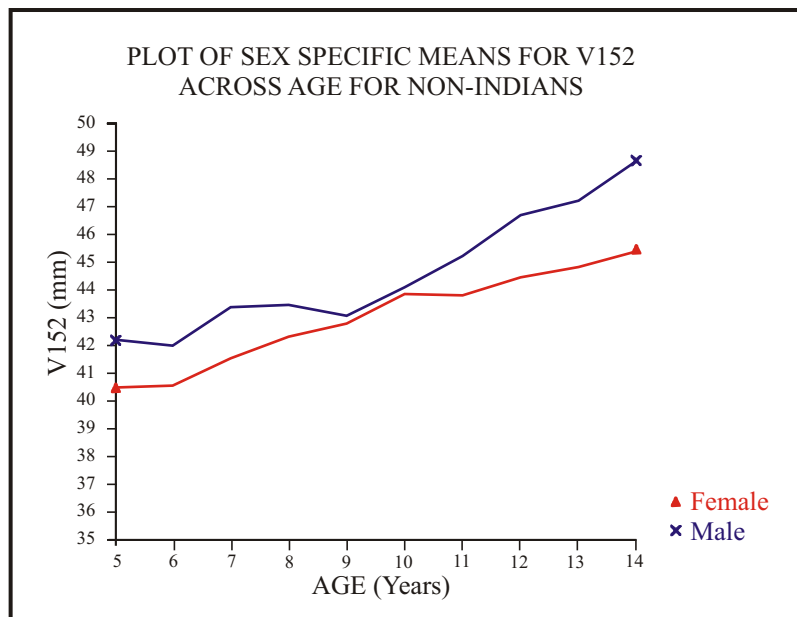
35-30

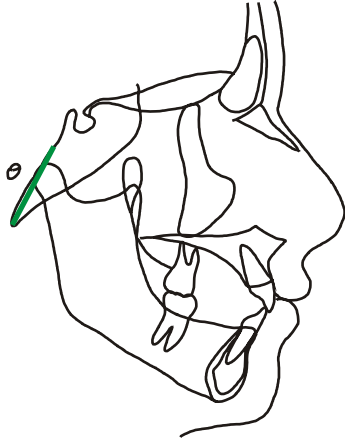
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	39.255	43.485	42.165	1.7557	-1.035	-.449
6	7	37.700	44.673	41.948	2.4955	-.486	-.867
7	7	38.309	45.586	43.341	2.4701	-1.256	.599
8	10	39.532	47.508	43.424	2.5235	-.134	-1.033
9	9	40.207	46.397	43.030	2.1106	-.118	-1.032
10	7	41.515	47.928	44.062	2.2758	.660	-.831
11	9	41.749	47.856	45.195	2.0034	-.257	-.835
12	9	42.784	49.796	46.675	1.9819	-.463	.118 **
13	9	43.451	51.219	47.199	2.7531	-.023	-1.259
14	4	45.508	51.309	48.640	2.3831	-.332	-.976 *

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	38.780	43.376	40.431	2.5569	.692	-1.500
6	7	36.411	43.362	40.501	2.3770	-.501	-.726
7	13	35.984	47.620	41.489	2.9500	.208	.135
8	12	36.762	45.040	42.273	2.3991	-.943	.285
9	9	39.074	47.352	42.748	2.7626	.482	-.983
10	13	40.201	48.434	43.818	2.2701	.417	-.370
11	13	39.395	48.391	43.770	2.7122	-.069	-.808
12	12	41.029	47.391	44.422	1.8147	-.228	-.772
13	11	40.817	51.446	44.796	2.8660	1.003	.719
14	10	43.172	48.354	45.365	1.7815	.189	-1.068





LINEAR MEASUREMENT VARIABLE 153

Basion-Spheno-Occipital Synchondrosis

BA-SOS

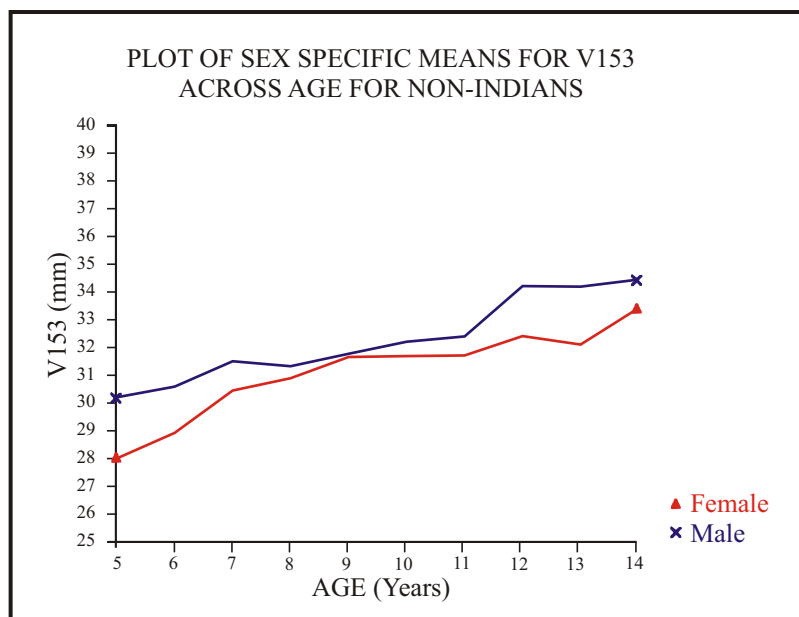
30-34

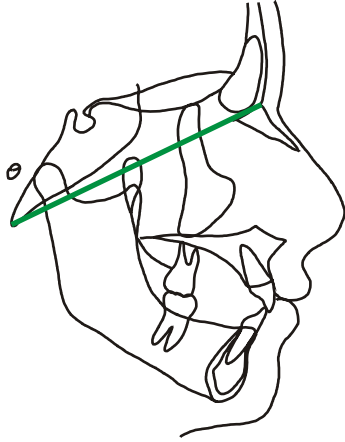
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	27.750	31.680	30.233	1.6369	-.678	-1.030
6	7	26.558	33.667	30.620	2.1844	-.683	.084 *
7	7	27.085	33.753	31.539	2.2727	-1.186	.117
8	10	28.100	34.460	31.359	2.1036	-.294	-1.168
9	9	28.822	34.876	31.810	1.9289	.319	-.623
10	7	29.868	34.952	32.246	1.6760	.214	-.770
11	9	30.026	35.744	32.438	2.1155	.301	-1.315
12	9	30.722	38.815	34.262	2.6606	.561	-.655
13	9	29.998	39.651	34.241	3.1646	.552	-.894
14	4	33.699	35.175	34.499	.60692	-.349	-.974

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	27.004	29.324	28.017	1.1873	.427	-1.500
6	7	26.760	30.687	28.945	1.4802	-.330	-1.336
7	13	26.714	35.882	30.478	2.5683	.552	-.256
8	12	25.156	33.488	30.925	2.8707	-1.072	-.262
9	9	28.886	35.564	31.693	2.3634	.426	-1.164
10	12	30.057	33.336	31.726	.97897	.213	-.814
11	13	27.008	36.981	31.749	2.9221	.027	-.621
12	12	29.214	34.860	32.450	2.1791	-.348	-1.513
13	10	30.090	34.130	32.144	1.3897	.010	-1.326
14	10	31.413	35.753	33.465	1.8280	.057	-1.768





LINEAR MEASUREMENT VARIABLE 154

Basion-Nasion

BA-N

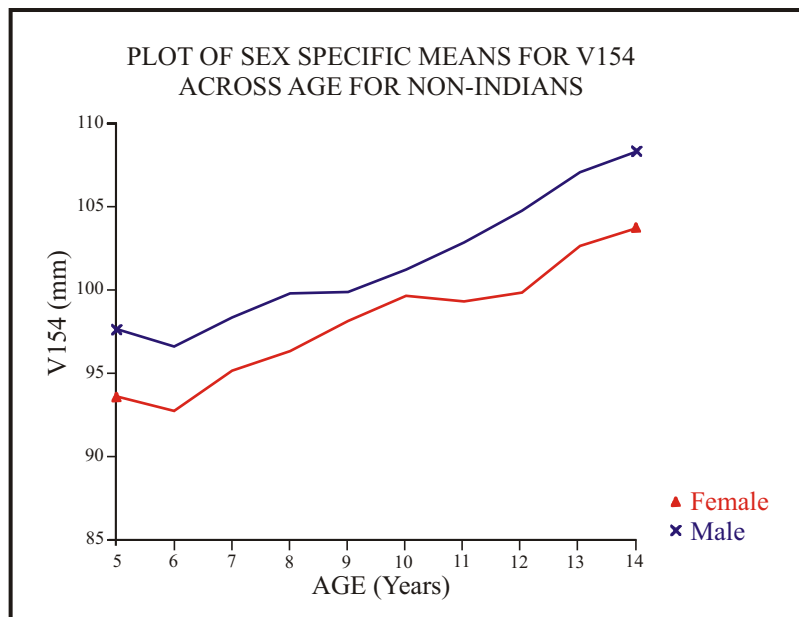
30-38

Male Non-Indian

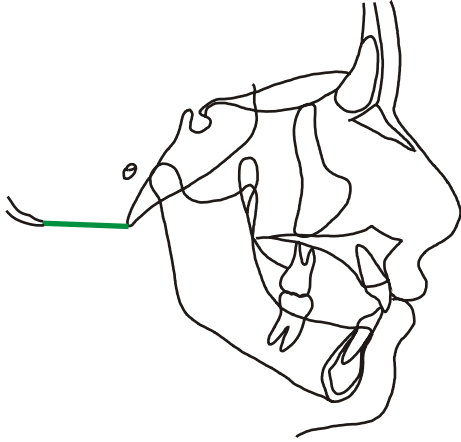
Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	94.855	101.75	97.660	2.9453	.362	-1.338
6	7	87.439	103.01	96.599	5.4360	-.430	-.835
7	7	89.436	103.79	98.352	5.3835	-.405	-1.024
8	10	92.142	108.89	99.805	4.7538	.223	-.249 *
9	9	92.402	105.81	99.890	4.4190	.010	-.904
10	7	94.285	108.84	101.24	4.9833	.353	-.899
11	9	96.541	108.10	102.88	3.9314	-.057	-1.004
12	9	99.675	107.64	104.80	2.6128	-.699	-.481 **
13	9	101.66	116.03	107.12	5.0853	.468	-1.055 *
14	4	104.56	113.92	108.40	4.0439	.603	-1.079

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	91.171	96.553	93.593	2.7311	.348	-1.500
6	7	88.140	96.920	92.710	2.7291	-.196	-.324
7	13	88.857	101.98	95.140	4.5742	.387	-1.375
8	12	91.271	100.28	96.321	2.7550	-.455	-.895
9	9	92.993	104.76	98.140	4.1728	.574	-1.026
10	13	94.622	103.89	99.659	2.8792	-.048	-.908
11	13	94.688	106.36	99.320	3.7983	.712	-.723
12	11	95.787	103.72	99.855	2.0347	-.091	.330
13	11	97.255	109.88	102.67	3.9583	.555	-.829
14	10	99.670	108.58	103.77	2.9283	.439	-.909



LINEAR MEASUREMENT VARIABLE 155



Basion-Opisthion

BA-OP

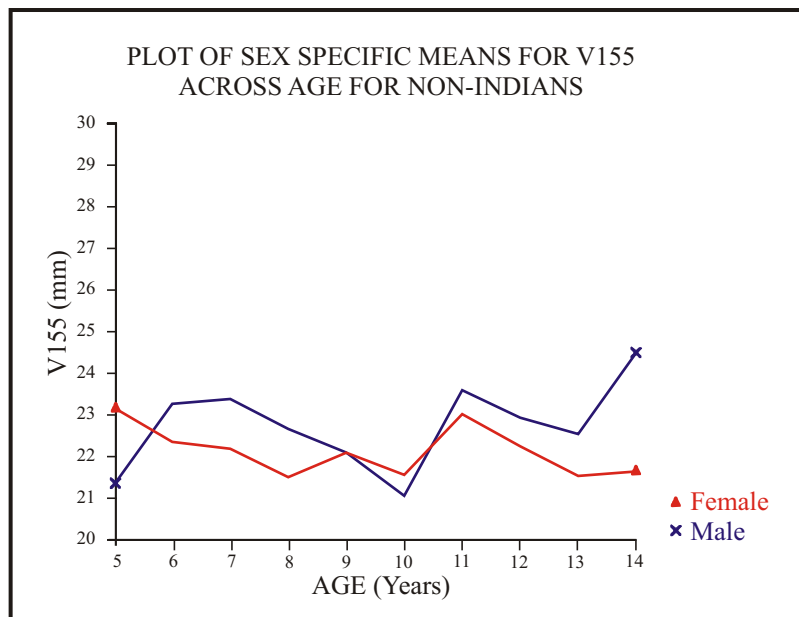
30-29

Male Non-Indian

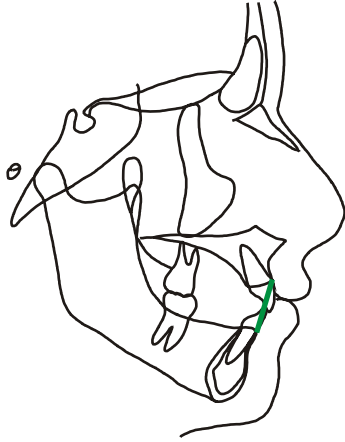
Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	17.947	24.375	21.331	2.4369	-.150	-1.028
6	7	19.902	26.472	23.277	2.5613	-.231	-1.256
7	7	18.336	27.069	23.394	2.7514	-.684	-.114
8	10	20.219	27.553	22.671	2.1120	1.094	.933
9	9	18.206	26.002	22.101	2.6911	.212	-1.130
10	7	17.985	23.785	21.057	2.0672	.204	-.890
11	9	21.684	28.756	23.606	2.6856	1.225	-.255
12	9	20.091	27.739	22.942	2.4435	.856	-.377
13	9	19.489	24.264	22.548	1.4933	-.785	-.030
14	4	21.347	32.064	24.509	5.0897	1.086	-.726

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	22.456	23.960	23.179	.75414	.142	-1.500
6	7	19.081	26.963	22.358	2.8854	.313	-1.107
7	13	16.075	27.034	22.192	3.1999	-.464	-.421
8	12	17.399	26.381	21.506	2.4296	.196	-.230
9	9	20.106	23.934	22.097	1.3227	-.266	-.808
10	13	17.624	24.679	21.562	2.1604	-.225	-1.069
11	13	17.131	30.376	23.028	3.6552	.378	-.331
12	12	18.050	28.354	22.252	3.1600	.373	-.807
13	11	18.870	24.981	21.536	1.8801	.699	-.373
14	10	16.740	24.587	21.644	2.2734	-.784	.198



LINEAR MEASUREMENT VARIABLE 156



Supradentale-Infradentale

SD-ID

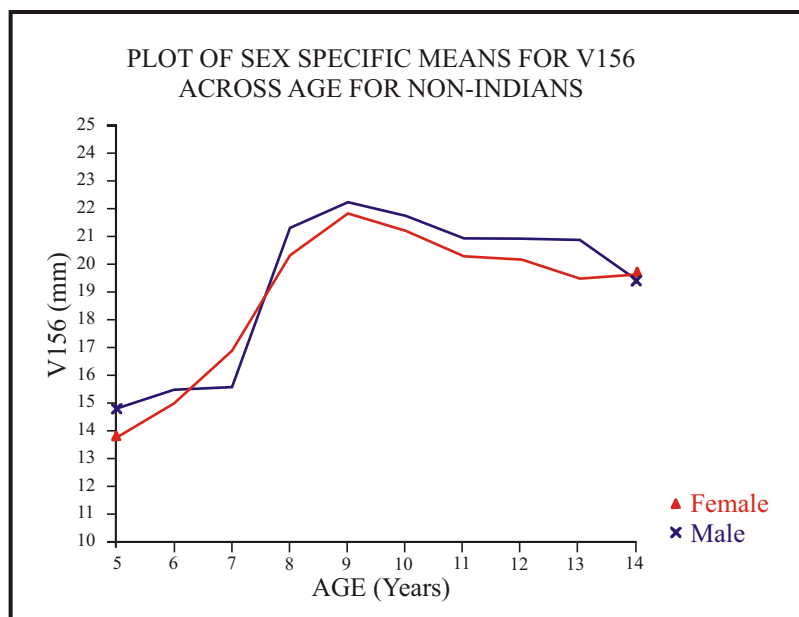
8-5

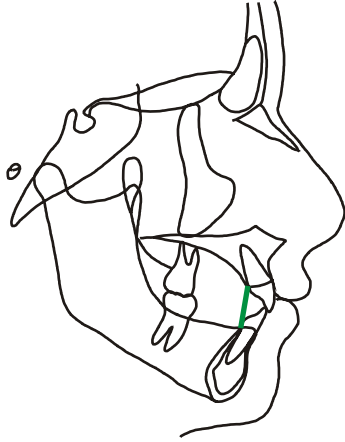
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	13.818	15.825	14.743	.83612	.062	-1.433
6	7	13.922	20.147	15.431	2.1293	1.841	1.757
7	7	9.5499	20.701	15.526	3.4861	-.333	-.340
8	10	12.349	25.628	21.292	4.0319	-1.135	.375
9	9	20.013	24.638	22.224	1.7844	.318	-1.489
10	7	19.428	24.262	21.728	1.6001	.194	-.830
11	9	19.084	23.578	20.914	1.2835	.655	.360
12	9	18.553	22.334	20.903	1.2827	-.640	-.852
13	9	18.450	24.100	20.857	1.8587	.370	-.960
14	4	18.753	19.938	19.374	.49731	-.178	-1.178

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	11.648	15.393	13.686	1.8942	-.311	-1.500
6	7	11.287	17.470	14.935	2.0320	-.620	-.370
7	13	10.597	27.839	16.843	4.6006	1.058	.708
8	12	14.210	23.660	20.297	3.2085	-.760	-.783
9	9	20.425	23.952	21.816	1.1579	.693	-.761
10	13	19.572	23.132	21.184	.93670	.600	-.005
11	13	17.567	21.757	20.265	1.2996	-1.294	.466
12	12	17.522	23.383	20.144	1.6328	.144	-.443
13	11	17.702	21.024	19.456	1.0097	-.205	-.781
14	10	17.425	20.946	19.608	1.1382	-.680	-.677





LINEAR MEASUREMENT

VARIABLE 157

**Upper Incisor Lingual Bony
Contact Point-Lower Incisor
Lingual Bony Contact Point**

UIB-LIB

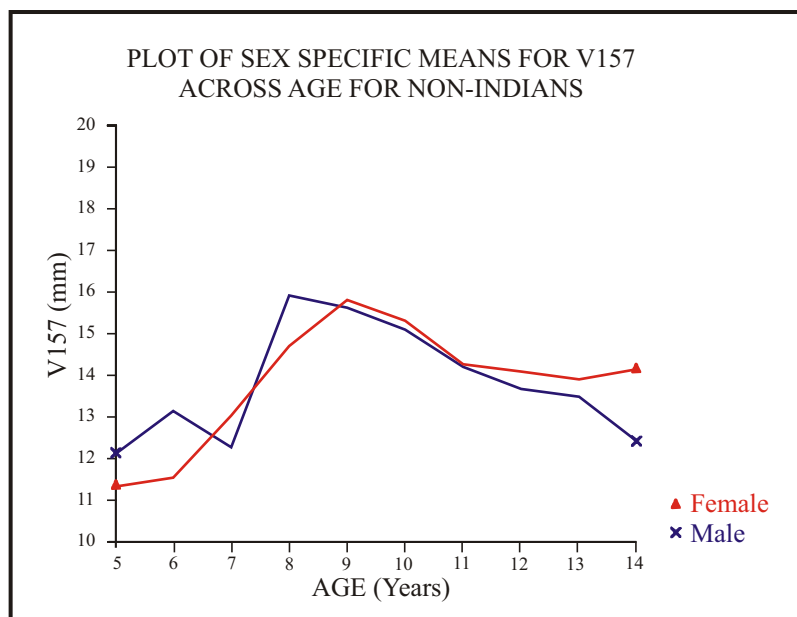
13-14

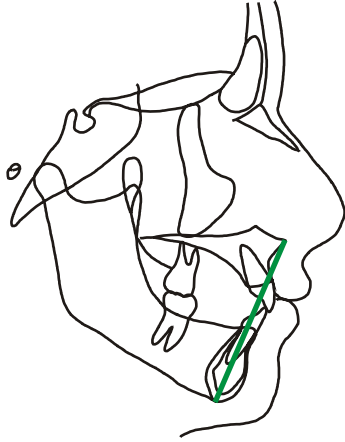
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	10.643	12.511	12.087	.80833	-1.492	.239
6	7	11.707	17.362	13.128	1.9418	1.717	1.509
7	7	9.1487	14.959	12.253	2.2001	-.134	-1.425
8	10	10.077	19.433	15.918	2.7912	-.814	-.103
9	9	13.398	17.475	15.623	1.3965	-.036	-1.138
10	7	13.346	17.407	15.093	1.6497	.521	-1.382
11	9	11.128	15.428	14.194	1.2538	-1.767	2.193
12	9	11.622	14.829	13.661	1.0640	-.792	-.612
13	9	11.000	14.685	13.473	1.1341	-1.132	.487
14	4	11.575	13.525	12.393	.85838	.485	-1.245 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	9.3948	12.601	11.303	1.6877	-.577	-1.500
6	7	8.8618	13.752	11.519	1.8627	-.230	-1.437
7	12	10.320	16.837	13.018	1.9625	.237	-.688
8	12	12.373	17.231	14.697	1.4243	-.004	-.594
9	9	13.869	17.729	15.810	1.3331	-.049	-1.278
10	13	13.162	16.695	15.308	1.1442	-.637	-.500
11	13	12.025	17.192	14.257	1.4850	.298	-.493
12	12	11.530	17.554	14.081	1.4915	.592	1.015
13	11	12.236	15.954	13.892	1.0159	.409	-.181
14	10	13.107	16.061	14.138	.93935	.822	-.307





LINEAR MEASUREMENT VARIABLE 158

Menton-Anterior Nasal Spine

ME-ANS

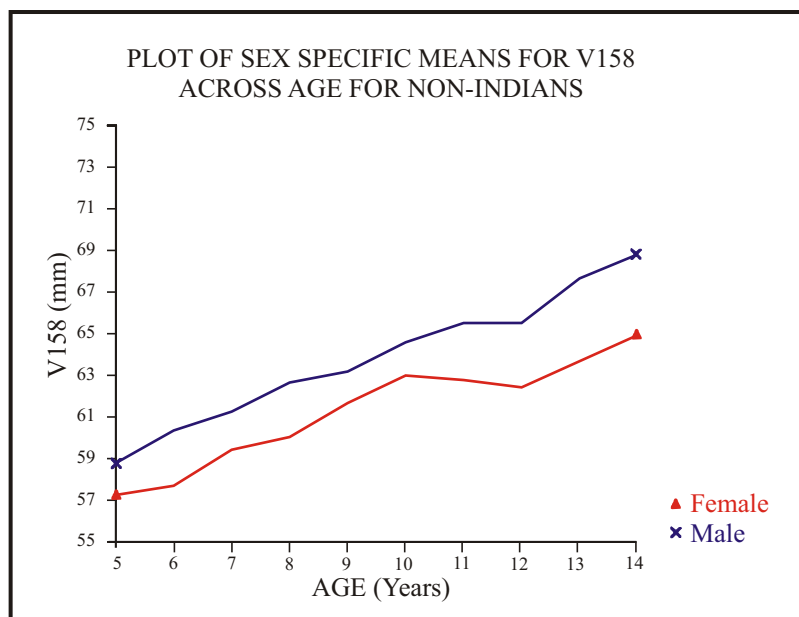
1-10

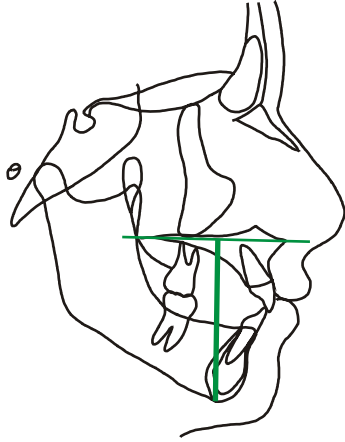
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	57.603	62.376	58.844	2.0543	1.250	-.155
6	7	57.881	65.089	60.421	2.5310	.855	-.342 **
7	7	57.447	65.436	61.332	2.5681	.061	-.599
8	10	60.387	66.911	62.737	2.0162	.901	-.071 *
9	9	60.968	65.080	63.268	1.7211	-.302	-1.592
10	7	62.672	67.403	64.679	1.7580	.241	-1.229
11	9	62.991	67.873	65.611	1.9572	-.060	-1.513 *
12	9	63.527	68.895	65.613	2.2098	.505	-1.465 **
13	9	64.610	70.025	67.766	1.7294	-.368	-.737 **
14	4	67.216	70.571	68.924	1.8341	-.007	-1.985 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	54.585	62.045	57.306	4.1193	.684	-1.500
6	7	53.887	62.430	57.751	2.9515	.230	-1.032
7	13	56.167	65.241	59.491	2.4697	.690	.371
8	12	55.877	65.855	60.106	2.7839	.213	-.140
9	9	57.216	68.307	61.746	3.0392	.849	.792
10	13	59.535	70.293	63.076	2.9344	.961	.819
11	13	58.365	69.546	62.857	3.2414	.344	-.382
12	12	59.531	66.278	62.504	2.2619	.283	-1.175
13	11	59.083	67.276	63.768	2.9992	-.433	-1.252
14	10	60.720	68.006	65.026	2.6455	-.400	-1.159





LINEAR MEASUREMENT VARIABLE 159

**Menton perpendicular to
Palatal Plane**

ME ⊥ ANS-PNS

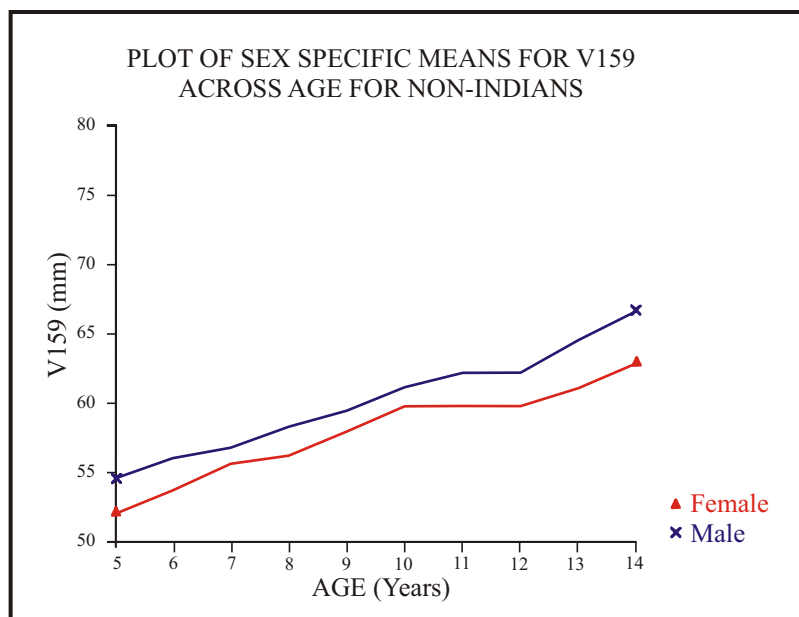
1 ⊥ 10-45

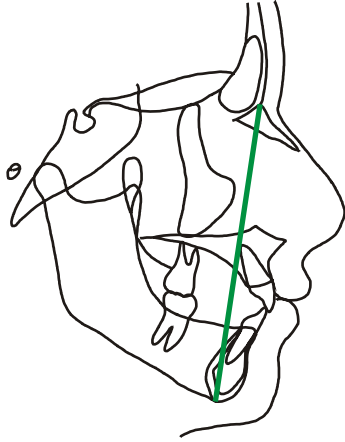
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	51.534	57.642	54.503	2.2363	.128	-.807
6	7	51.943	60.680	55.979	2.5795	.390	.316 *
7	7	53.632	59.499	56.739	2.7172	-.221	-1.852
8	10	55.702	61.704	58.256	2.0948	.395	-1.336
9	9	56.022	62.778	59.418	2.2990	-.247	-.989
10	7	57.617	63.638	61.118	2.3466	-.319	-1.328
11	9	59.304	65.801	62.161	2.4820	.240	-1.613
12	9	58.946	66.209	62.176	2.5206	.531	-1.178
13	9	60.927	67.199	64.540	2.3884	-.266	-1.542 **
14	4	64.073	68.702	66.641	2.3070	-.136	-1.809 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	49.121	56.604	51.934	4.0728	.663	-1.500
6	7	50.093	57.480	53.645	2.8640	.198	-1.292
7	13	52.088	61.533	55.573	2.4974	.897	.557
8	12	52.432	62.745	56.162	2.6610	1.139	1.288
9	9	54.487	63.571	57.906	3.0343	.446	-.746
10	13	55.451	66.951	59.738	3.0466	.761	.519
11	13	56.257	66.424	59.761	3.1252	.569	-.452
12	12	55.808	63.068	59.751	2.4053	.013	-1.233
13	11	56.342	64.635	61.057	2.6452	-.430	-1.046
14	10	58.272	66.091	62.857	2.3942	-.642	-.487





LINEAR MEASUREMENT VARIABLE 160

Menton-Nasion

ME-N

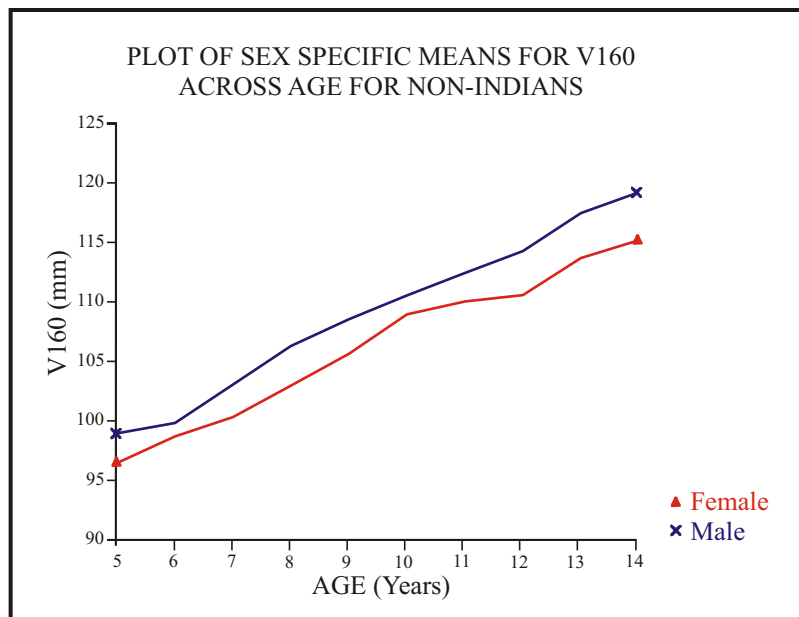
1-38

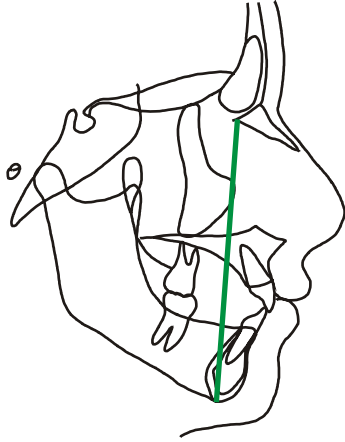
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	97.666	101.59	99.166	1.5564	.716	-.815
6	7	94.674	104.49	100.04	3.2178	-.421	-.645
7	7	98.188	106.78	103.29	3.2812	-.665	-1.115
8	10	102.61	110.45	106.55	2.5590	.151	-.865 *
9	9	103.18	111.99	108.81	2.9409	-.798	-.483
10	7	107.07	113.51	110.82	2.3209	-.287	-.943
11	9	108.91	116.59	112.72	2.8794	.319	-1.374
12	9	110.55	118.10	114.57	2.8145	-.058	-1.375 **
13	9	113.10	122.27	117.78	3.2548	.195	-1.214 *
14	4	118.94	120.16	119.54	.58449	.027	-1.775 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	93.339	100.65	96.660	3.7012	.322	-1.500
6	7	95.965	102.41	98.904	2.7681	.292	-1.669
7	13	94.511	106.86	100.54	3.1528	.092	-.090
8	12	97.409	110.96	103.20	4.0333	.368	-.737
9	9	99.362	113.66	105.89	3.8337	.403	.604
10	13	101.16	118.67	109.22	4.1884	.349	.747
11	13	103.42	118.45	110.31	3.9820	.293	-.156
12	12	102.05	115.14	110.85	3.7481	-1.012	.540
13	11	106.25	120.12	113.98	4.3205	-.599	-.610
14	10	107.17	119.71	115.49	3.5139	-1.269	1.267





LINEAR MEASUREMENT VARIABLE 161

Menton-Fronto-Maxillary Nasal Suture

ME-FMN

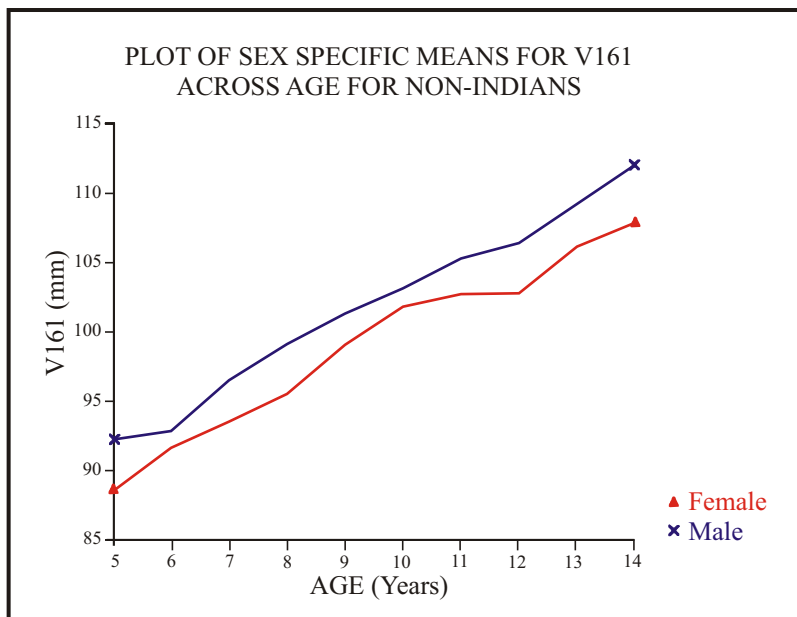
1-39

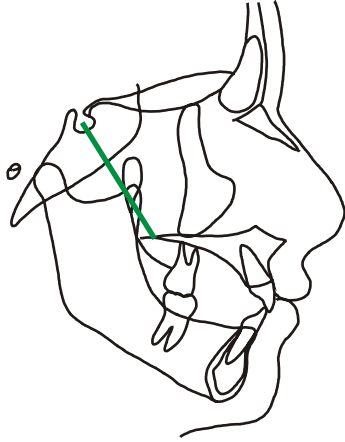
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	91.039	96.247	92.976	2.0321	.843	-.582
6	7	89.688	97.709	93.592	2.6159	.023	-.687
7	7	92.122	100.53	97.272	3.0506	-.548	-.834 *
8	10	96.917	104.07	99.890	2.5368	.298	-1.320
9	9	98.561	105.28	102.10	2.4181	-.163	-1.214
10	7	100.18	107.48	103.93	2.3626	-.105	-.632
11	9	102.01	110.82	106.09	3.0931	.147	-1.260
12	9	102.54	112.14	107.21	3.0762	.035	-1.010 *
13	9	104.50	114.23	110.04	3.2885	-.254	-.978
14	4	112.47	113.22	112.87	.38315	-.059	-1.899 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	87.009	92.341	89.239	2.7707	.521	-1.500
6	7	89.795	95.654	92.375	2.3501	.205	-1.587
7	13	90.345	100.63	94.274	2.9858	.537	-.373
8	12	88.578	103.89	96.281	4.4736	-.146	-.707
9	9	92.441	108.02	99.838	4.3196	.234	.112
10	13	93.118	113.09	102.60	4.8434	.204	.522
11	13	97.226	111.77	103.51	4.0698	.302	-.368
12	12	94.567	109.36	103.97	4.3787	-.731	-.174
13	11	99.261	110.49	106.95	4.0075	-.942	-.640
14	10	99.874	112.55	108.68	3.8473	-1.206	.686





LINEAR MEASUREMENT VARIABLE 162

Sella-Posterior Nasal Spine

S-PNS

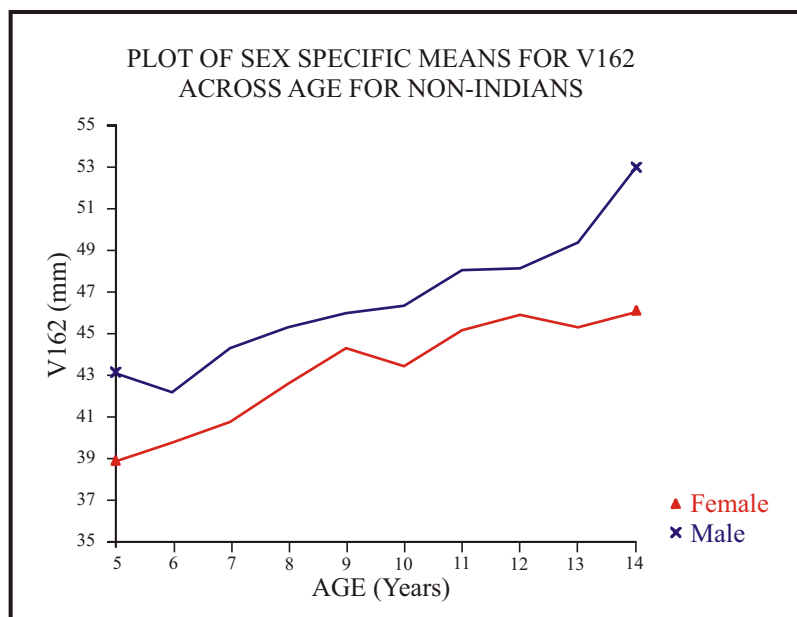
35-45

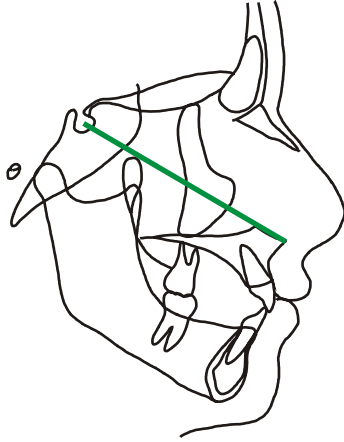
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	41.815	44.365	43.099	1.0631	-.012	-1.509 **
6	7	36.783	44.513	42.159	2.6601	-1.261	.437
7	7	42.243	46.835	44.290	1.7227	.365	-1.232 **
8	10	39.993	48.107	45.298	2.5291	-1.017	.023 *
9	9	39.486	50.387	45.980	3.0303	-.778	.723
10	7	38.768	50.011	46.338	3.5501	-1.517	1.257
11	9	40.993	50.879	48.058	3.0686	-1.353	1.195 *
12	9	42.507	51.938	48.144	2.8536	-.527	-.163 *
13	9	42.872	52.268	49.392	3.3704	-.829	-.615 **
14	4	49.893	56.155	53.020	2.6438	.005	-1.243 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	37.937	40.287	38.797	1.2953	.682	-1.500
6	7	36.448	42.970	39.726	2.7188	.062	-1.724
7	13	35.987	49.080	40.727	3.6868	.733	.034
8	12	35.475	48.531	42.569	3.6449	-.088	-.245
9	9	38.667	50.110	44.289	3.4336	.174	-.524
10	12	40.502	48.369	43.419	2.2783	.771	-.006
11	13	40.810	51.091	45.155	3.0669	.432	-.599
12	12	42.915	51.834	45.899	2.8875	1.162	.070
13	10	43.039	49.530	45.295	1.8383	1.136	.876
14	10	41.803	53.780	46.028	3.6363	.654	.161





LINEAR MEASUREMENT VARIABLE 163

Sella-Anterior Nasal Spine

S-ANS

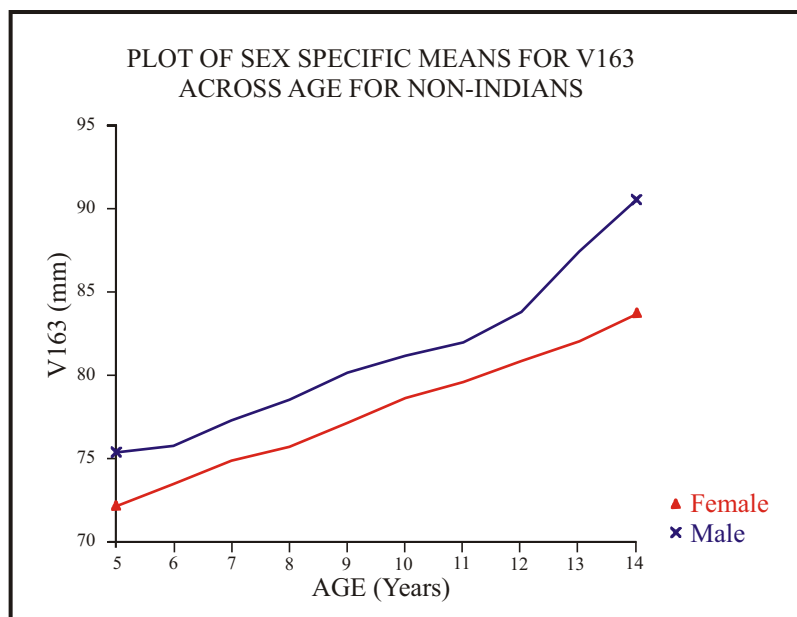
35-10

Male Non-Indian

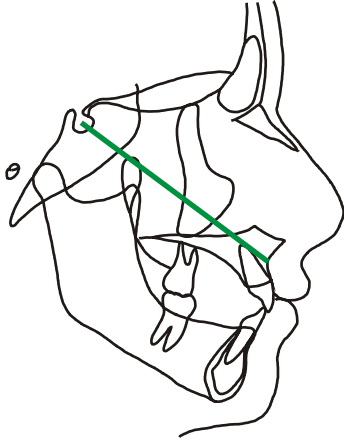
Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	73.413	77.211	75.195	1.5570	.088	-1.409
6	7	71.183	79.319	75.595	3.2830	-.207	-1.537
7	7	73.141	81.465	77.133	2.8013	.105	-.958
8	10	73.938	82.902	78.379	2.9004	-.101	-1.002 **
9	9	74.779	85.412	80.012	3.5341	-.178	-.935
10	7	74.955	85.675	81.035	4.4276	-.466	-1.373
11	9	75.445	86.038	81.842	3.4491	-.631	-.626
12	9	78.149	87.629	83.679	3.4750	-.614	-.815 **
13	9	80.314	91.290	87.336	4.0432	-.792	-.955 **
14	4	89.782	91.330	90.498	.74906	.116	-1.781 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	69.699	74.952	71.932	2.7134	.488	-1.500
6	7	70.339	78.155	73.293	3.1048	.507	-1.383
7	13	71.143	79.634	74.701	3.0164	.315	-1.437
8	12	70.814	79.574	75.538	2.9193	-.038	-1.326
9	9	73.042	81.463	76.983	2.9641	.314	-1.230
10	13	74.423	82.948	78.481	3.1145	.138	-1.486
11	13	75.613	83.922	79.450	2.7165	.125	-1.404
12	12	76.568	84.209	80.716	3.0113	-.085	-1.561
13	11	78.644	85.839	81.906	2.5420	.365	-1.251
14	10	79.299	88.653	83.567	3.4821	.281	-1.450



LINEAR MEASUREMENT VARIABLE 164



Sella-A Point

S-A

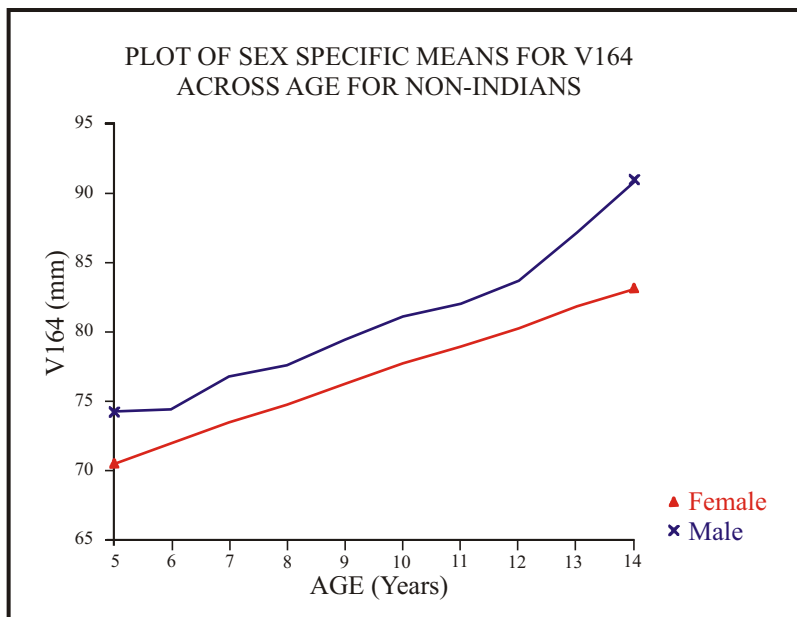
35-9

Male Non-Indian

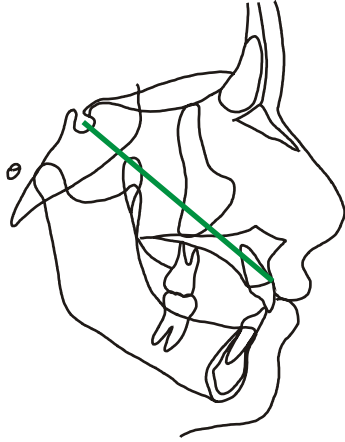
Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	71.864	76.265	74.109	1.8528	-.123	-1.543
6	7	70.282	77.407	74.264	2.9671	-.308	-1.542
7	7	74.559	79.756	76.645	1.9035	.485	-.998 **
8	10	72.606	81.714	77.460	2.6655	-.216	-.562 **
9	9	73.507	84.321	79.310	3.3404	-.418	-.592
10	7	73.760	85.403	80.991	4.3272	-.685	-.990
11	9	74.365	86.446	81.917	3.8601	-.670	-.346
12	9	77.195	88.279	83.584	3.6751	-.436	-.854 **
13	9	79.314	90.455	87.063	4.0261	-1.068	-.376 **
14	4	89.310	92.464	90.779	1.3133	.265	-1.096 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	68.526	73.331	70.276	2.6548	.685	-1.500
6	7	69.462	76.442	71.800	2.5935	.773	-.660
7	13	69.535	79.544	73.320	3.0366	.702	-.684
8	12	69.794	78.486	74.601	2.7619	-.053	-1.028
9	9	71.078	81.235	76.111	3.1858	.171	-.815
10	13	73.306	82.341	77.598	2.7924	.147	-1.037
11	13	74.224	83.066	78.814	2.8850	.035	-1.381
12	12	76.245	84.269	80.134	2.7751	.262	-1.307
13	11	78.266	85.707	81.726	2.6762	.324	-1.140
14	10	78.440	88.314	82.987	3.5393	.580	-1.204



LINEAR MEASUREMENT VARIABLE 165



Sella-Supradentale

S-SD

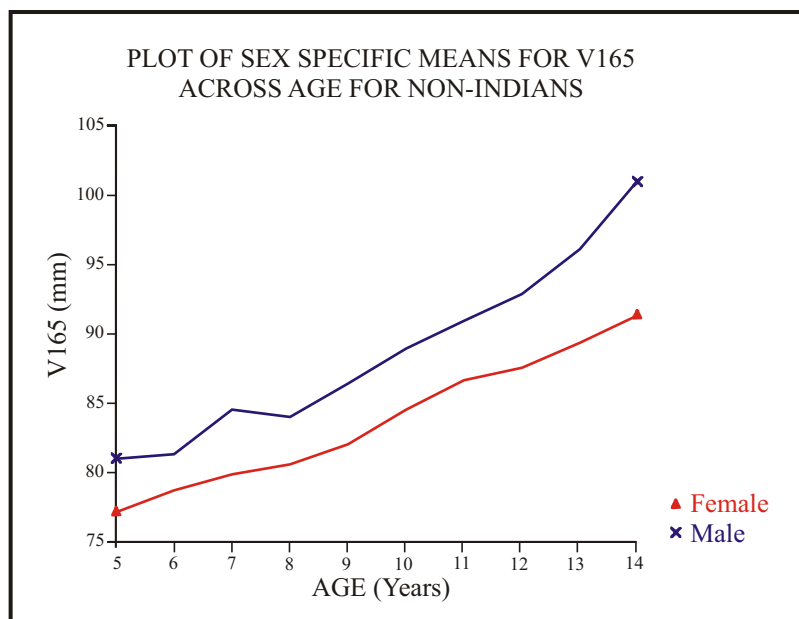
35-8

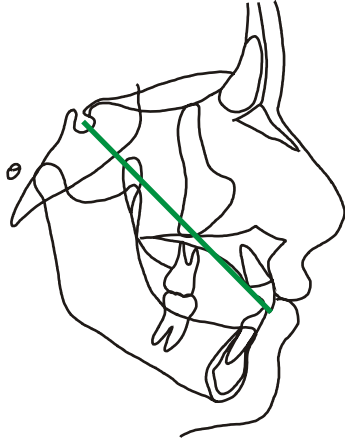
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	79.465	83.406	80.980	1.5981	.562	-.915
6	7	76.639	84.757	81.312	3.2037	-.580	-1.178
7	7	80.757	87.821	84.543	2.4902	-.221	-1.139 **
8	10	77.979	89.969	84.009	3.2400	.019	.010 **
9	9	80.294	91.514	86.430	3.9582	-.437	-.886 *
10	7	81.832	92.996	88.960	4.4071	-.627	-1.161 *
11	9	82.099	97.059	90.973	4.5314	-.700	-.254 *
12	9	84.672	99.201	92.918	4.6173	-.445	-.778 **
13	9	85.958	101.26	96.170	4.6935	-1.278	.554 **
14	4	99.352	103.28	101.15	1.6218	.350	-1.002 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	74.974	80.350	77.110	2.8524	.604	-1.500
6	7	75.235	82.376	78.692	2.5576	.021	-1.287
7	13	75.719	87.677	79.853	3.3625	.925	.324
8	12	76.528	86.877	80.577	2.8391	.940	.275
9	9	74.843	87.697	82.031	3.7424	-.342	-.130
10	13	78.585	91.423	84.534	3.7566	.577	-.427
11	13	79.608	93.581	86.671	4.0265	.138	-.793
12	12	81.659	93.368	87.575	3.2406	.054	-.269
13	11	84.085	94.556	89.386	3.0374	-.011	-.327
14	10	85.811	97.494	91.382	3.5030	.331	-.431





LINEAR MEASUREMENT VARIABLE 166

**Sella-Upper Incisor Incisal
Edge**

S-UIE

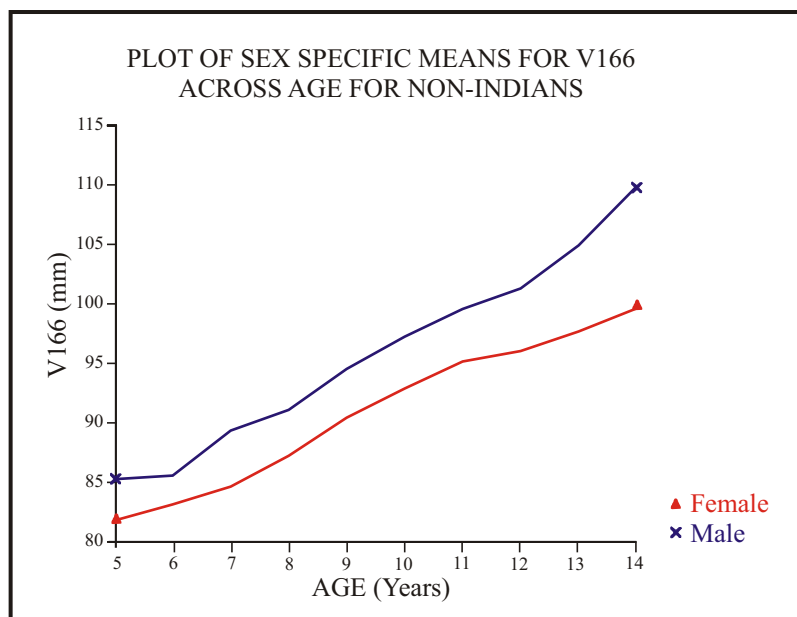
35-7

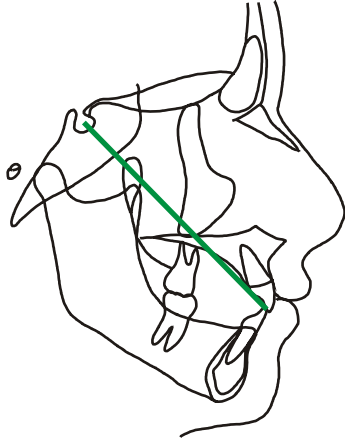
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	82.282	88.435	85.182	2.2411	.236	-.728
6	7	81.132	90.286	85.487	3.8549	-.077	-1.704
7	7	83.561	92.919	89.290	3.2603	-.664	-.702 **
8	10	85.124	96.371	91.038	3.3714	-.104	-.714 **
9	9	87.730	99.991	94.499	4.1066	-.434	-.834
10	7	88.428	101.55	97.225	5.0261	-.795	-.815
11	9	90.662	105.12	99.567	4.7477	-.702	-.687 *
12	9	92.177	107.86	101.30	4.9941	-.539	-.761 **
13	9	94.787	109.19	104.94	4.9141	-1.359	.164 **
14	4	109.17	111.48	109.92	1.0622	1.008	-.789 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	80.355	84.269	81.695	2.2301	.705	-1.500
6	7	80.324	85.306	83.050	1.8784	-.244	-1.325
7	13	80.904	91.197	84.554	3.0645	.772	-.326
8	12	80.097	91.888	87.159	3.3715	-.483	-.076
9	9	83.126	96.449	90.380	4.2569	-.083	-.798
10	13	85.950	100.77	92.842	4.1468	.586	-.241
11	13	86.905	102.96	95.128	4.4622	.109	-.651
12	12	89.291	102.11	96.011	3.4500	-.039	-.221
13	11	91.425	104.29	97.665	3.3596	.277	.284
14	10	92.188	106.90	99.616	4.0600	.166	-.003





LINEAR MEASUREMENT

VARIABLE 167

Sella-Lower Incisor Incisal Edge

S-LIE

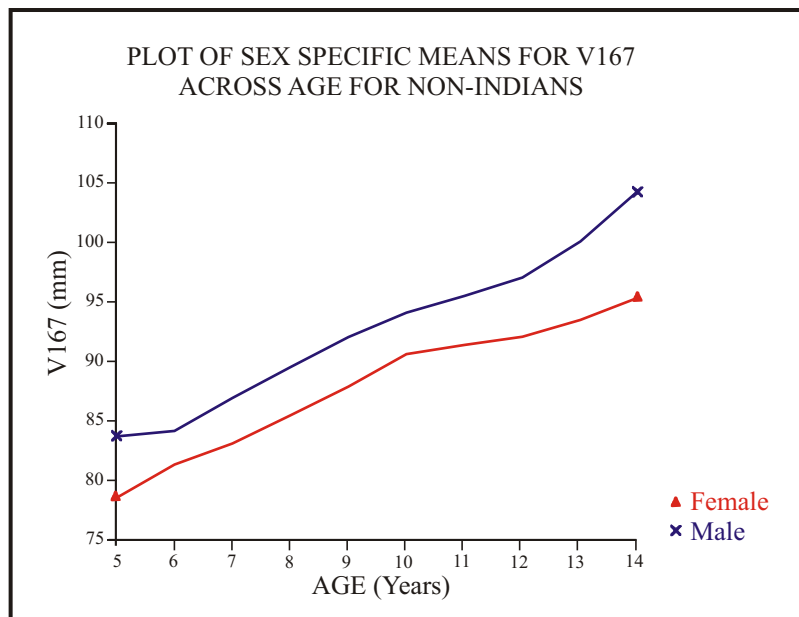
35-6

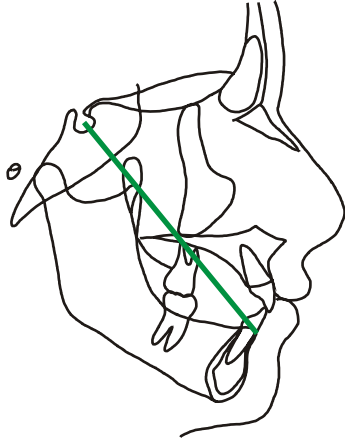
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	82.390	85.330	83.712	1.1189	.318	-.965 **
6	7	77.747	88.223	84.176	3.9570	-.680	-1.029
7	7	80.855	92.067	86.963	3.8729	-.286	-1.009 *
8	10	84.850	94.671	89.570	3.4031	.130	-1.135 **
9	9	85.538	98.631	92.110	4.1865	-.172	-.860 *
10	7	87.189	100.17	94.171	4.5255	-.285	-1.060
11	9	87.034	102.76	95.589	5.3392	-.181	-1.077
12	9	88.398	105.10	97.139	5.5234	-.089	-1.043 **
13	9	90.521	106.44	100.19	5.6041	-.808	-.640 **
14	4	102.03	108.07	104.48	2.5507	.712	-.890 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	78.169	79.162	78.521	.55644	.697	-1.500
6	7	78.441	86.683	81.334	2.7633	.977	.085
7	13	78.646	89.74	83.117	3.3440	.636	-.770
8	12	78.365	91.851	85.496	3.4372	-.145	.255
9	9	81.060	93.012	87.923	3.6299	-.352	-.382
10	13	83.987	98.275	90.668	4.2398	.658	-.364
11	13	83.956	97.813	91.443	3.9974	.206	-.430
12	12	83.219	98.600	92.136	3.6738	-.788	1.472
13	11	85.260	100.76	93.559	3.8074	-.319	.980
14	10	87.297	102.62	95.449	4.2050	-.135	.066





LINEAR MEASUREMENT VARIABLE 168

Sella-Infradentale

S-ID

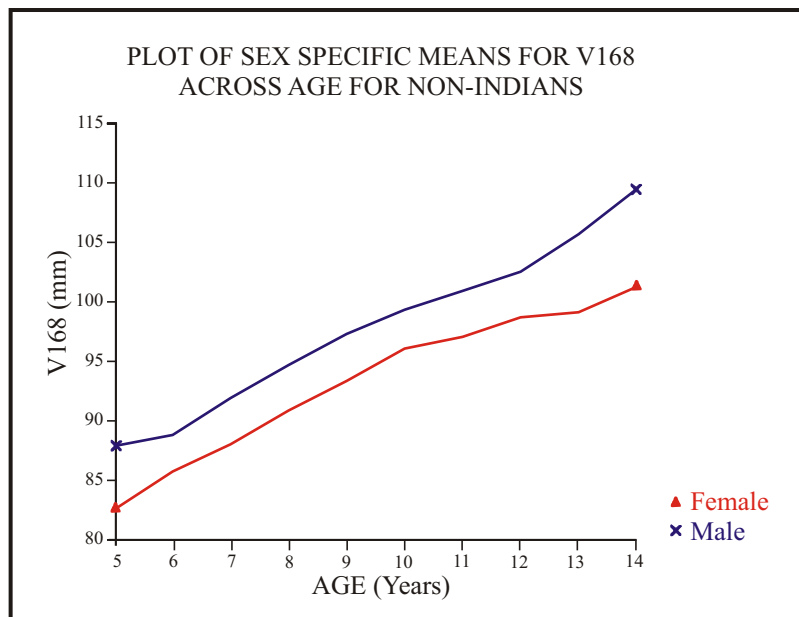
35-5

Male Non-Indian

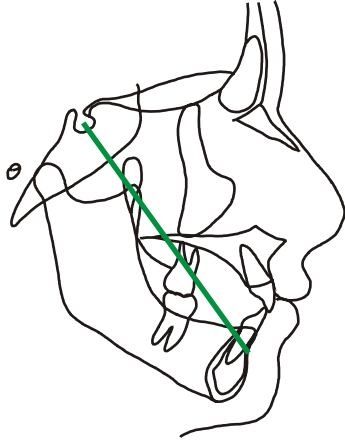
Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	85.005	89.308	87.715	1.6481	-.943	-.415 **
6	7	82.221	91.669	88.644	3.7873	-.869	-.913
7	7	84.766	97.518	91.769	4.5101	-.312	-1.152
8	10	88.372	99.323	94.557	3.5891	-.334	-.922 **
9	9	91.858	102.33	97.181	3.6472	-.251	-1.087 *
10	7	93.053	103.94	99.226	4.1861	-.311	-1.315
11	9	93.051	106.93	100.82	4.8546	-.225	-1.100
12	9	95.335	109.48	102.44	4.7555	.128	-1.083 **
13	9	97.319	111.18	105.61	5.0805	-.618	-.946 **
14	4	106.43	113.01	109.42	2.8286	.301	-1.273 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	82.166	82.633	82.361	.24249	.521	-1.500
6	7	82.345	90.584	85.557	2.9887	.588	-.980
7	13	83.284	93.529	87.860	3.7501	.354	-1.229
8	12	84.073	96.190	90.713	3.4225	-.129	-.396
9	9	86.300	98.634	93.208	3.8322	-.137	-.476
10	13	88.173	104.54	95.944	4.4539	.576	-.044
11	13	88.783	104.61	96.936	4.2448	.228	-.183
12	11	96.306	103.90	98.586	2.1679	1.381	1.316
13	11	90.084	105.74	99.015	3.6975	-.824	1.966
14	10	92.042	108.23	101.16	4.1974	-.590	.830



LINEAR MEASUREMENT VARIABLE 169



Sella-B Point

S-B

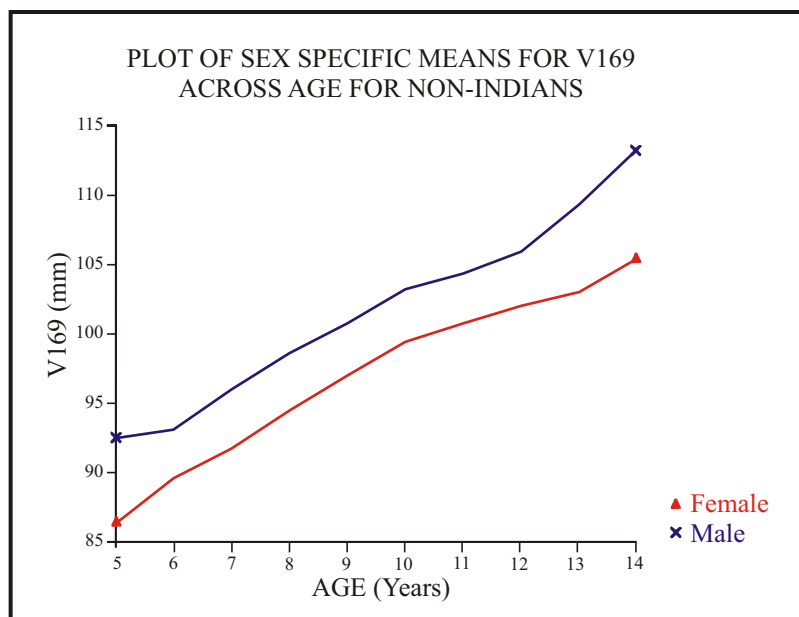
35-4

Male Non-Indian

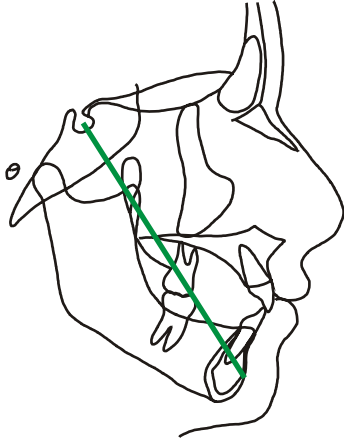
Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	89.067	97.169	92.478	3.0815	.586	-.830 **
6	7	86.504	95.967	93.098	3.3024	-1.258	.284 *
7	7	89.948	99.982	96.006	3.8094	-.527	-1.217 *
8	10	93.084	102.93	98.637	3.2235	-.192	-1.101 **
9	9	95.619	105.14	100.80	3.1776	-.259	-1.074
10	7	97.538	107.68	103.27	4.0115	-.291	-1.372
11	9	97.709	109.84	104.41	4.2965	-.144	-1.209
12	9	100.41	112.84	106.00	4.1207	.428	-1.023 **
13	9	101.36	114.32	109.42	4.7942	-.662	-1.059 **
14	4	109.86	116.82	113.42	3.1064	-.061	-1.543 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	85.194	87.339	86.278	1.0727	-.041	-1.500
6	7	85.841	94.238	89.571	3.0862	.253	-1.299
7	13	86.366	98.325	91.725	3.8816	.434	-.780
8	12	88.748	99.975	94.480	3.4092	.293	-.771
9	9	90.420	104.68	97.017	4.4757	.327	-.695
10	13	91.257	108.73	99.461	4.7422	.600	.002
11	13	92.096	109.61	100.80	4.3809	.197	.219
12	11	99.721	107.08	102.07	2.0383	1.299	1.341
13	11	94.997	110.62	103.07	3.7163	-.172	1.356
14	10	96.152	111.54	105.50	4.1450	-.908	.862



LINEAR MEASUREMENT VARIABLE 170



Sella-Pogonion

S-PG

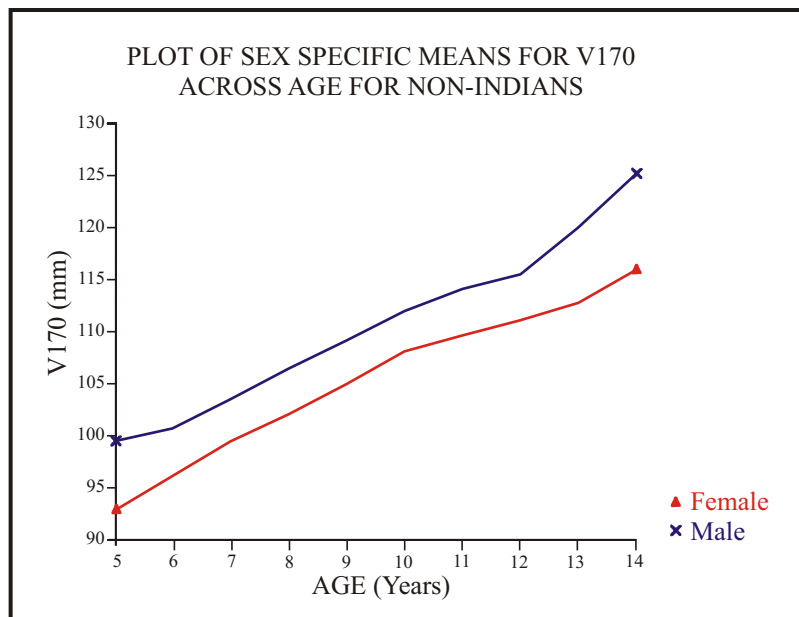
35-3

Male Non-Indian

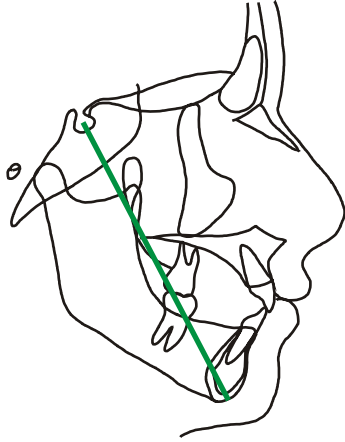
Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	94.873	103.00	99.285	3.0245	-.317	-.846 **
6	7	92.894	106.20	100.52	4.3815	-.629	-.533 *
7	7	96.373	107.73	103.34	4.6430	-.435	-1.521
8	10	100.46	111.94	106.29	4.2026	-.156	-1.577 **
9	9	102.07	116.07	109.01	4.8397	-.233	-1.263
10	7	104.58	118.65	111.85	5.7322	-.150	-1.668
11	9	106.03	121.93	113.99	5.2923	-.122	-1.126
12	9	108.09	123.88	115.40	5.0907	.179	-.953 *
13	9	110.80	125.88	119.94	5.6722	-.650	-1.074 **
14	4	121.10	129.23	125.13	3.8344	.014	-1.749 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	90.992	93.977	92.579	1.5016	-.228	-1.500
6	7	91.304	100.76	95.925	3.4199	.147	-1.343
7	13	94.189	107.44	99.270	3.9497	.797	-.265
8	12	93.792	107.80	101.88	3.9049	-.290	-.214
9	9	95.786	111.91	104.80	5.0518	-.144	-.562
10	13	97.977	119.01	107.96	5.6567	.518	.036
11	13	99.068	118.58	109.50	5.3036	.008	-.309
12	12	100.42	117.84	110.97	4.3330	-.846	1.334
13	11	102.34	121.11	112.65	4.5967	-.454	1.147
14	10	104.59	124.04	115.85	5.0131	-.751	1.086



LINEAR MEASUREMENT VARIABLE 171



Sella-Gnathion

S-GN

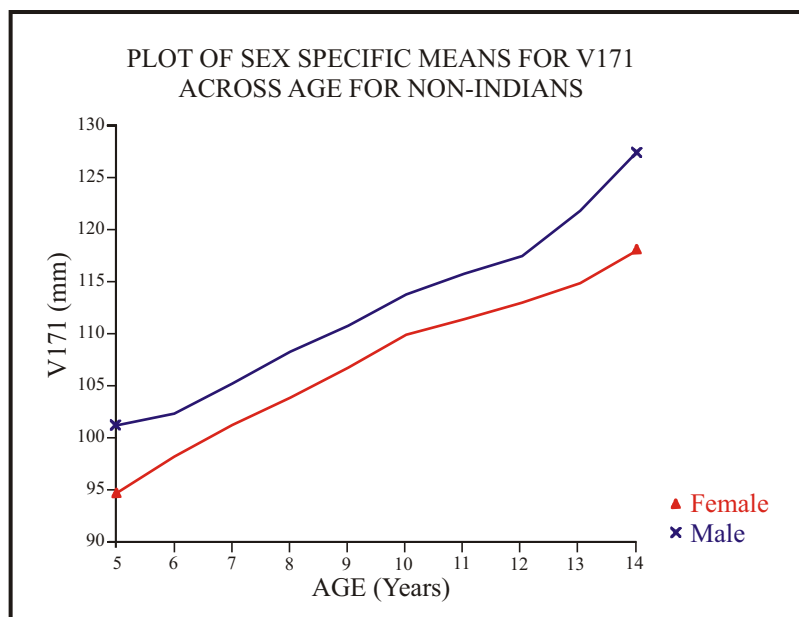
35-2

Male Non-Indian

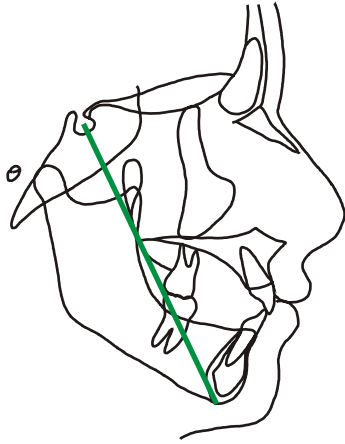
Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	97.260	105.00	101.15	2.8834	.003	-.948 **
6	7	96.001	107.75	102.29	4.1162	-.438	-.968 *
7	7	99.543	108.77	105.19	4.1291	-.358	-1.731
8	10	102.13	114.19	108.27	4.0158	-.165	-1.338 **
9	9	103.95	118.41	110.78	4.8534	-.116	-1.108
10	7	106.10	120.48	113.80	5.4509	-.231	-1.493
11	9	107.69	123.74	115.80	5.0574	-.126	-.878
12	9	109.43	126.27	117.51	5.0680	.178	-.633 *
13	9	113.02	128.34	121.88	5.6726	-.653	-.955 **
14	4	123.26	131.40	127.68	3.7968	-.173	-1.660 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	92.889	95.897	94.594	1.5436	-.447	-1.500
6	7	94.210	101.90	98.135	2.9742	.042	-1.548
7	13	96.915	109.03	101.19	3.7225	.779	-.274
8	12	95.132	109.12	103.83	3.8111	-.780	.340
9	9	97.318	114.25	106.73	5.1825	-.208	-.499
10	13	100.20	119.96	109.91	5.2540	.416	.125
11	13	100.93	119.84	111.41	4.9854	-.178	-.034
12	12	102.65	119.79	113.01	4.2007	-.900	1.502
13	11	104.52	123.16	114.89	4.4539	-.594	1.591
14	10	106.64	126.44	118.11	5.0557	-.793	1.226



LINEAR MEASUREMENT VARIABLE 172



Sella-Menton

S-ME

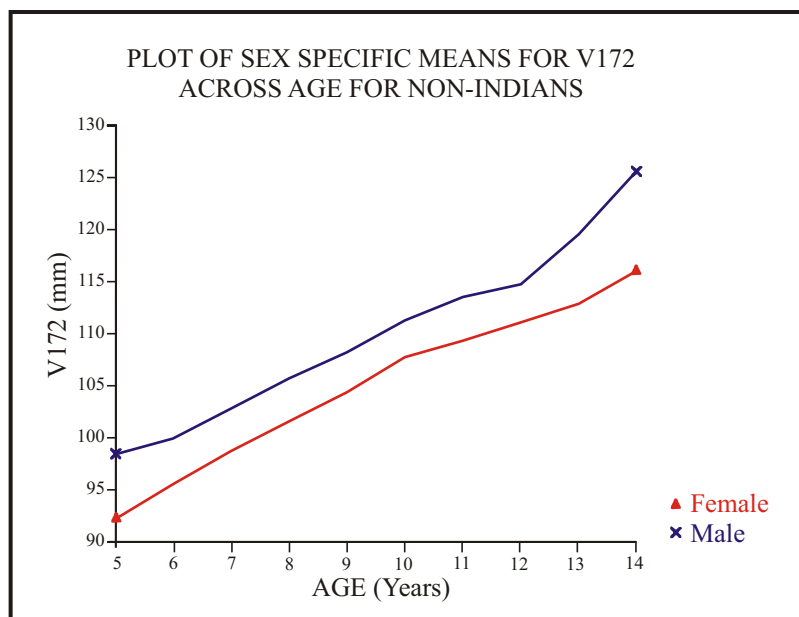
35-1

Male Non-Indian

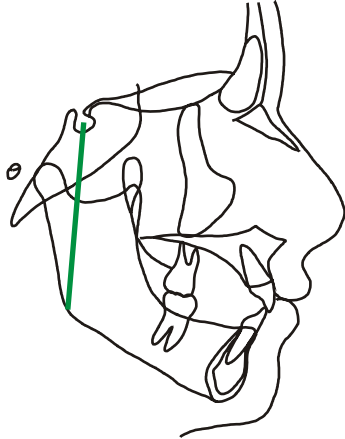
Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	94.268	103.92	98.966	3.6011	.089	-.952 *
6	7	94.717	107.19	100.50	4.3243	-.066	-.829 *
7	7	98.708	107.61	103.39	4.2031	-.226	-1.863 *
8	10	99.895	111.51	106.30	4.0409	-.242	-1.390 **
9	9	102.57	115.94	108.83	4.7632	-.070	-1.258
10	7	103.46	118.06	111.91	5.4543	-.423	-1.331
11	9	106.39	122.17	114.17	4.8959	-.044	-.865
12	9	108.06	123.72	115.40	4.7790	.182	-.732
13	9	111.27	125.87	120.24	5.5044	-.761	-.941 **
14	4	121.82	129.87	126.36	3.6377	-.321	-1.465 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	89.963	95.129	92.700	2.5966	-.215	-1.500
6	7	92.479	99.338	96.087	2.8959	-.061	-1.644
7	13	95.253	105.71	99.287	3.4587	.541	-.733
8	12	93.185	108.12	102.15	3.9073	-.822	.542
9	9	95.857	111.60	104.97	5.1228	-.349	-.806
10	13	99.290	118.03	108.36	5.0536	.400	.002
11	13	100.14	119.01	109.95	5.0919	-.004	-.346
12	12	101.22	118.79	111.72	4.4447	-.731	.951
13	11	103.81	121.66	113.52	4.3983	-.426	.987
14	10	105.44	124.68	116.71	4.8290	-.925	1.602



LINEAR MEASUREMENT VARIABLE 173



Sella-Gonion

S-GO

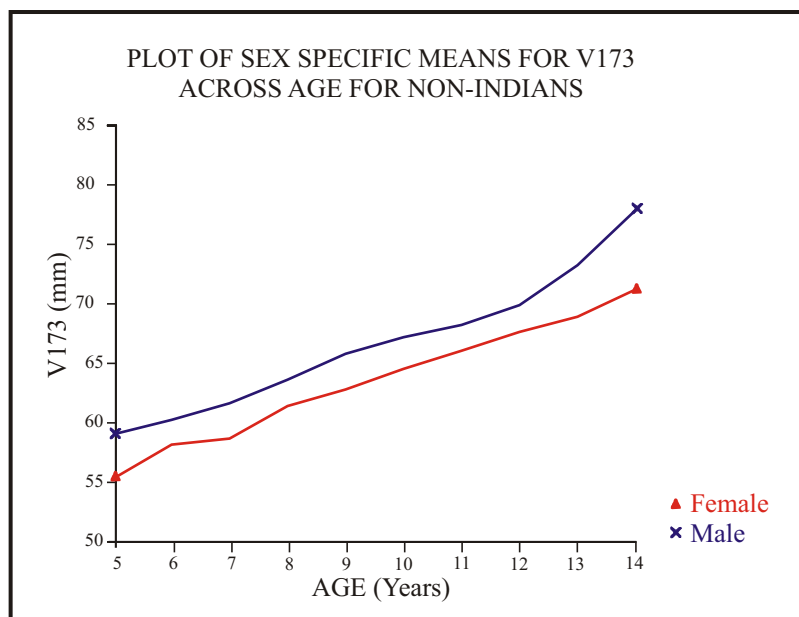
35-27

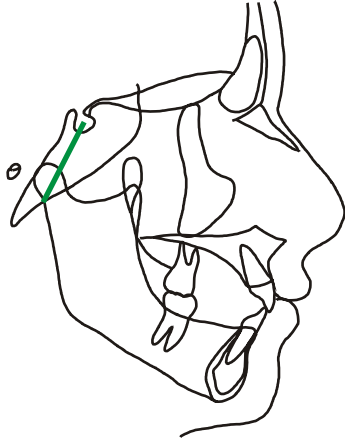
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	56.756	63.402	59.352	2.8690	.472	-1.340
6	7	56.888	66.019	60.569	3.1723	.452	-.743
7	7	58.067	65.544	61.972	2.7446	.018	-1.374 *
8	10	58.801	67.579	63.963	2.6010	-.622	-.271 **
9	9	60.534	69.828	66.152	2.8876	-.627	-.443 *
10	7	62.547	71.608	67.554	3.3753	-.249	-1.328
11	9	63.761	72.347	68.590	2.6771	-.198	-.615
12	9	65.706	73.761	70.266	2.2834	-.477	.138
13	9	66.817	78.270	73.638	3.6342	-.489	-.446 **
14	4	76.727	81.598	78.284	2.2749	.973	-.834 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	54.574	57.361	55.620	1.5178	.665	-1.500
6	7	55.715	62.116	58.476	2.2412	.447	-.928
7	13	55.826	61.787	58.988	2.0532	-.159	-1.321
8	11	59.485	63.611	61.738	1.4088	-.170	-1.186
9	9	56.656	67.239	63.136	2.9699	-.970	.767
10	13	59.528	70.194	64.878	2.9484	-.071	-.554
11	13	59.409	73.306	66.410	3.5894	.060	-.171
12	12	62.512	76.432	68.001	3.9916	.821	-.178
13	11	64.202	73.760	69.283	2.6813	-.086	-.413
14	10	65.002	77.050	71.582	3.1675	-.369	.506





LINEAR MEASUREMENT VARIABLE 174

Sella-Articulare, Posterior

S-AR

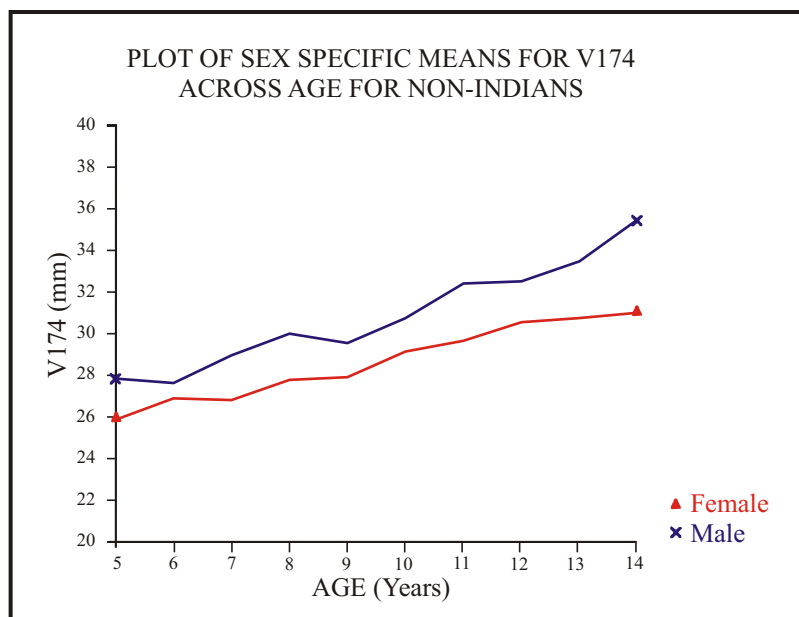
35-31

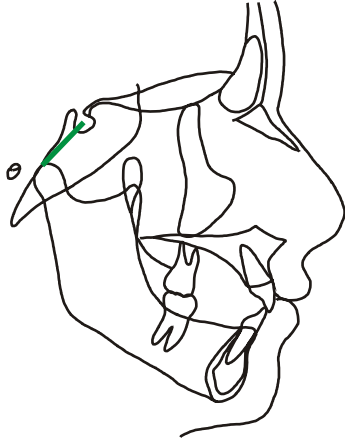
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	23.604	30.934	27.791	2.6611	-.620	-.475
6	7	24.764	30.772	27.576	2.0702	.275	-.937
7	7	27.341	31.763	28.914	1.5738	.737	-.531 **
8	10	26.401	32.933	29.960	2.0658	-.095	-.843 **
9	9	26.675	32.339	29.506	2.0087	.104	-1.268
10	7	29.054	32.541	30.710	1.3874	.054	-1.451
11	9	27.829	36.458	32.383	2.4099	-.177	.053 **
12	9	29.002	34.862	32.487	2.0163	-.680	-.657 *
13	9	29.399	38.590	33.453	2.7130	.420	-.295 *
14	4	32.584	37.750	35.462	2.1473	-.454	-.991 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	23.879	28.446	25.802	2.3674	.507	-1.500
6	7	24.053	33.980	26.836	3.5178	1.336	.482
7	13	24.145	30.277	26.754	1.8200	.239	-.824
8	12	24.776	30.444	27.728	1.7384	.092	-1.026
9	9	24.722	31.282	27.859	2.3133	.065	-1.175
10	13	24.746	34.756	29.097	2.8761	.556	-.540
11	13	24.903	33.243	29.617	2.6183	-.217	-.916
12	12	27.911	35.502	30.514	2.5223	.943	-.399
13	11	27.374	34.745	30.714	2.0018	.245	.082
14	10	27.399	34.500	30.970	2.1390	-.059	-.754





LINEAR MEASUREMENT VARIABLE 175

Sella-Condylion

S-CO

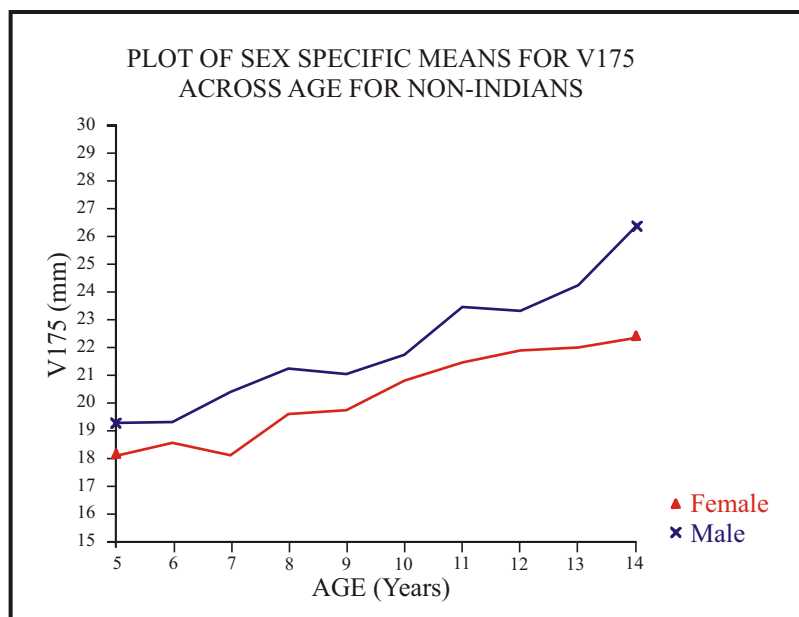
35-33

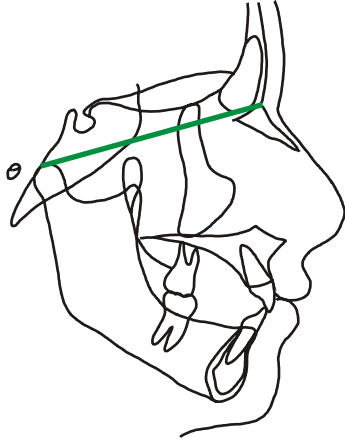
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	15.626	22.122	19.257	2.3554	-.508	-.545
6	7	16.853	21.907	19.290	2.0158	.320	-1.355
7	7	17.889	23.209	20.378	1.6120	.296	-.027 **
8	10	17.968	24.890	21.227	2.3677	.135	-1.067 *
9	9	19.117	23.774	21.027	1.4909	.348	-.537
10	7	19.924	24.093	21.726	1.6615	.396	-1.471
11	9	18.689	27.756	23.458	2.4041	-.308	.661
12	9	20.035	25.485	23.316	1.9586	-.579	-.909
13	9	20.198	28.450	24.247	2.3842	.032	-.336 *
14	4	23.760	29.489	26.392	2.3541	.338	-.975 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	15.396	20.802	18.052	2.7041	.064	-1.500
6	7	15.335	25.579	18.537	3.4658	1.320	.510
7	13	15.022	23.003	18.086	2.3545	.519	-.489
8	12	16.259	22.862	19.580	2.1565	.171	-1.235
9	9	15.976	22.344	19.719	1.9939	-.537	-.610
10	13	17.323	26.867	20.789	2.9070	.855	-.247
11	13	17.669	24.627	21.447	2.2744	.109	-1.197
12	12	17.997	27.638	21.882	2.7982	.640	-.400
13	11	18.099	25.454	21.990	1.9787	-.330	-.028
14	10	19.398	26.344	22.341	2.4806	.373	-1.053





LINEAR MEASUREMENT VARIABLE 176

Nasion- Condylion

N-CO

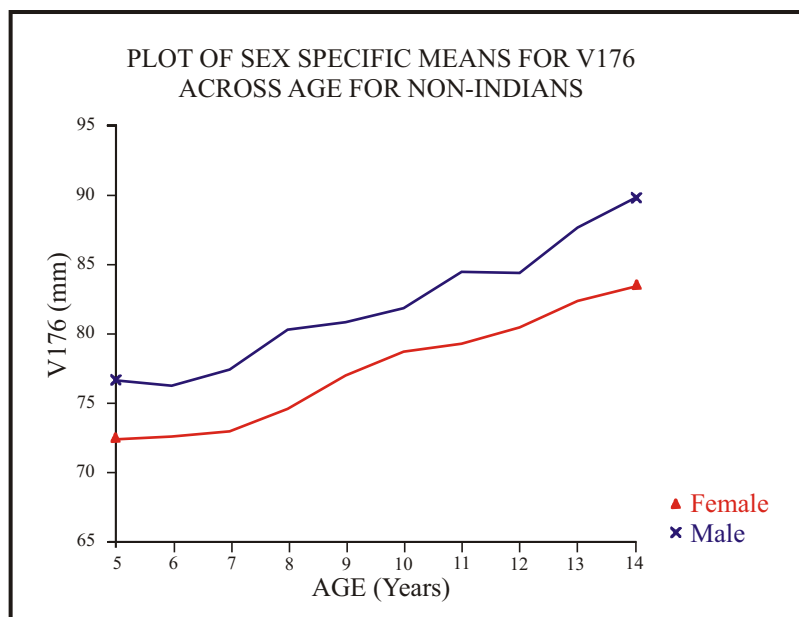
38-33

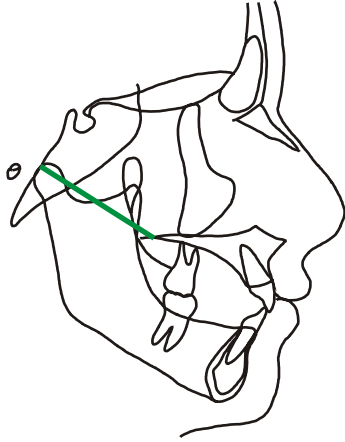
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	73.958	81.482	77.037	3.5511	.402	-1.712
6	7	69.545	83.256	76.636	4.6593	-.195	-.914
7	7	72.920	82.052	77.807	3.7648	-.297	-1.325 **
8	10	74.237	85.342	80.696	3.8495	-.504	-.953 **
9	9	74.635	86.692	81.238	4.0444	-.252	-.964 *
10	7	75.416	88.363	82.254	4.4867	-.078	-1.069
11	9	80.660	89.310	84.884	2.6655	.002	-.798 **
12	9	76.076	89.070	84.805	3.7800	-1.335	1.314 **
13	9	80.145	98.269	88.092	5.0855	.537	.177 **
14	4	87.356	93.539	90.255	3.2867	.037	-1.948 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	64.089	81.243	72.744	8.5777	-.033	-1.500
6	7	69.137	80.900	72.954	4.0712	1.027	.127
7	12	71.298	76.277	73.331	1.4921	.337	-.525
8	11	72.758	77.841	74.960	1.7468	.353	-1.341
9	9	74.313	85.238	77.379	3.6397	1.257	.387
10	13	74.387	86.497	79.103	3.3186	.698	.176
11	13	76.084	88.245	79.679	3.6386	1.105	.316
12	12	76.382	89.721	80.860	3.8569	1.034	.323
13	11	79.082	89.562	82.776	3.3535	1.108	-.066
14	10	79.853	92.420	83.824	3.8534	1.071	.424





LINEAR MEASUREMENT VARIABLE 177

Condylion-Posterior Nasal Spine

CO-PNS

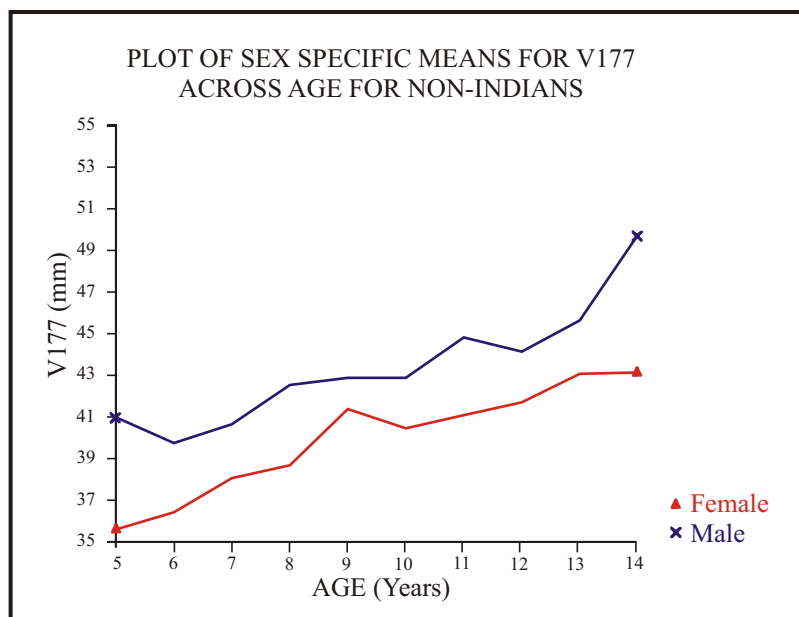
33-45

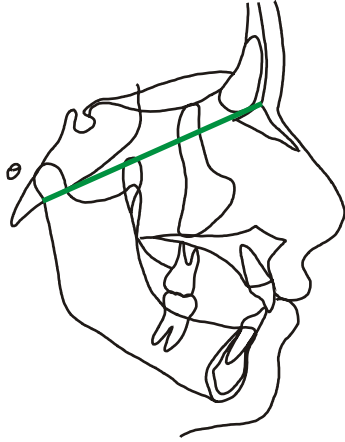
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	38.177	44.171	40.997	2.6019	-.073	-1.560
6	7	34.131	44.003	39.752	3.5842	-.400	-1.065
7	7	37.598	43.809	40.660	1.9264	.033	-.321
8	10	37.520	46.007	42.556	2.7618	-.719	-.635 **
9	9	37.820	48.015	42.901	3.2011	.076	-.877
10	7	35.379	48.138	42.901	4.1818	-.665	-.389
11	9	38.116	48.557	44.852	3.3331	-.727	-.138 **
12	9	38.350	49.801	44.167	3.7089	-.014	-1.023 *
13	9	38.339	51.856	45.675	4.8013	-.457	-1.161
14	4	47.892	51.810	49.795	1.6332	.110	-1.148 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	28.954	40.748	35.621	6.0457	-.437	-1.500
6	7	31.532	38.579	36.450	2.5093	-1.120	.088
7	13	31.658	43.434	38.099	3.3081	-.601	-.062
8	12	31.477	44.438	38.721	3.3595	-.455	.258
9	9	36.375	45.116	41.436	2.6467	-.482	-.369
10	13	36.425	46.950	40.507	3.1526	.667	-.494
11	13	35.389	45.460	41.141	3.1361	-.315	-.930
12	12	38.379	45.002	41.761	2.1219	-.072	-1.166
13	11	39.094	47.469	43.139	3.0908	.081	-1.423
14	10	37.168	47.522	43.203	3.0911	-.491	-.411





LINEAR MEASUREMENT VARIABLE 178

Nasion- Articulare, Posterior

N-AR

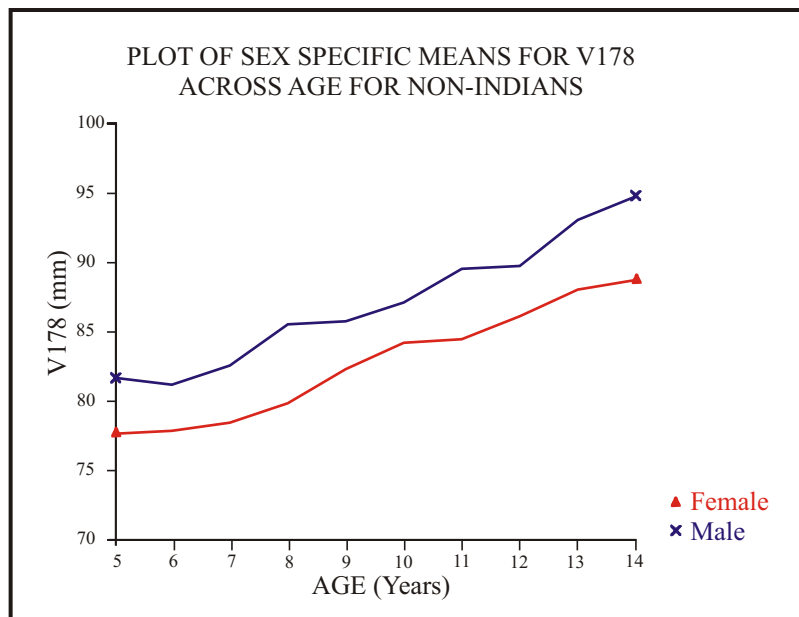
38-31

Male Non-Indian

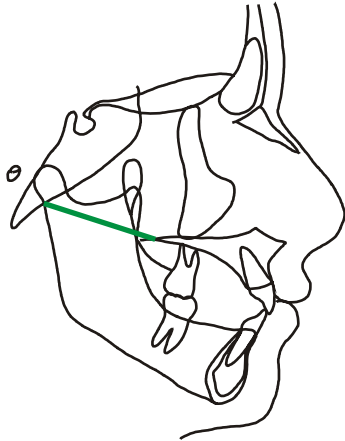
Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	5	77.388	86.205	81.856	3.7357	.118	-1.549
6	7	74.731	87.652	81.348	4.5371	-.068	-1.086
7	7	77.684	87.123	82.737	3.7675	-.340	-1.299 **
8	10	79.865	91.012	85.722	3.7061	-.173	-1.033 **
9	9	78.869	91.959	85.942	4.0479	-.212	-.647
10	7	80.519	93.688	87.306	4.4227	.037	-.853
11	9	85.347	94.879	89.742	2.8808	.272	-.575 **
12	9	81.341	94.837	89.950	3.7916	-1.168	1.214 **
13	9	84.648	102.97	93.283	5.0834	.297	.119 *
14	4	91.782	98.219	94.987	3.2856	.004	-1.922 **

Female Non-Indian

Age	N	Minimun	Maximun	Mean	Std Dev	Skewness	Kurtosis
5	3	70.355	85.036	77.794	7.3429	-.049	-1.500
6	7	73.749	85.736	78.008	3.9745	.995	.142
7	12	75.823	80.467	78.598	1.4120	-.546	-.572
8	11	76.576	82.819	80.007	1.8463	-.169	-.670
9	9	79.205	91.094	82.479	3.8414	1.413	.817
10	13	78.964	91.750	84.386	3.3518	.569	.197
11	13	80.930	93.417	84.644	3.6275	1.208	.634
12	12	81.637	95.824	86.307	3.8525	1.248	1.137
13	11	84.884	95.666	88.237	3.4626	1.432	.515
14	10	85.084	97.150	88.935	3.5263	1.222	1.024



LINEAR MEASUREMENT VARIABLE 179



**Articulare, Posterior-
Posterior Nasal Spine**

AR-PNS

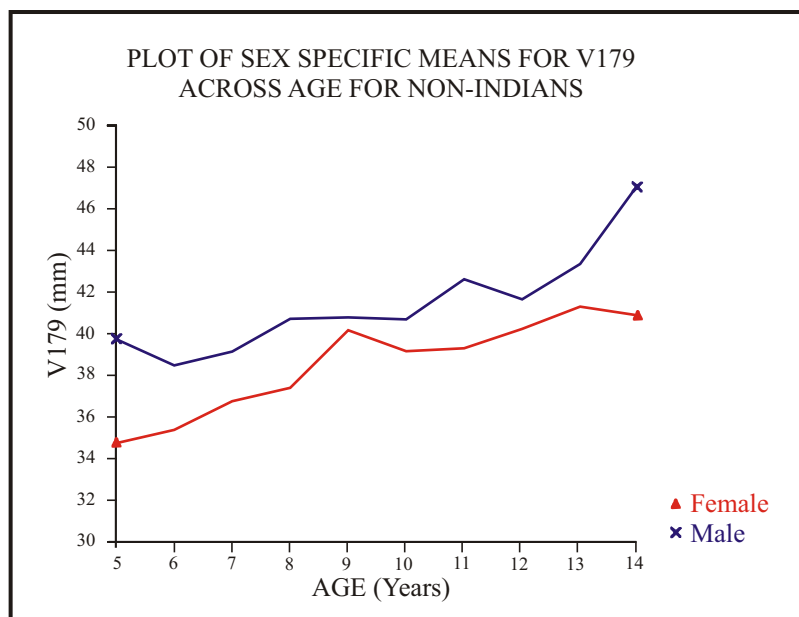
31-45

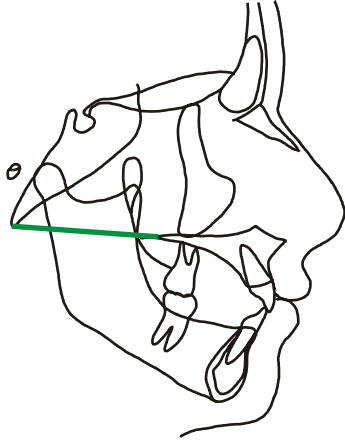
Male Non-Indian

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	35.714	42.477	39.640	2.6278	-.519	-.955
6	7	33.648	42.833	38.375	3.3453	-.109	-1.252
7	7	36.486	43.326	39.043	2.3616	.778	-.483
8	10	35.260	43.943	40.624	3.0784	-.819	-.575 **
9	9	36.038	45.720	40.693	3.3724	-.156	-1.215
10	7	34.443	47.624	40.597	4.3374	.282	-.734
11	9	36.720	45.305	42.535	3.0017	-.900	-.607 **
12	9	35.400	47.660	41.566	4.1851	.117	-1.319
13	9	34.848	50.431	43.273	5.0882	-.368	-1.014
14	4	44.214	50.982	47.111	2.8671	.526	-1.050 **

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	30.155	38.015	34.619	4.0375	-.452	-1.500
6	7	31.780	37.771	35.261	2.1845	-.305	-1.069
7	13	31.383	41.860	36.645	3.0498	-.089	-.849
8	12	31.215	41.586	37.292	3.2100	-.378	-.605
9	9	36.173	42.895	40.073	2.1038	-.291	-.543
10	13	34.905	45.035	39.060	2.7690	.689	-.158
11	13	34.515	43.028	39.202	2.8860	.039	-1.409
12	12	36.322	43.944	40.138	2.0864	.125	-.253
13	11	36.852	46.365	41.213	3.1807	.417	-1.121
14	10	37.631	46.378	40.789	2.6974	.937	-.086





LINEAR MEASUREMENT VARIABLE 180

Basion-Posterior Nasal Spine

BA-PNS

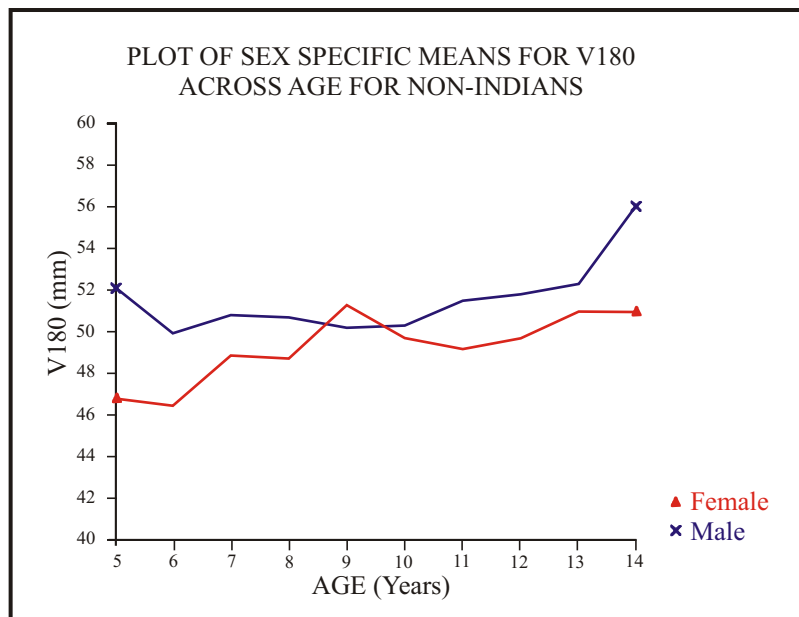
30-45

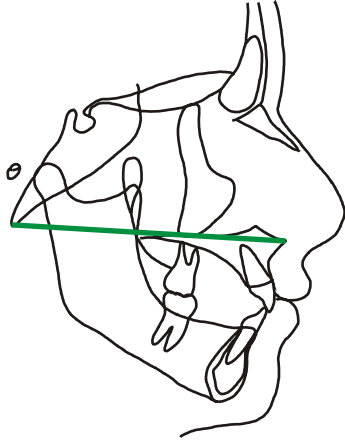
Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	50.218	54.502	52.048	1.6909	.381	-1.066 **
6	7	43.677	56.231	49.813	4.4901	.031	-1.240
7	7	45.118	57.375	50.692	4.1470	.395	-.830
8	10	44.411	57.148	50.580	3.8324	-.048	-.737
9	9	44.827	56.029	50.079	3.7401	-.020	-1.031
10	7	43.947	56.297	50.187	4.5711	.250	-1.139
11	9	45.027	54.991	51.385	3.1052	-.884	-.073
12	9	45.933	56.642	51.696	4.0792	-.020	-1.526
13	9	44.238	61.200	52.197	5.3690	-.078	-.684
14	4	54.461	58.623	56.011	1.8570	.776	-.997 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	46.320	46.843	46.664	.29766	-.705	-1.500
6	7	43.624	48.568	46.314	1.7547	-.350	-1.097
7	13	41.887	58.336	48.739	4.9963	.381	-.490
8	12	42.386	54.435	48.593	3.5345	-.073	-.639
9	9	47.776	58.130	51.173	3.0989	1.247	.881
10	13	43.570	56.231	49.582	3.5093	.359	-.360
11	13	42.202	53.816	49.050	3.4109	-.374	-.541
12	12	44.301	52.947	49.571	2.5077	-.553	-.289
13	11	43.417	55.405	50.862	4.1842	-.515	-1.132
14	10	45.877	58.051	50.840	3.7982	.505	-.628





LINEAR MEASUREMENT VARIABLE 181

Basion-Anterior Nasal Spine

BA-ANS

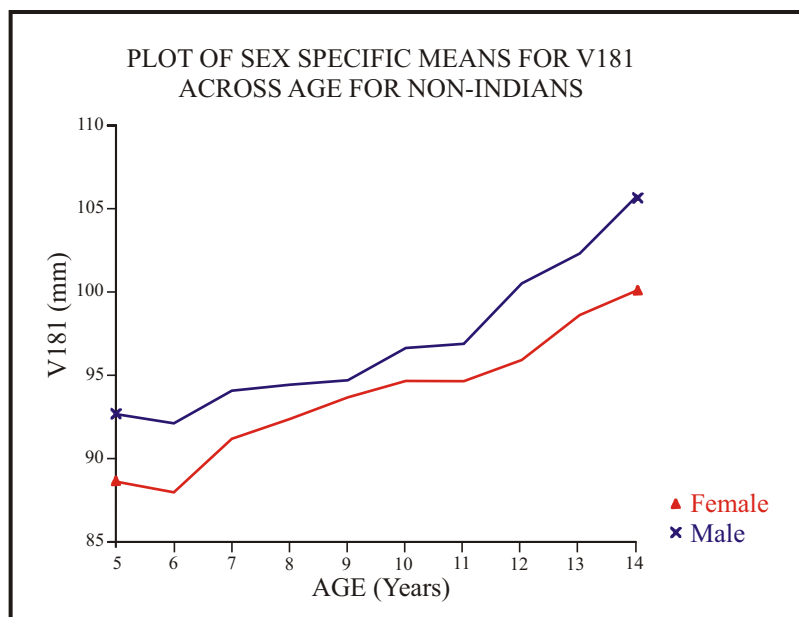
30-10

Male Non-Indian

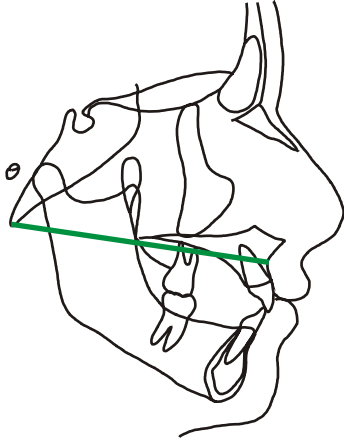
Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	89.804	97.144	92.207	3.0165	.993	-.569
6	7	84.199	100.03	92.174	5.3964	.030	-1.022
7	7	84.718	100.35	93.365	5.4564	-.186	-.969
8	10	87.652	104.18	94.083	4.5109	.951	.705
9	9	87.249	99.916	94.340	3.7794	-.495	-.383
10	7	88.253	106.14	95.986	5.8361	.465	-.492
11	9	89.968	104.30	96.239	4.2795	.229	-.169
12	9	92.008	102.31	99.089	3.1382	-1.331	.899 **
13	9	93.892	112.53	102.32	5.4015	.446	-.106
14	4	101.93	111.66	105.42	4.4495	.767	-1.041 *

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	87.272	91.125	88.582	2.2028	.706	-1.500
6	7	84.952	90.059	87.868	2.1367	-.150	-1.606
7	13	84.234	97.847	91.046	4.3423	.236	-1.124
8	12	83.282	96.535	91.305	3.5799	-.857	.268
9	9	88.388	99.643	93.425	3.7302	.382	-.852
10	13	89.878	99.743	94.592	2.9514	.219	-.976
11	13	89.559	100.44	94.292	3.5545	.411	-1.047
12	12	90.078	100.46	95.553	3.0973	.133	-.681
13	11	91.378	104.84	97.819	3.8905	.228	-.397
14	10	95.403	106.37	99.822	3.4565	.670	-.547



LINEAR MEASUREMENT VARIABLE 182



Basion-A Point

BA-A

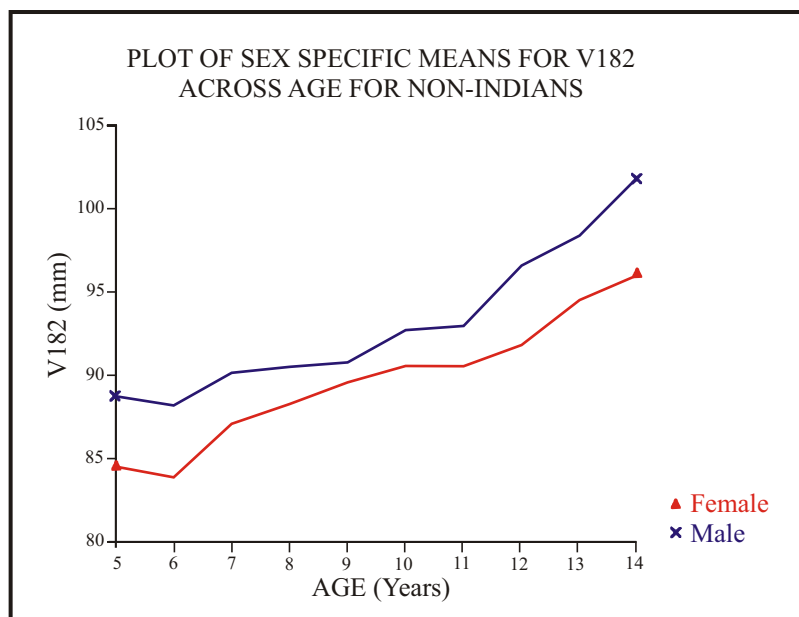
30-9

Male Non-Indian

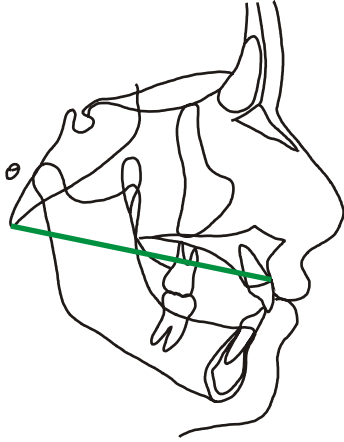
Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	86.260	92.965	88.906	2.7927	.578	-1.245 *
6	7	81.170	94.873	88.351	4.7384	-.155	-1.097 *
7	7	82.984	95.256	90.320	4.2821	-.413	-.672
8	10	84.988	99.153	90.681	3.8319	.775	.729
9	9	85.108	95.509	90.949	3.4732	-.546	-.818
10	7	86.707	100.38	92.898	4.9448	.039	-1.044
11	9	86.902	99.889	93.150	4.0854	-.304	-.422
12	8	94.630	98.847	96.795	1.6190	-.054	-1.366 **
13	9	89.264	108.58	98.603	5.6882	.136	-.354
14	4	99.733	107.19	102.12	3.4938	.953	-.855 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	82.815	86.784	84.658	2.0000	.255	-1.500
6	7	82.496	86.056	84.011	1.2596	.365	-1.051
7	13	82.567	95.089	87.242	4.0302	.767	-.463
8	11	84.059	91.425	88.437	2.2478	-.801	-.435
9	9	85.033	95.377	89.743	3.4753	.139	-.914
10	13	86.132	95.406	90.734	2.5551	.199	-.536
11	13	86.684	97.254	90.719	3.5854	.367	-1.073
12	12	87.526	97.288	91.999	2.9159	.572	-.536
13	11	88.633	102.72	94.713	4.0764	.453	-.285
14	10	91.896	103.79	96.218	3.6495	.960	-.196



LINEAR MEASUREMENT VARIABLE 183



Basion-Supradentale

BA-SD

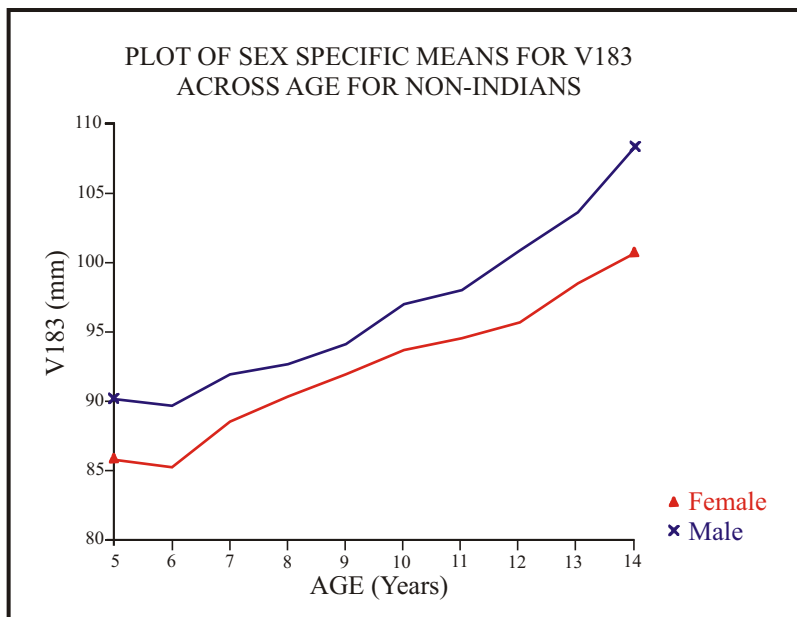
30-8

Male Non-Indian

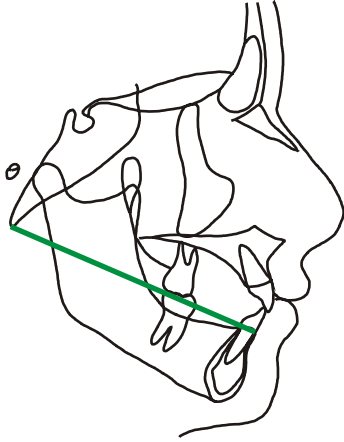
Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	87.390	94.454	90.072	2.8546	.679	-.920
6	7	81.645	96.581	89.586	5.2250	-.264	-1.162
7	7	83.747	96.673	91.858	4.7306	-.484	-.830
8	10	87.264	99.434	92.598	3.4710	.240	-.076
9	9	86.823	97.766	94.053	3.8153	-.938	-.455
10	7	90.595	104.83	96.945	5.0981	.130	-1.058
11	9	89.663	105.28	97.964	5.2664	-.460	-.811
12	9	91.337	106.59	100.84	4.5582	-.704	.348 **
13	9	92.431	112.03	103.60	5.7929	-.563	-.226 *
14	4	103.34	113.89	108.41	4.3224	.163	-1.008 **

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	82.307	89.061	85.675	3.3773	.009	-1.500
6	7	82.039	86.999	85.132	1.6315	-.948	-.085
7	13	83.209	96.986	88.436	4.2732	.745	-.385
8	11	85.957	93.172	90.254	2.0743	-.697	-.258
9	9	85.811	96.227	91.868	3.6292	-.392	-1.036
10	13	88.837	100.84	93.621	3.3470	.697	-.211
11	13	87.883	100.94	94.479	4.0316	-.039	-1.089
12	12	90.887	100.67	95.627	3.1172	.245	-.995
13	11	91.710	104.18	98.452	4.0052	-.146	-1.005
14	10	95.629	105.67	100.68	3.2067	.003	-.925



LINEAR MEASUREMENT VARIABLE 184



Basion-Infradentale

BA-ID

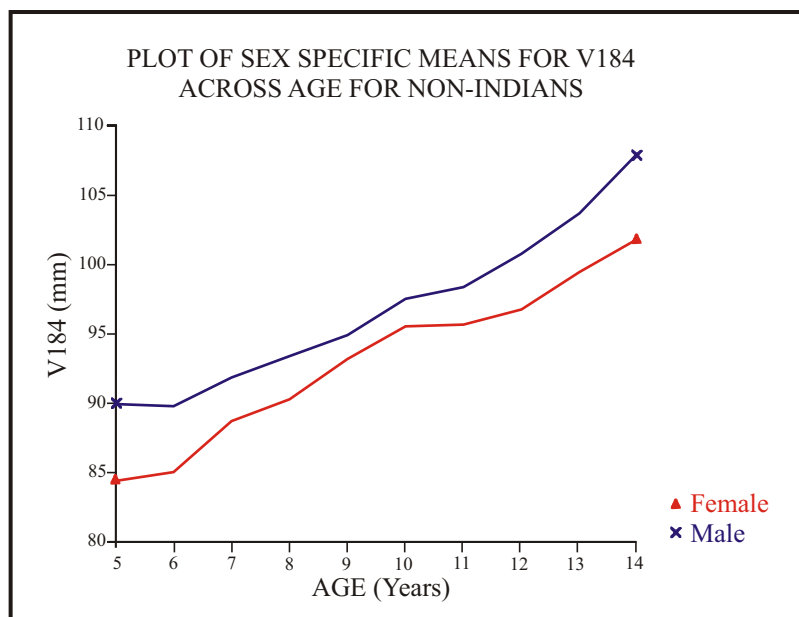
30-5

Male Non-Indian

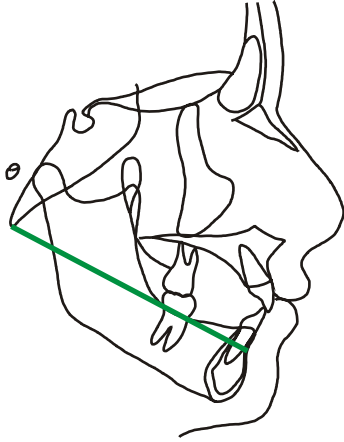
Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	85.974	93.936	89.961	3.2489	.028	-1.435 **
6	7	80.679	96.874	89.807	5.8294	-.294	-1.126
7	7	83.446	98.767	91.886	5.1888	-.238	-.886
8	10	87.451	101.09	93.435	4.7285	.396	-.946
9	9	88.233	102.09	94.958	4.3455	-.014	-.786
10	7	91.317	105.00	97.584	5.0349	.105	-1.170
11	9	89.613	107.12	98.436	6.1131	-.042	-1.074
12	9	91.959	110.77	100.85	5.4347	.448	-.102 *
13	9	93.918	112.18	103.78	6.8241	-.224	-1.240
14	4	101.91	114.26	108.11	5.3890	-.010	-1.440

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	82.884	85.546	84.394	1.3663	-.447	-1.500
6	7	81.661	88.315	85.034	2.5110	-.057	-1.473
7	13	83.717	96.422	88.729	3.8359	.721	-.355
8	12	81.348	94.903	90.307	3.8462	-.949	.469
9	9	87.031	98.001	93.228	3.8341	-.317	-1.332
10	13	90.832	103.93	95.591	3.8915	.837	-.255
11	13	88.176	102.76	95.718	3.7689	-.096	-.150
12	12	90.589	101.85	96.816	3.0908	-.194	-.341
13	11	92.729	104.34	99.527	3.9541	-.280	-1.305
14	10	94.455	107.65	101.92	3.7910	-.454	-.327



LINEAR MEASUREMENT VARIABLE 185



Basion-B Point

BA-B

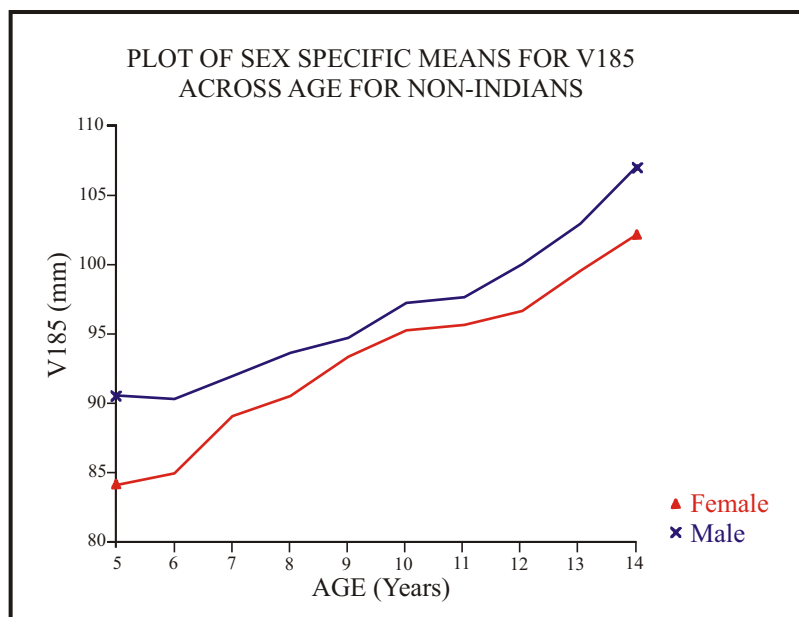
30-4

Male Non-Indian

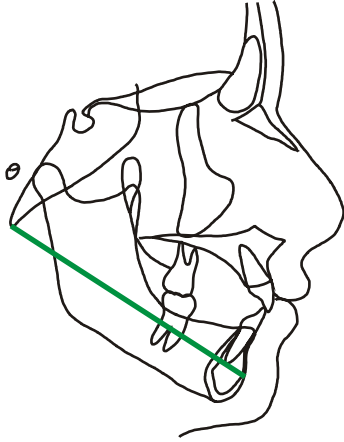
Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	85.184	96.436	90.313	4.1872	.346	-.848 **
6	7	81.300	97.698	90.057	5.6856	-.177	-1.065
7	7	83.688	97.734	91.714	5.1812	-.153	-1.155
8	10	86.514	100.88	93.398	4.5704	.424	-.713
9	9	88.693	101.18	94.488	4.0079	-.050	-.708
10	7	90.370	104.08	97.017	4.9166	.019	-1.168
11	9	88.209	105.66	97.430	6.0600	-.071	-1.051
12	9	92.120	108.30	99.827	4.8352	.481	-.273 *
13	9	92.447	112.37	102.75	6.9403	-.262	-1.099
14	4	100.95	113.79	107.02	5.6743	.152	-1.475

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	83.015	84.572	83.822	.77997	-.133	-1.500
6	7	81.202	89.002	84.669	2.7755	.224	-1.133
7	13	83.305	96.928	88.813	3.9116	.670	-.351
8	12	82.728	96.128	90.272	3.6689	-.350	-.188
9	9	87.497	99.222	93.118	4.2273	-.115	-1.450
10	13	90.101	104.31	95.030	4.4662	.876	-.375
11	13	88.679	102.83	95.423	3.8485	.202	-.531
12	12	90.996	101.75	96.435	3.0359	.258	-.361
13	11	94.240	104.70	99.338	3.9117	.016	-1.604
14	10	94.937	107.54	102.04	3.7568	-.273	-.494



LINEAR MEASUREMENT VARIABLE 186



Basion-Pogonion

BA-PG

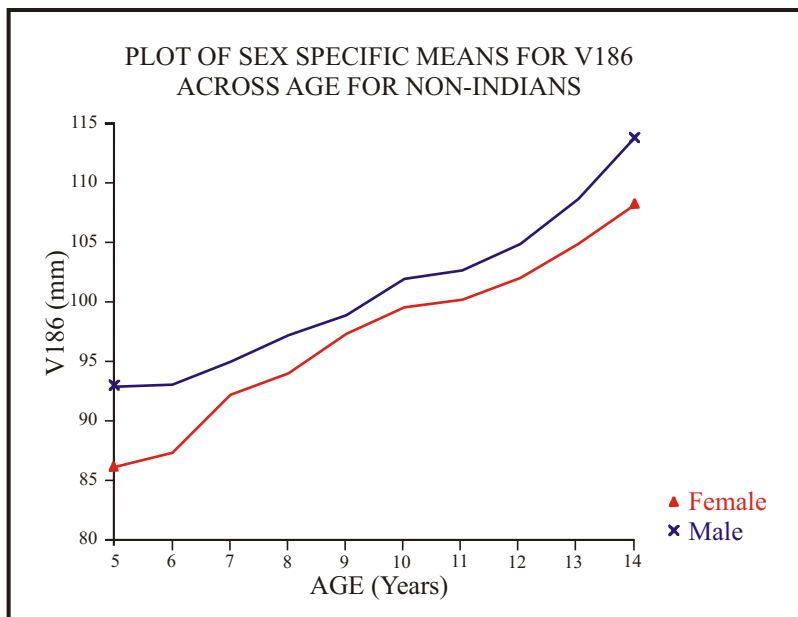
30-3

Male Non-Indian

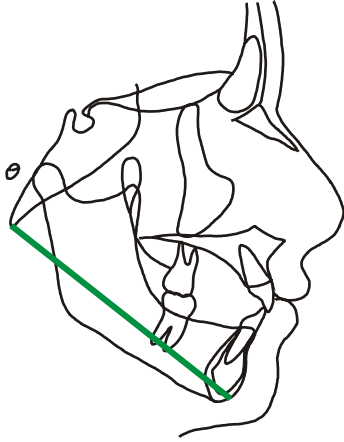
Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	86.763	98.611	92.736	4.4979	-.070	-1.076 *
6	7	84.057	101.81	92.912	6.1727	-.067	-1.108
7	7	86.307	101.12	94.842	5.7083	-.241	-1.380
8	10	89.263	105.35	97.085	5.4079	.112	-1.292
9	9	91.562	105.04	98.781	5.0431	-.208	-1.354
10	7	94.004	109.70	101.85	6.2983	.055	-1.509
11	9	92.208	111.07	102.57	6.9895	-.175	-1.213
12	9	96.166	113.45	104.80	5.5838	.309	-.692
13	9	95.672	119.13	108.60	7.9254	-.401	-1.036
14	4	107.09	121.41	113.93	6.6141	.094	-1.668

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	83.940	88.306	85.946	2.2042	.287	-1.500
6	7	83.946	92.988	87.154	3.3208	.765	-.771
7	13	86.401	100.25	92.051	4.2758	.465	-.813
8	12	85.111	101.52	93.865	4.2827	-.247	.084
9	9	90.318	102.24	97.207	4.7696	-.258	-1.512
10	13	92.991	109.00	99.446	5.3402	.610	-.905
11	13	92.019	107.21	100.09	4.7386	.078	-1.101
12	12	94.843	108.81	101.93	4.0694	.156	-.526
13	11	97.896	112.77	104.81	4.7688	.227	-1.087
14	10	99.342	115.38	108.20	4.7916	-.087	-.410



LINEAR MEASUREMENT VARIABLE 187



Basion-Gnathion

BA-GN

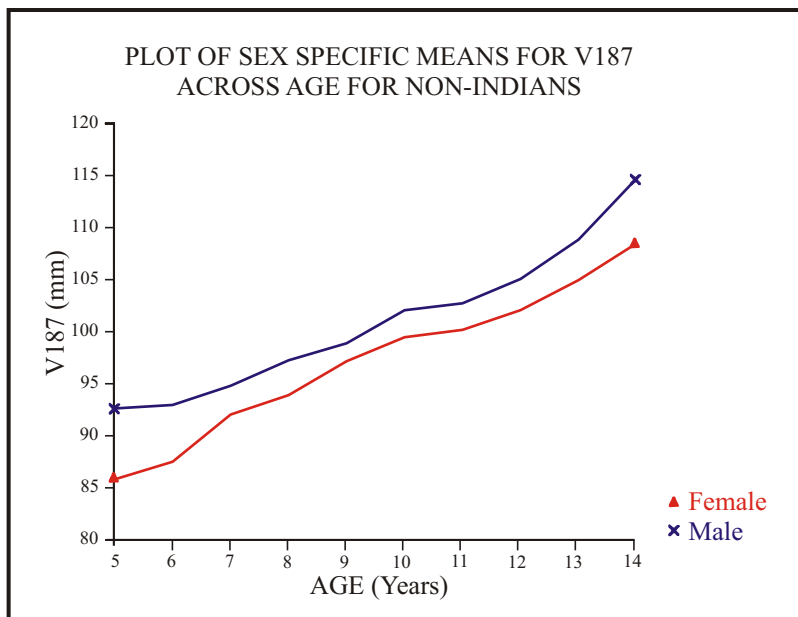
30-2

Male Non-Indian

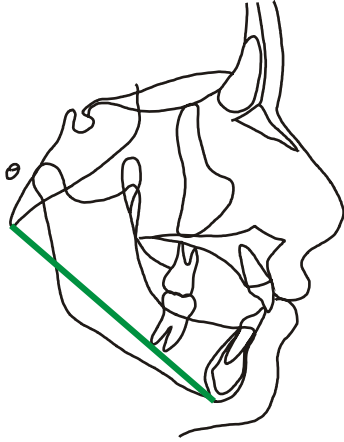
Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	86.710	98.229	92.391	4.4452	-.015	-1.169 *
6	7	84.717	101.63	92.731	6.0343	.015	-1.169
7	7	87.106	100.45	94.584	5.3788	-.094	-1.567
8	10	89.125	104.97	97.045	5.3089	.068	-1.310
9	9	91.949	105.58	98.688	5.0777	-.138	-1.364
10	7	93.793	109.62	101.88	6.2263	.058	-1.440
11	9	92.374	110.81	102.55	6.9205	-.176	-1.205
12	9	95.929	113.83	104.90	5.6585	.301	-.610
13	9	95.994	118.46	108.70	7.6918	-.467	-.999
14	4	108.01	122.25	114.60	6.6523	.148	-1.679

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	83.217	88.094	85.544	2.4459	.166	-1.500
6	7	84.266	93.013	87.247	3.3616	.770	-.870
7	13	86.272	99.415	91.805	4.1506	.331	-.907
8	12	84.360	101.61	93.680	4.4936	-.363	.094
9	9	89.653	102.49	96.954	4.9083	-.261	-1.431
10	13	92.631	108.16	99.272	5.2138	.479	-1.000
11	13	91.450	106.43	99.986	4.7498	-.095	-1.089
12	12	94.362	109.17	101.89	4.1288	.083	-.416
13	11	97.490	112.27	104.79	4.7391	.058	-1.152
14	10	98.890	115.12	108.34	4.8842	-.291	-.334



LINEAR MEASUREMENT VARIABLE 188



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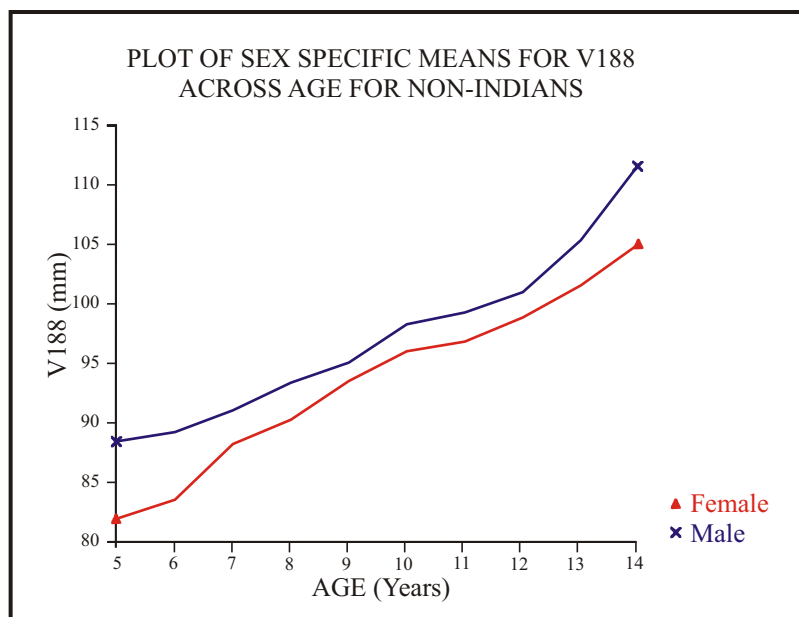
30-1

Male Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	5	81.951	95.674	88.521	5.0686	.152	-.829
6	7	81.850	99.722	89.300	6.4288	.307	-.977
7	7	85.161	97.133	91.142	5.3351	.010	-1.750
8	10	85.288	102.50	93.477	5.5046	.162	-1.093
9	9	89.240	101.73	95.177	5.1171	-.052	-1.609
10	7	89.529	106.71	98.415	6.3754	.007	-1.313
11	9	90.366	107.64	99.410	6.6230	-.070	-1.302
12	9	93.285	109.53	101.13	5.3469	.203	-.968
13	9	93.478	116.21	105.52	7.5468	-.386	-.930
14	4	106.05	120.67	111.95	6.7143	.466	-1.370

Female Non-Indian

Age	N	Minimum	Maximum	Mean	Std Dev	Skewness	Kurtosis
5	3	78.254	84.576	81.986	3.3125	-.558	-1.500
6	7	79.874	89.611	83.583	3.5956	.668	-.921
7	13	81.705	93.767	88.293	3.9757	-.096	-1.132
8	12	80.830	97.543	90.347	4.7057	-.518	-.314
9	9	86.295	100.54	93.620	5.1285	-.284	-1.285
10	13	88.503	104.81	96.133	5.2540	.287	-1.056
11	13	89.049	103.97	96.949	5.0402	-.052	-1.285
12	12	91.090	105.66	98.990	4.3280	-.116	-.831
13	11	94.898	109.07	101.70	4.9128	.030	-1.377
14	10	95.835	111.18	105.20	4.5780	-.510	-.086

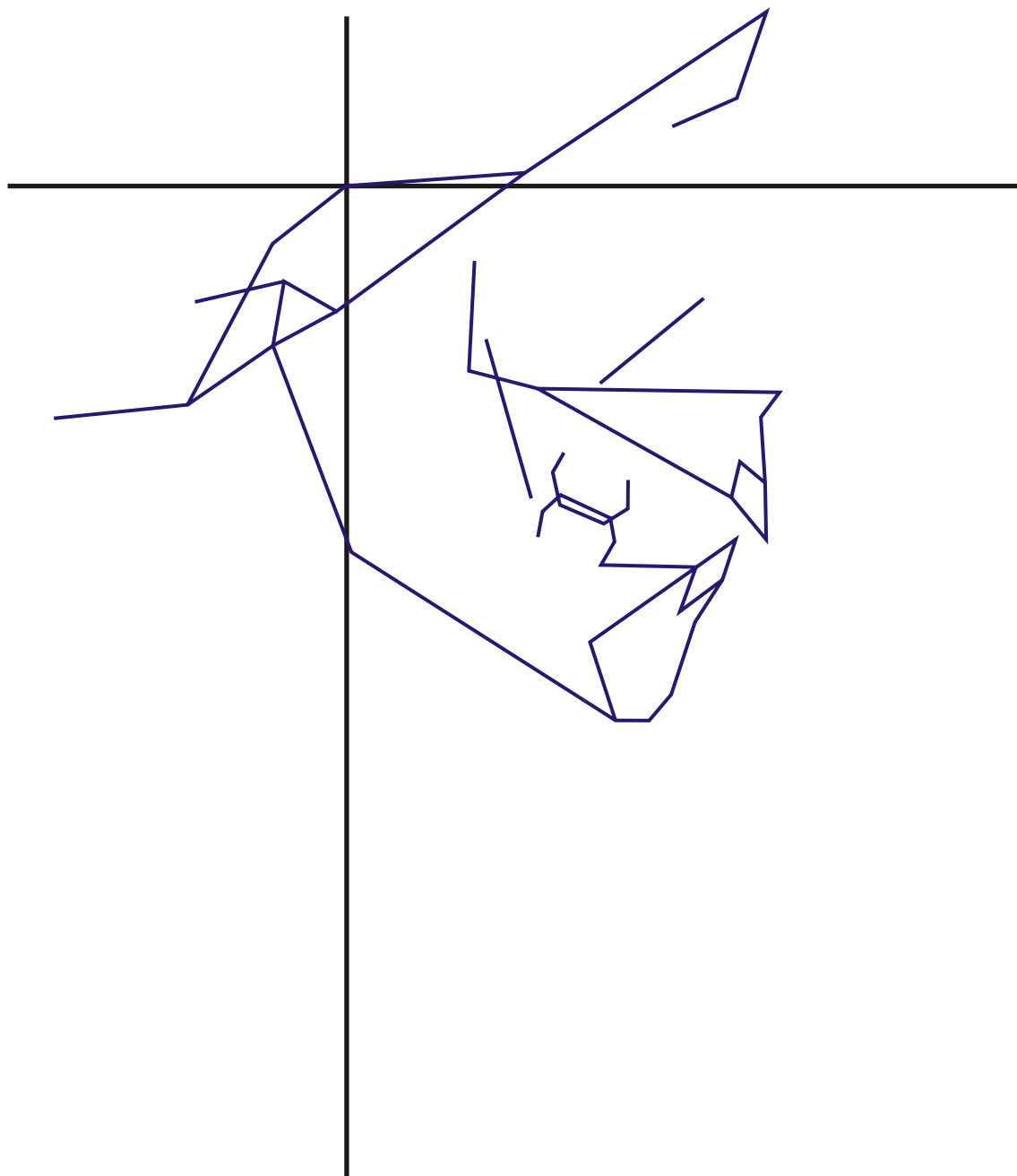




**10. DIAGRAMAS DEL COMPLEJO CRANEOFACIAL
CRANIOFACIAL COMPLEX DIAGRAMS**

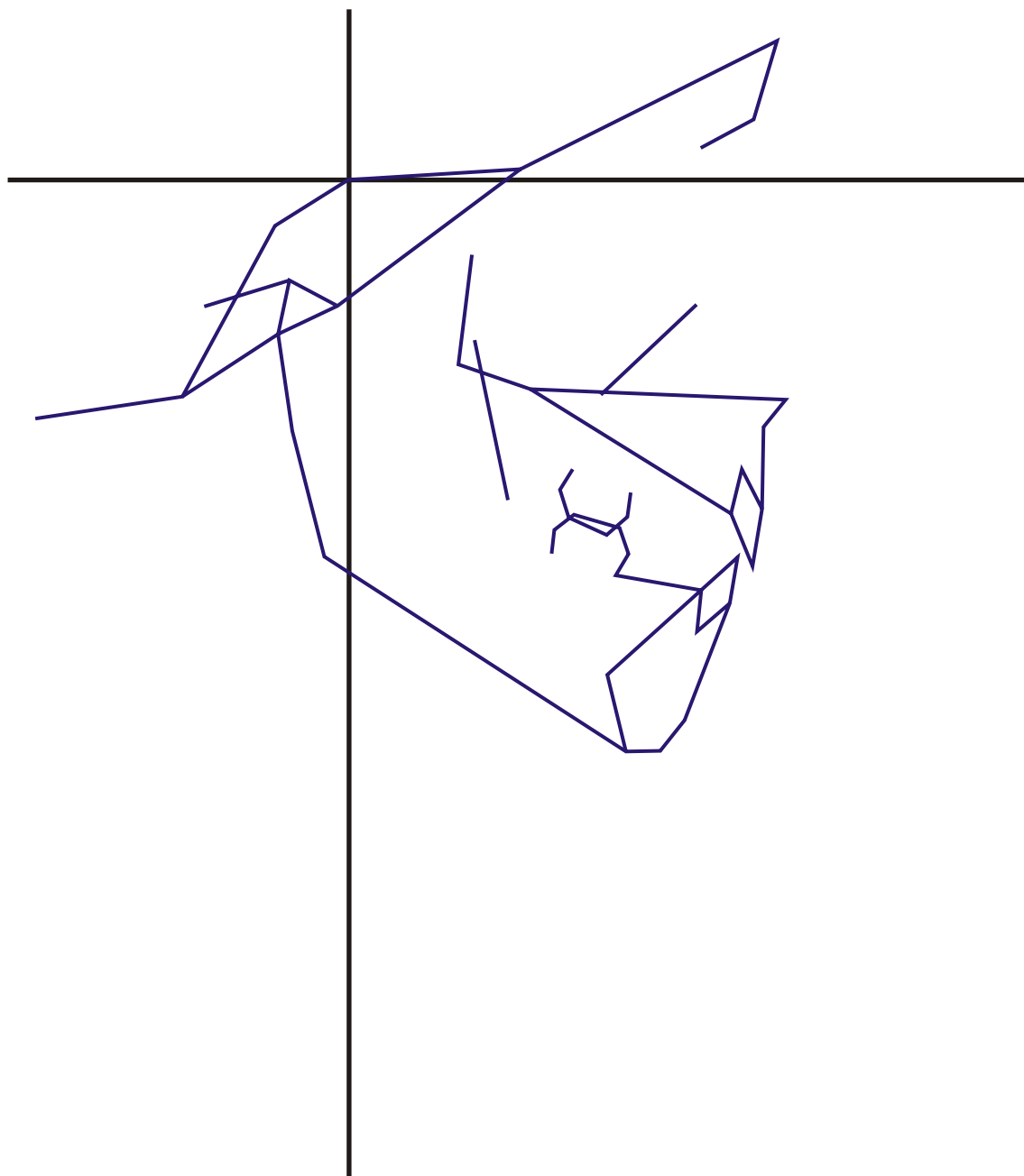
Guatemalan Non-Indian Male

Age: 4.56 - 5.55 years



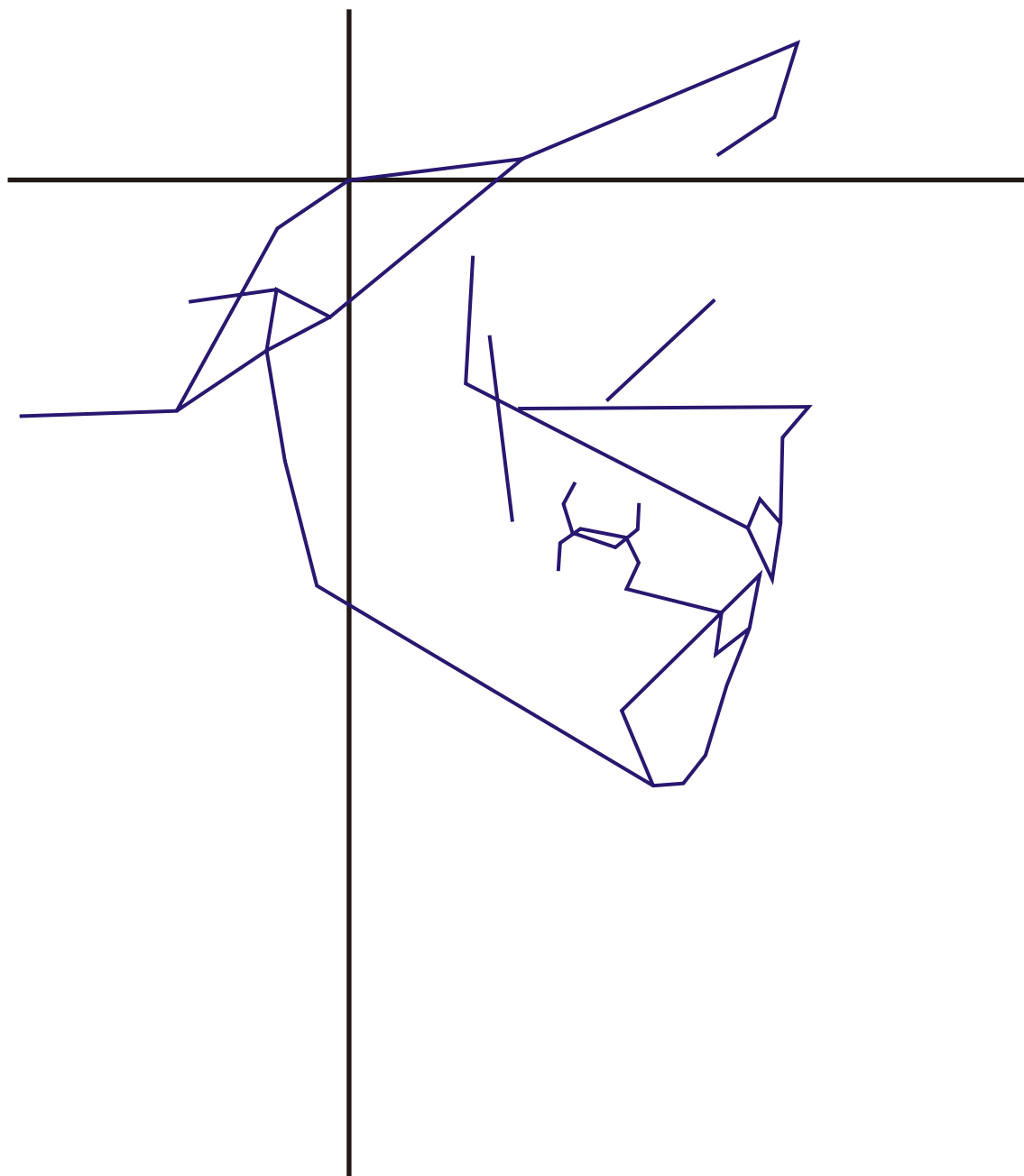
Guatemalan Non-Indian Male

Age: 5.56 - 6.55 years



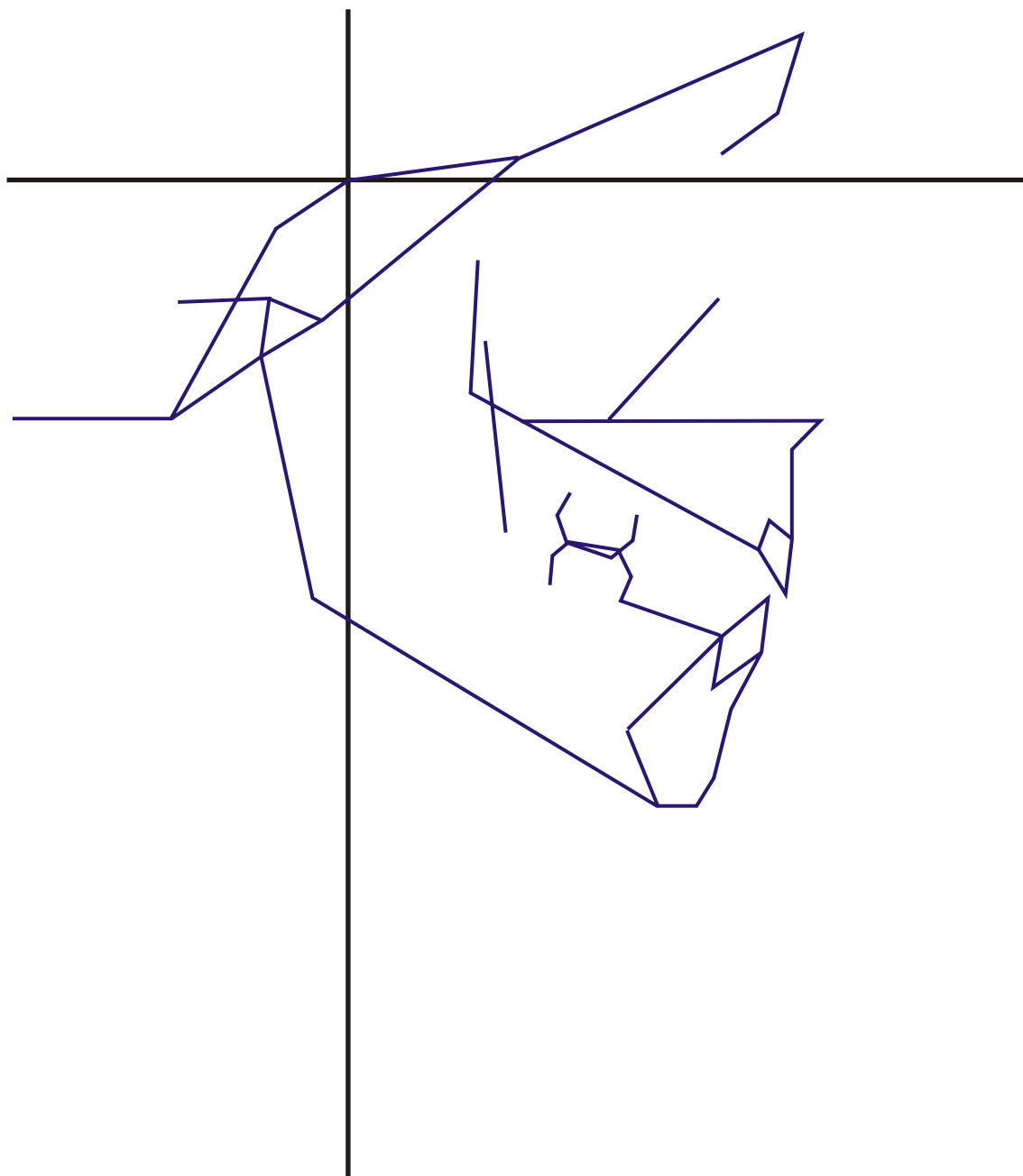
Guatemalan Non-Indian Male

Age: 6.56 - 7.55 years



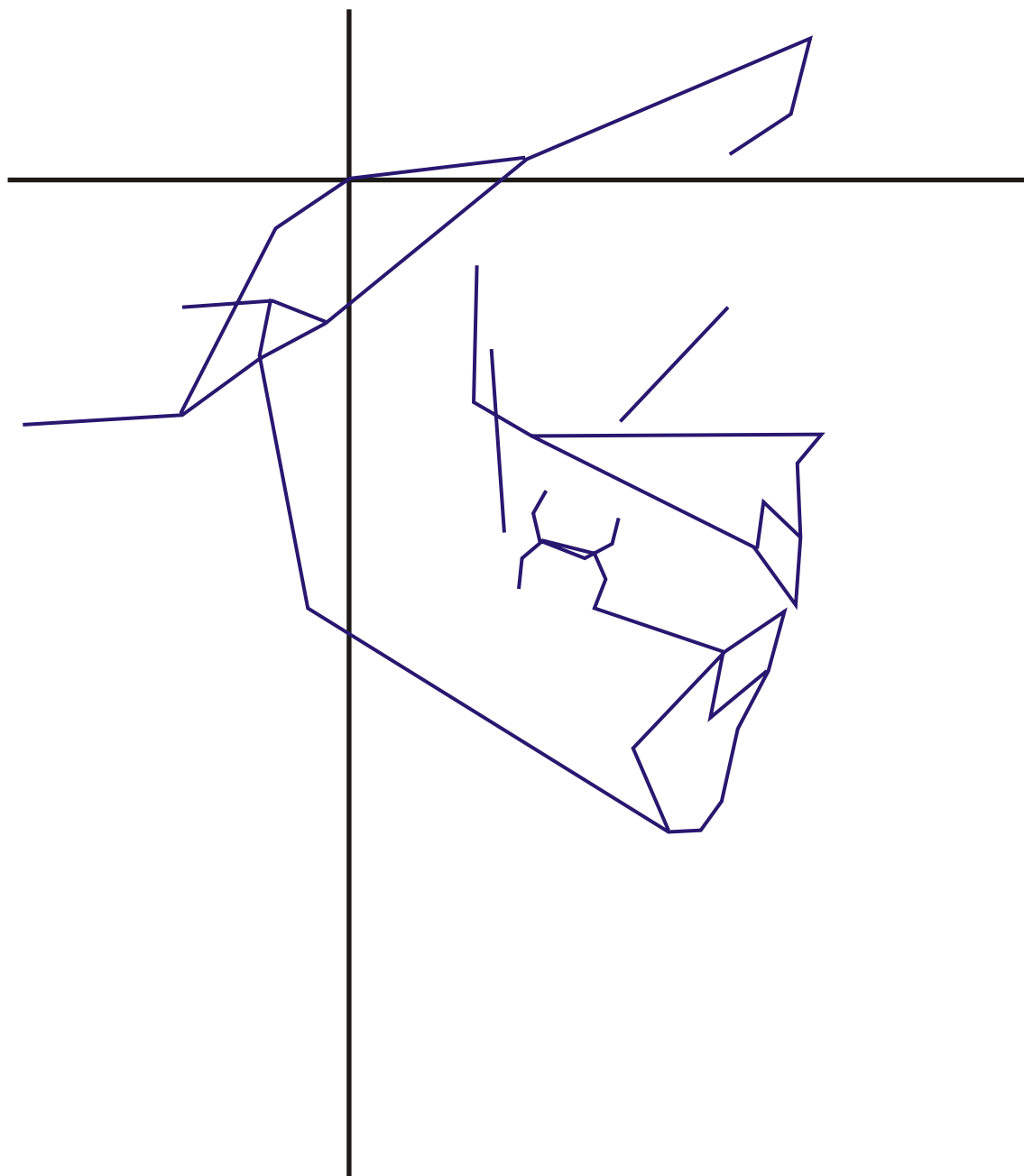
Guatemalan Non-Indian Male

Age: 7.56 - 8.55 Years



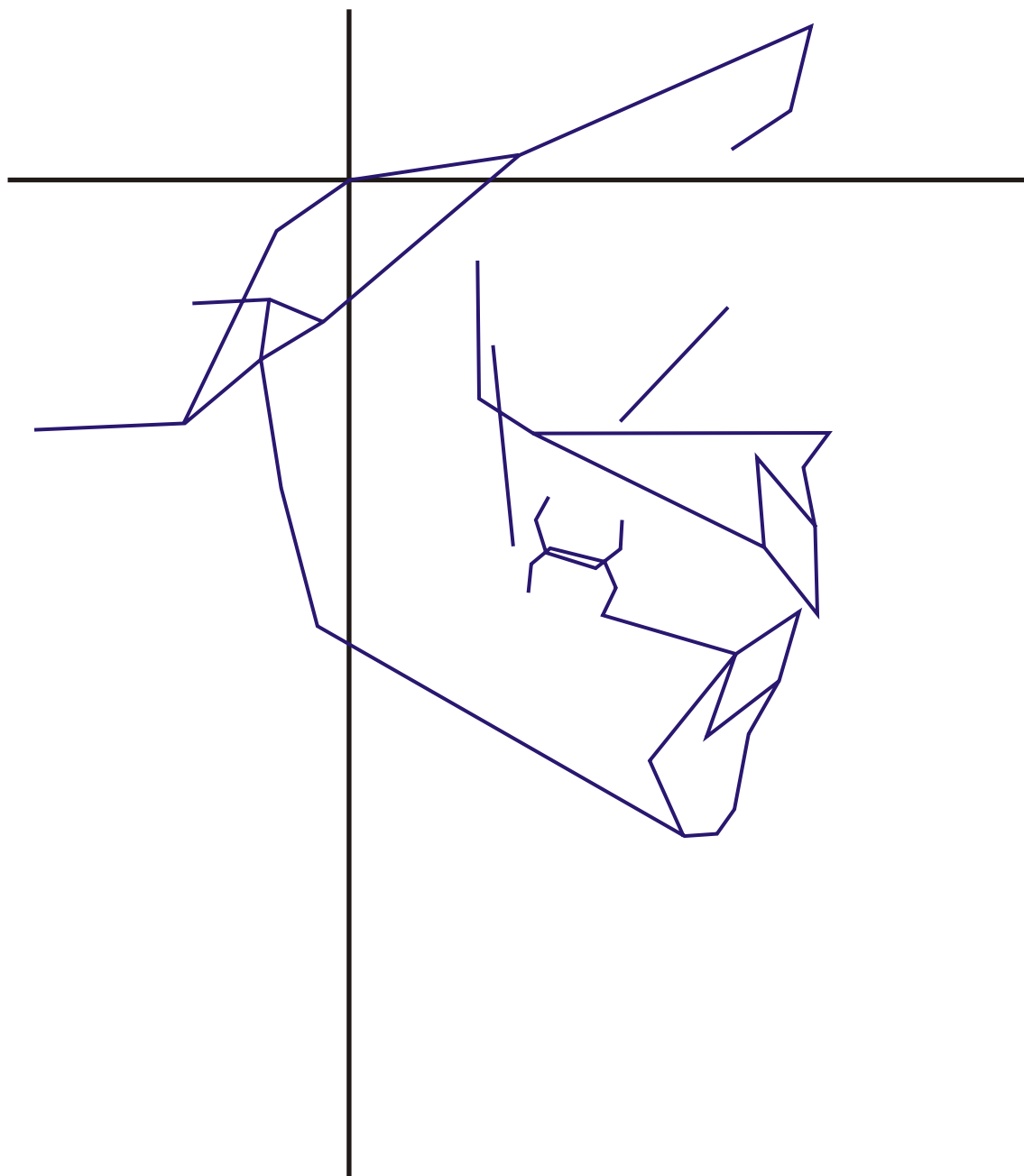
Guatemalan Non-Indian Male

Age: 8.56 - 9.55 years



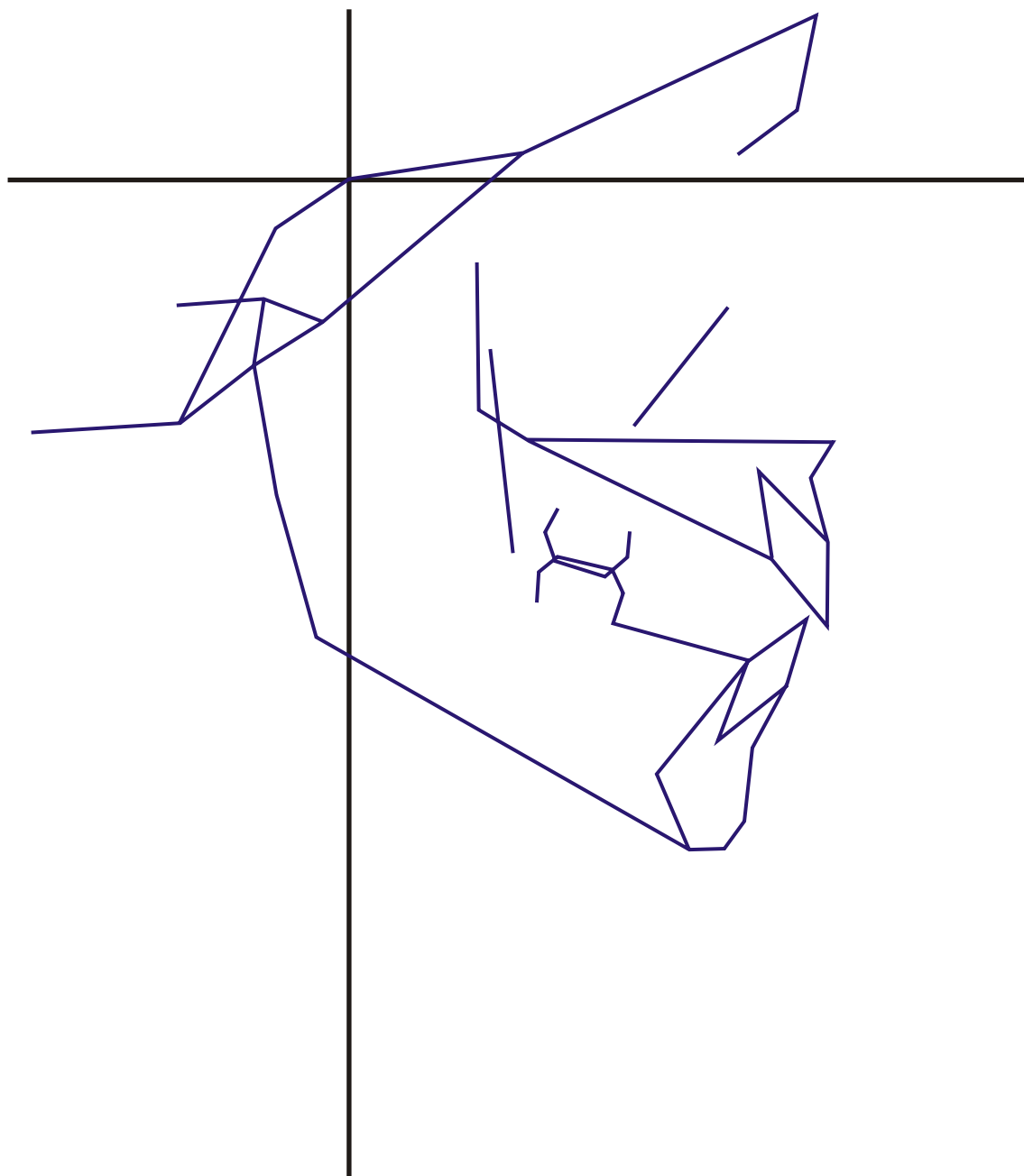
Guatemalan Non-Indian Male

Age: 9.56 - 10.55 Years



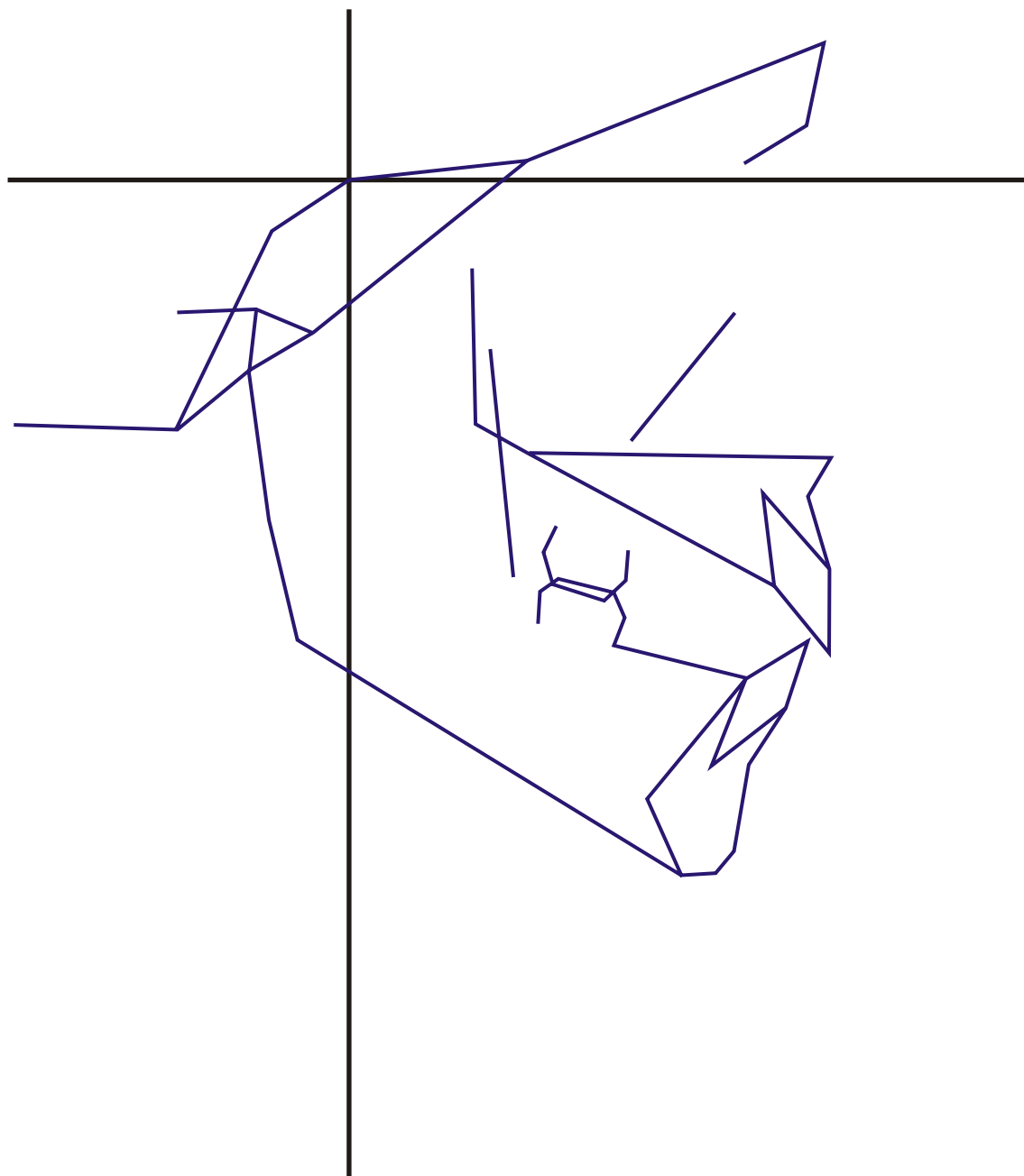
Guatemalan Non-Indian Male

Age: 10.56 - 11.55 Years



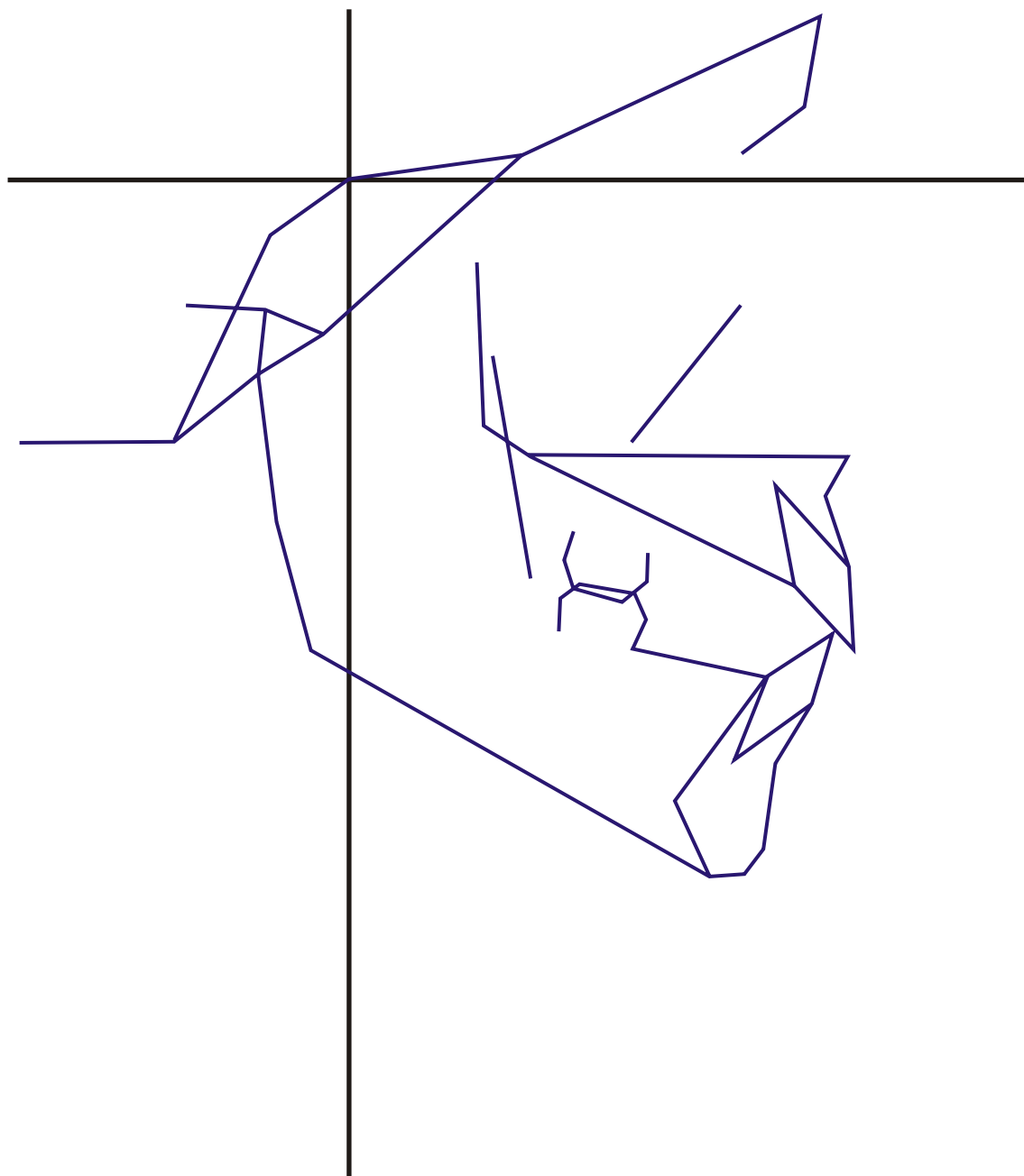
Guatemalan Non-Indian Male

Age: 11.56 - 12.55 Years



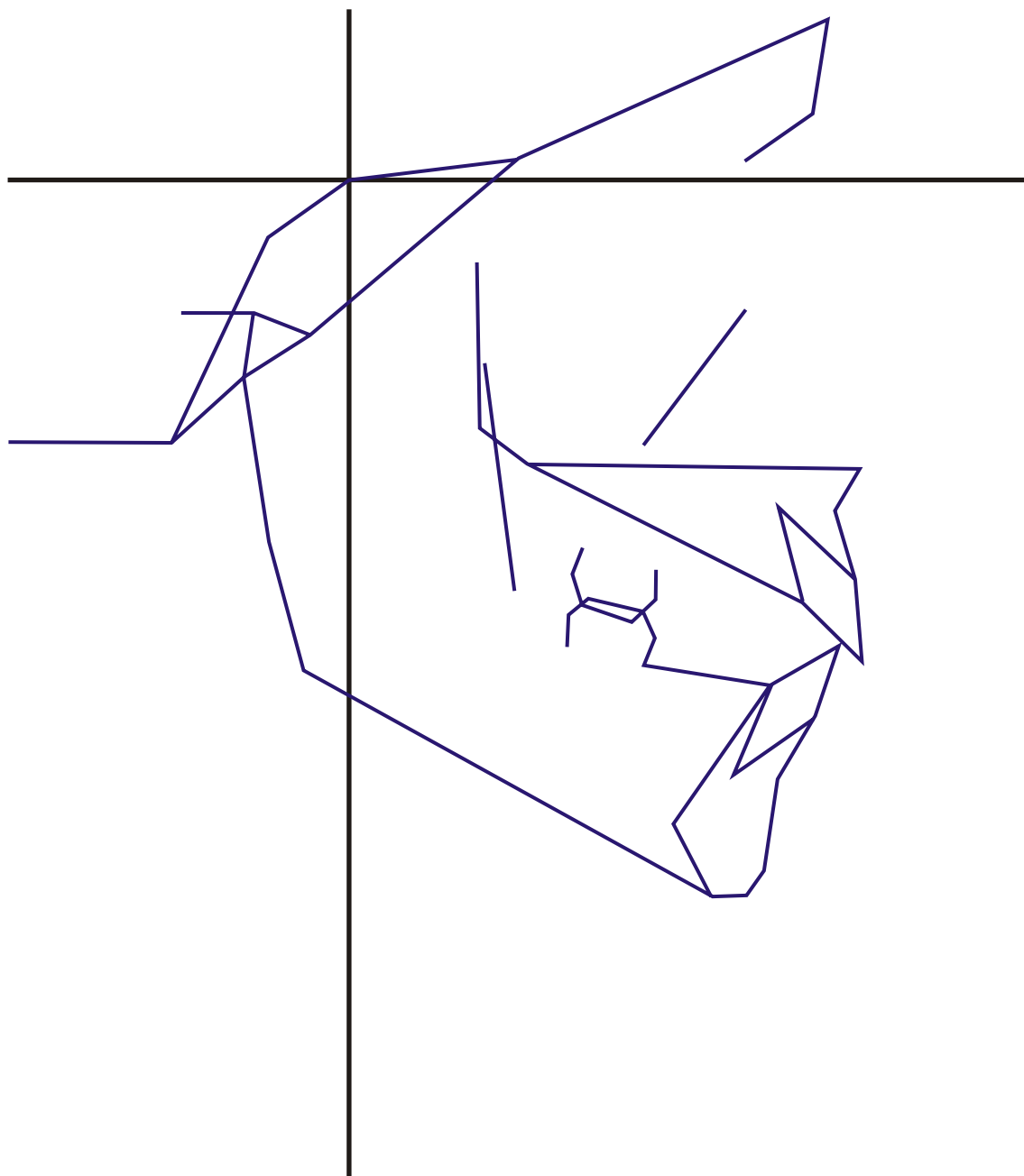
Guatemalan Non-Indian Male

Age: 12.56 - 13.55 Years



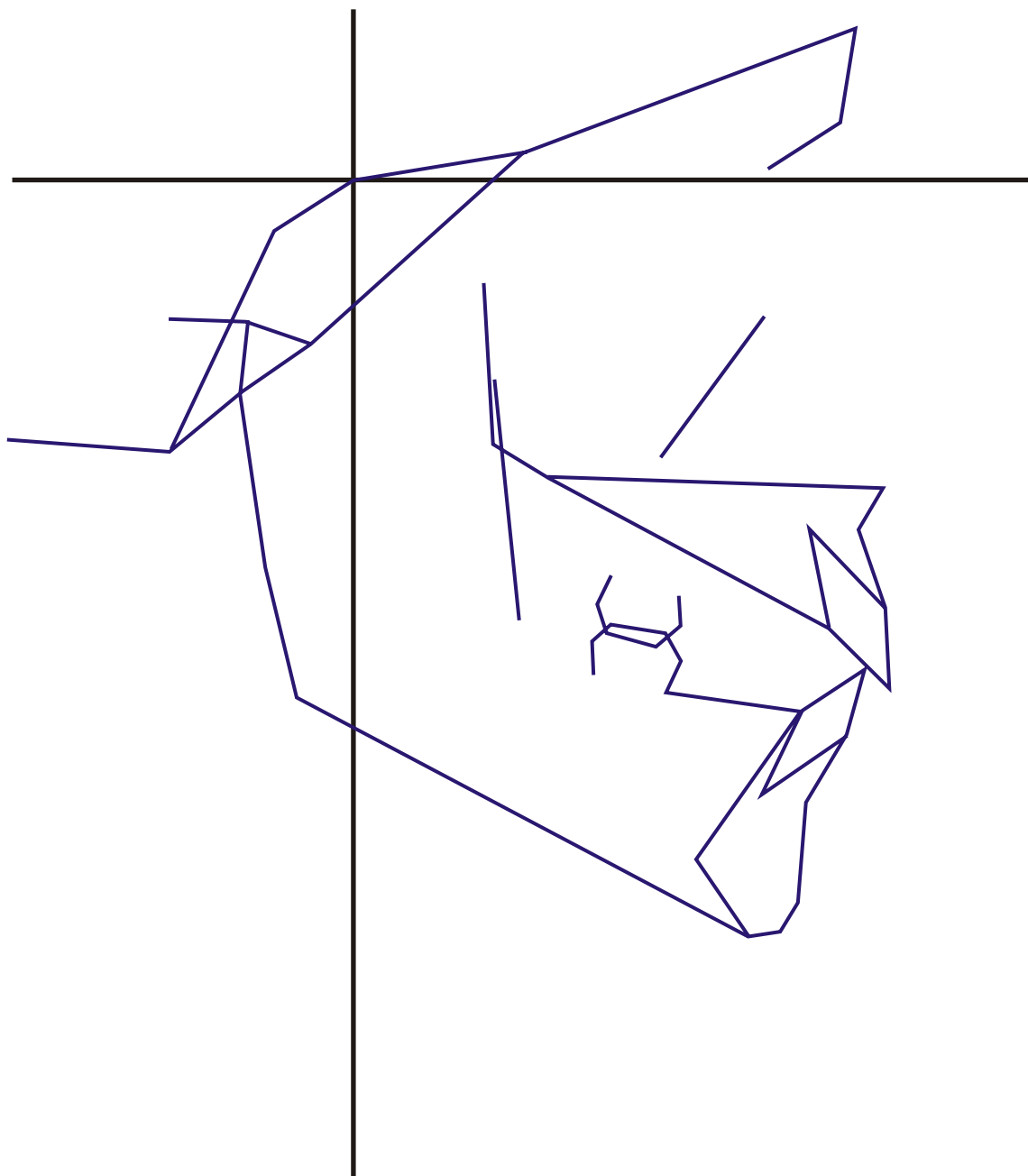
Guatemalan Non-Indian Male

Age: 13.56 - 14.55 Years



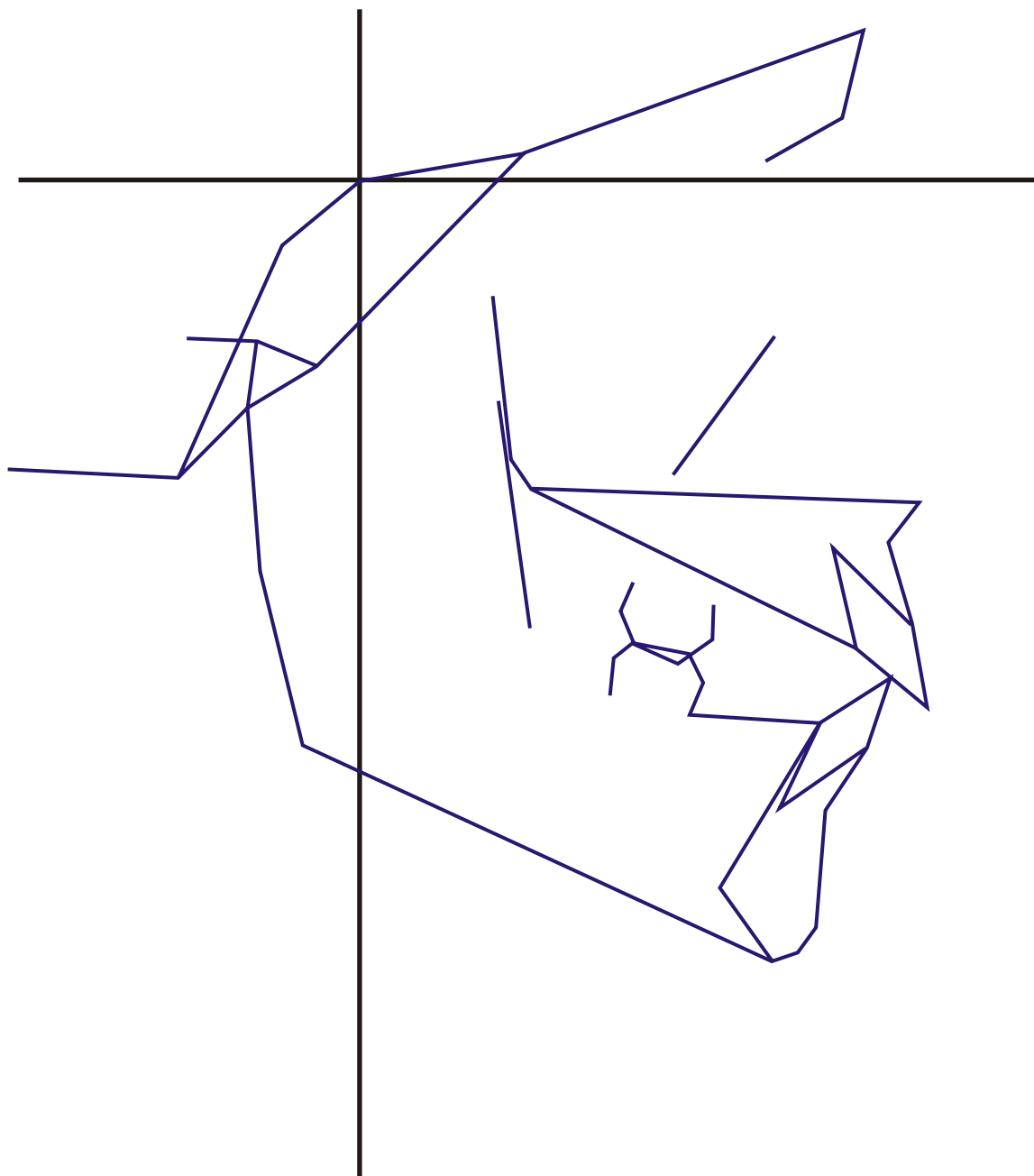
Guatemalan Non-Indian Male

Age: 14.56 - 15.55 Years



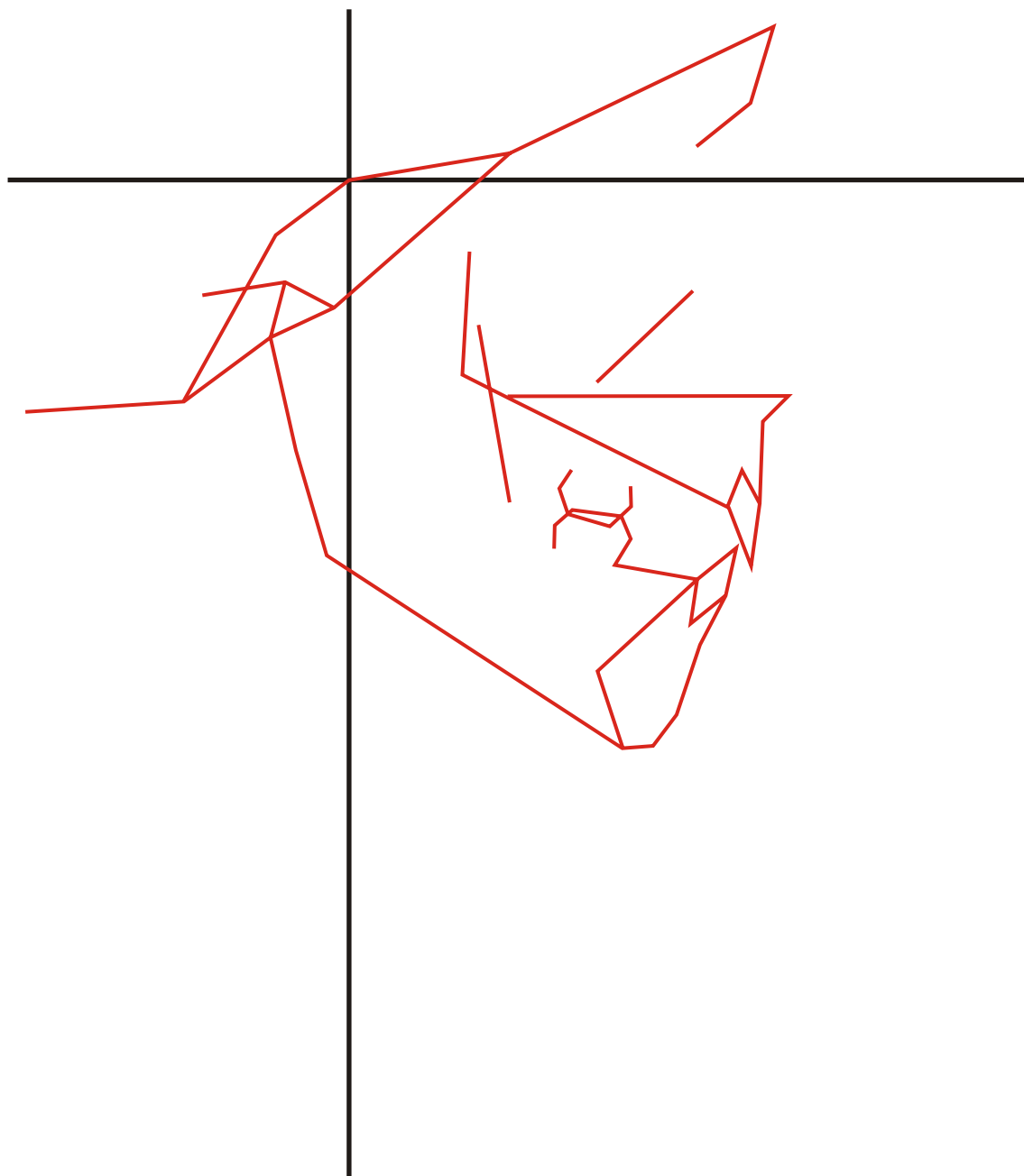
Guatemalan Non-Indian Male

Age: 15.56 - 16.55 Years



Guatemalan Non-Indian Female

Age: 5.56 - 6.55 Years



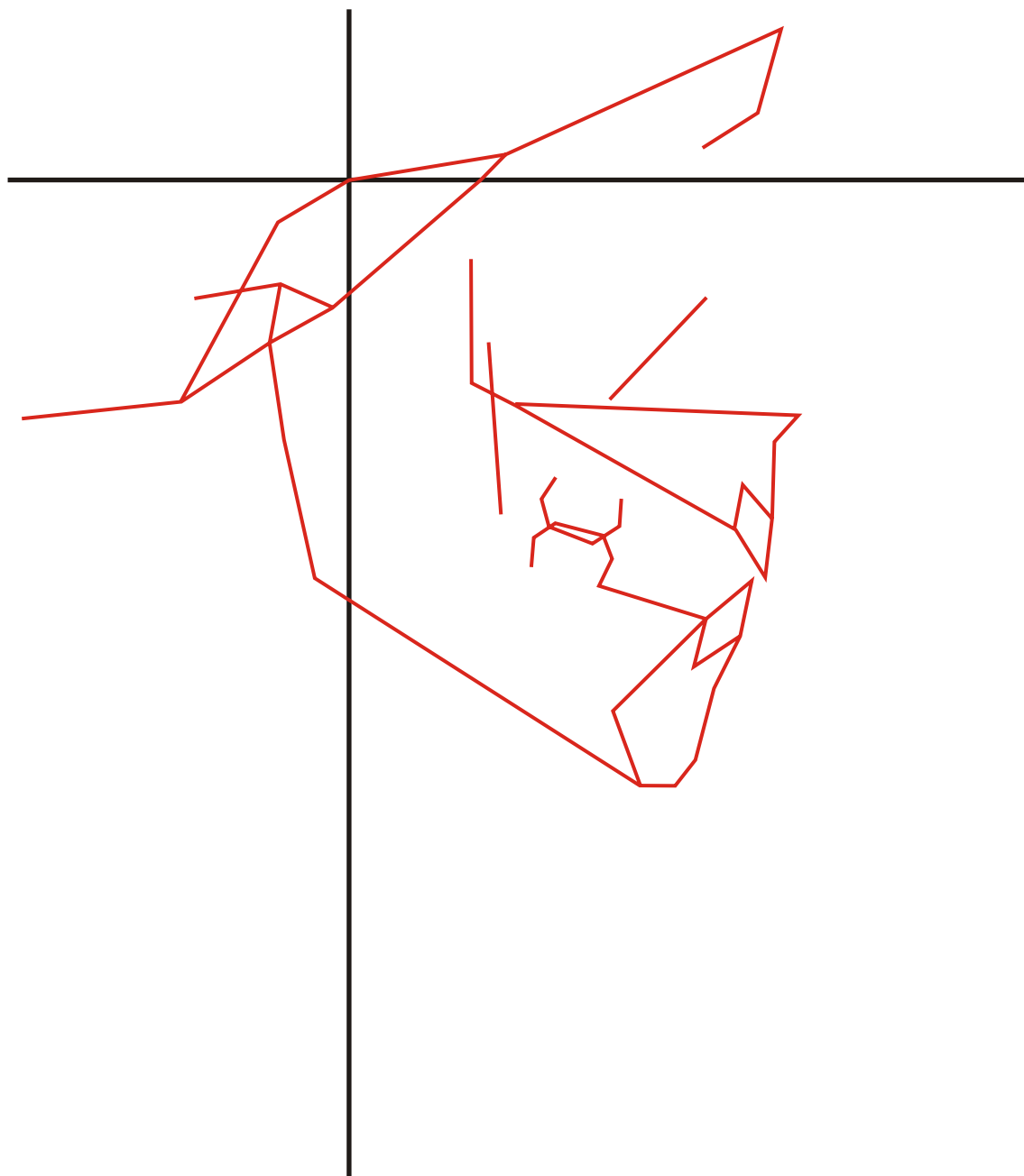
Guatemalan Non-Indian Female

Age: 6.56 - 7.55 Years



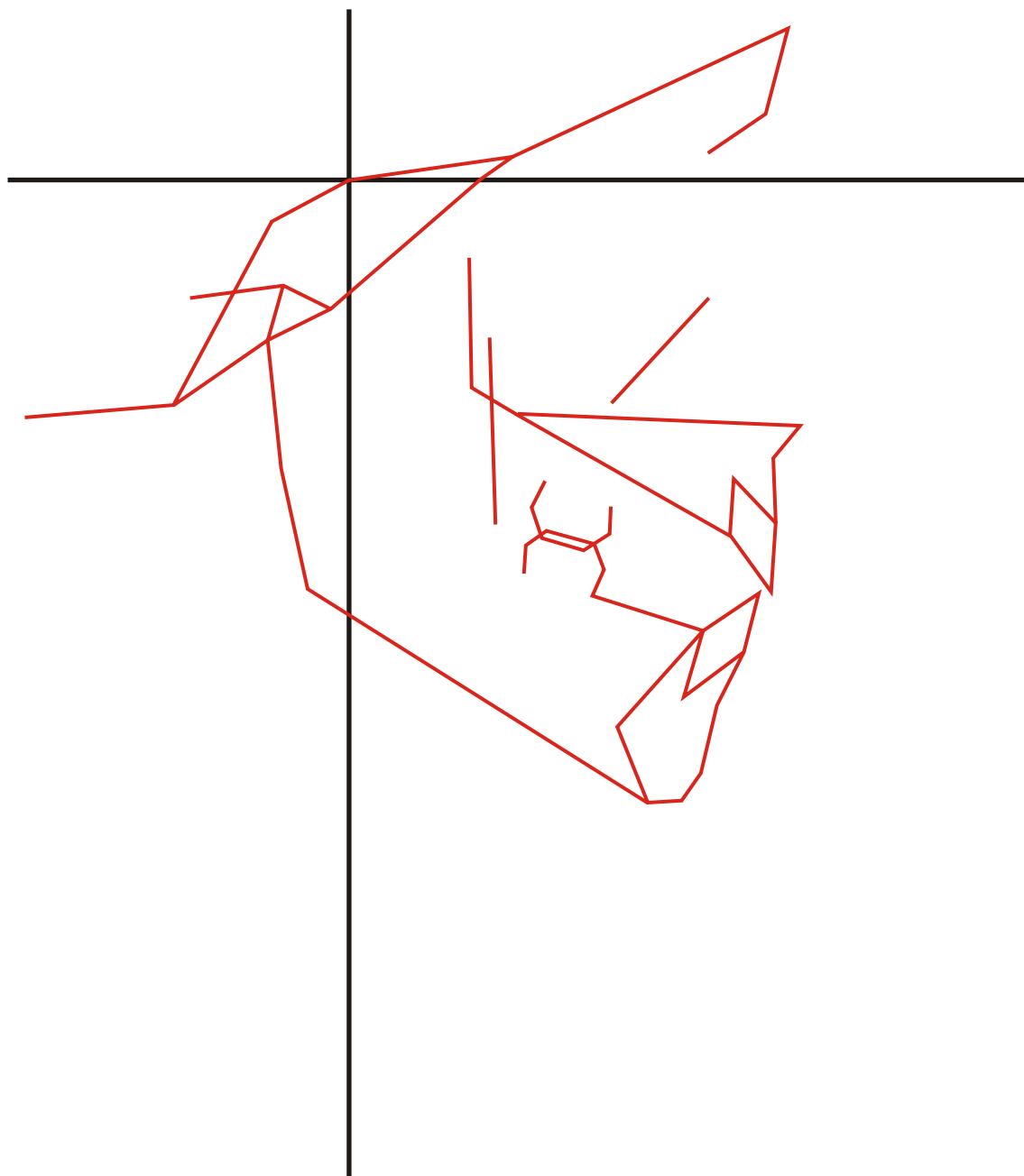
Guatemalan Non-Indian Female

Age: 7.56 - 8.55 Years



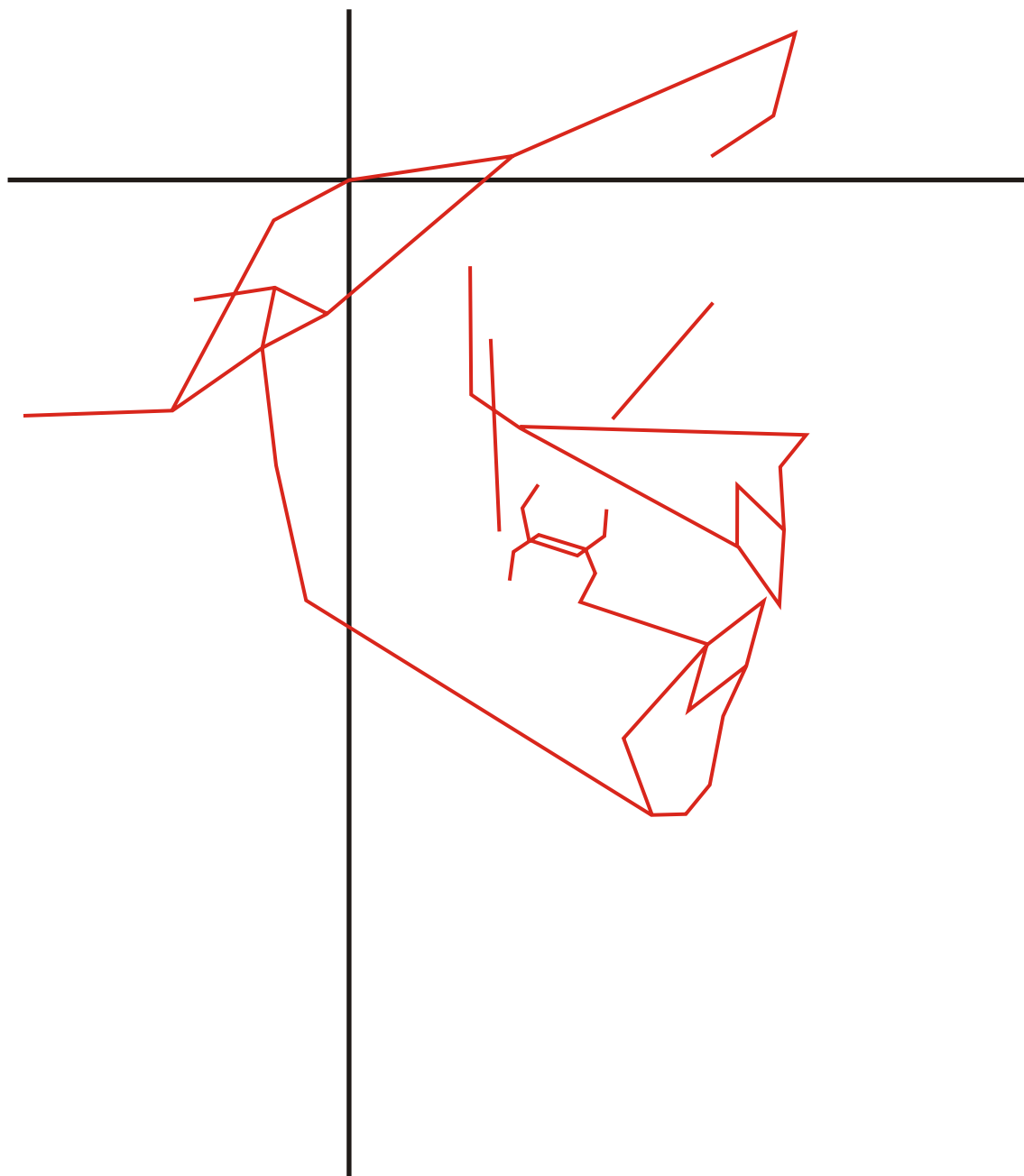
Guatemalan Non-Indian Female

Age: 8.56 - 9.55 Years



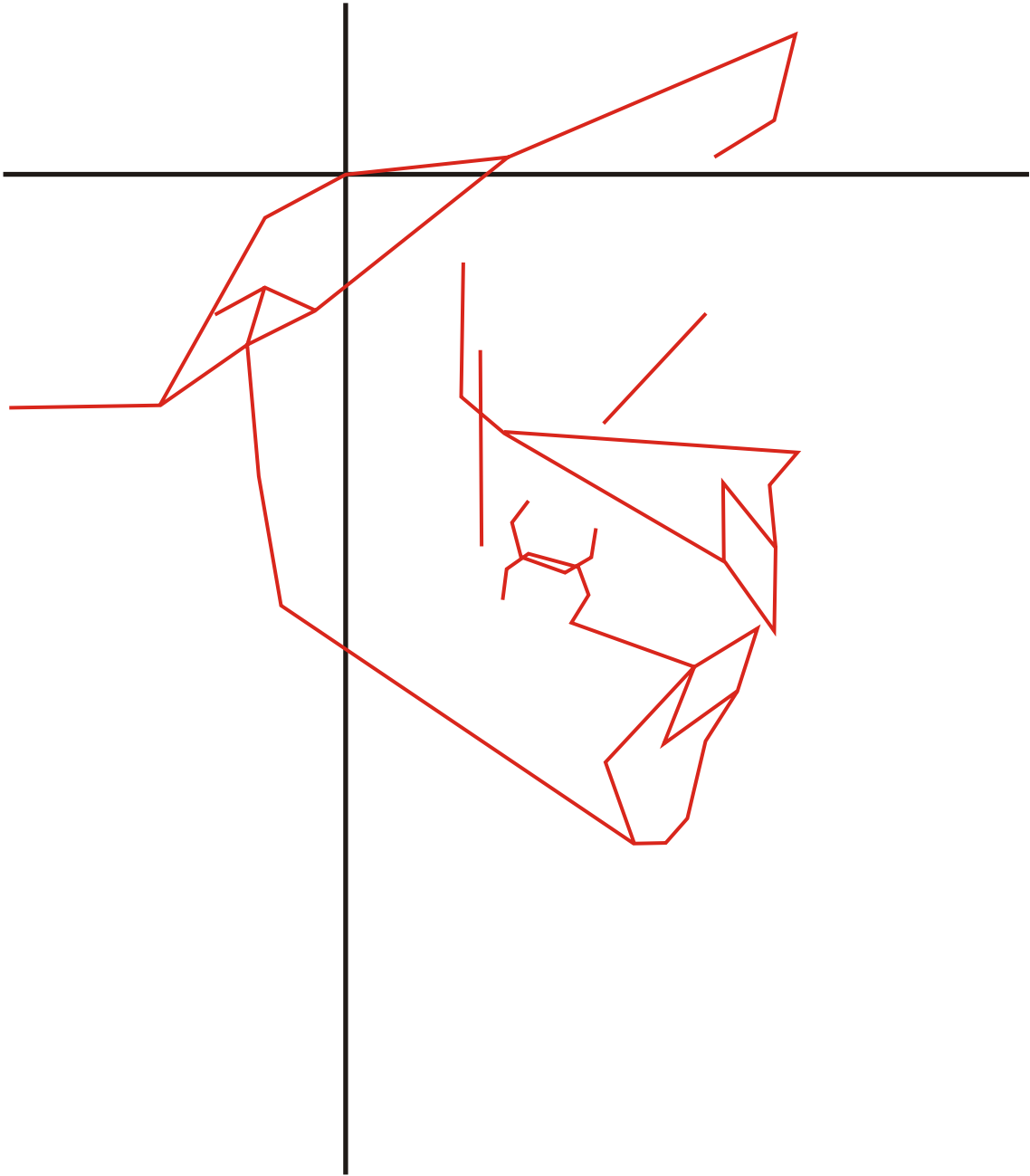
Guatemalan Non-Indian Female

Age: 9.56 - 10.55 years

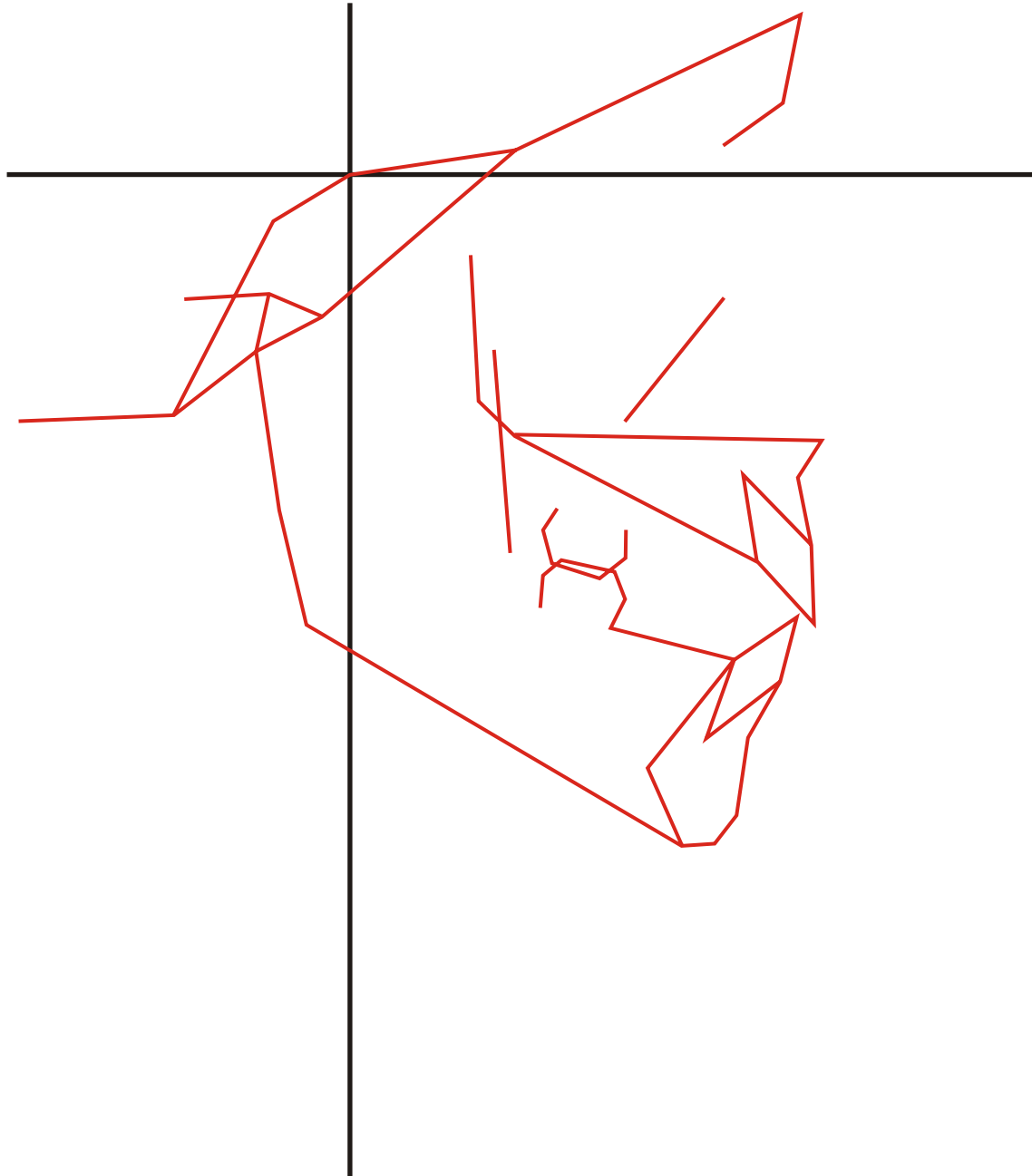


Guatemalan Non-Indian Female

Age: 10.56 - 11.55 Years

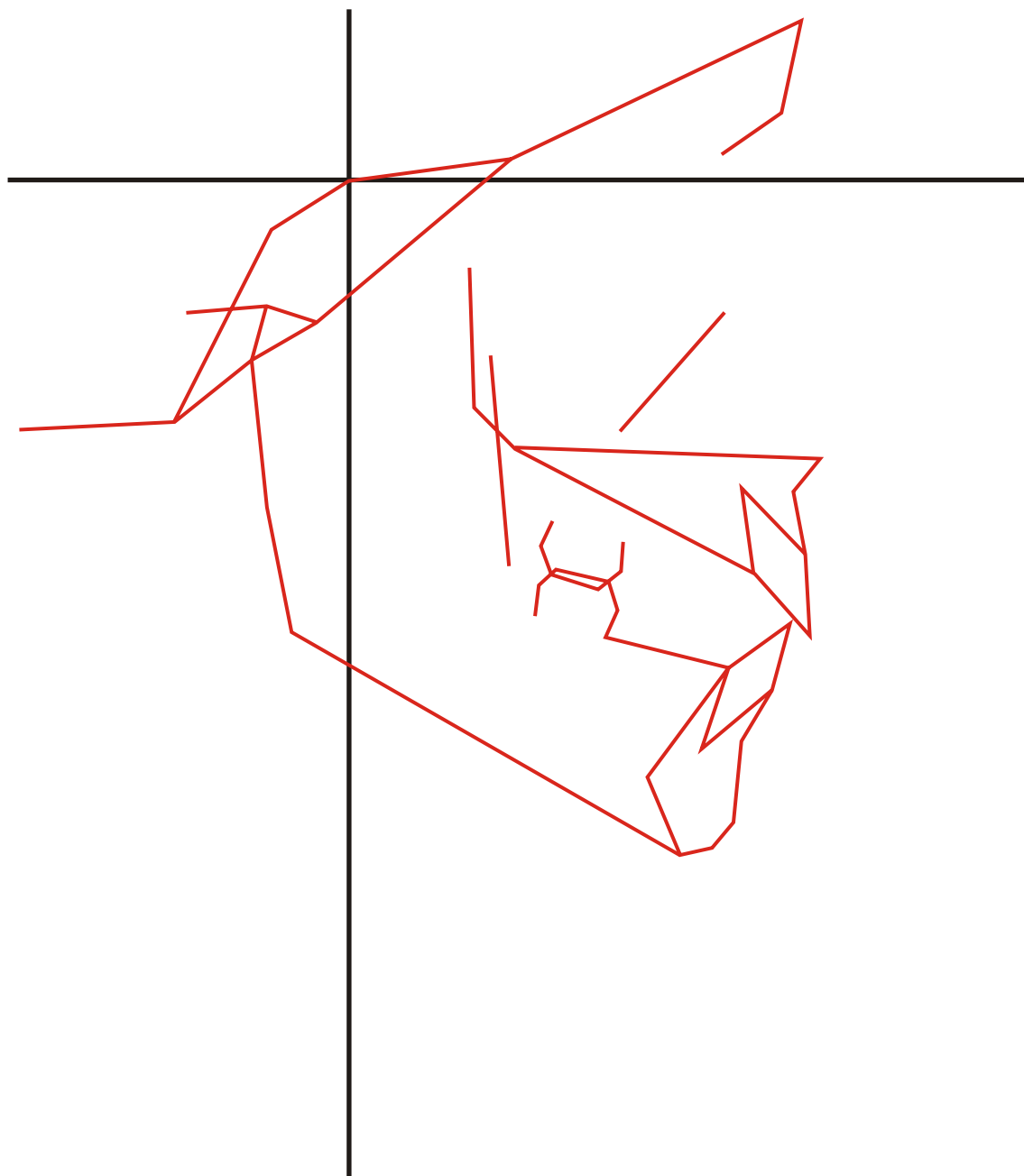


Guatemalan Non-Indian Female
Age: 11.56 - 12.55 Years



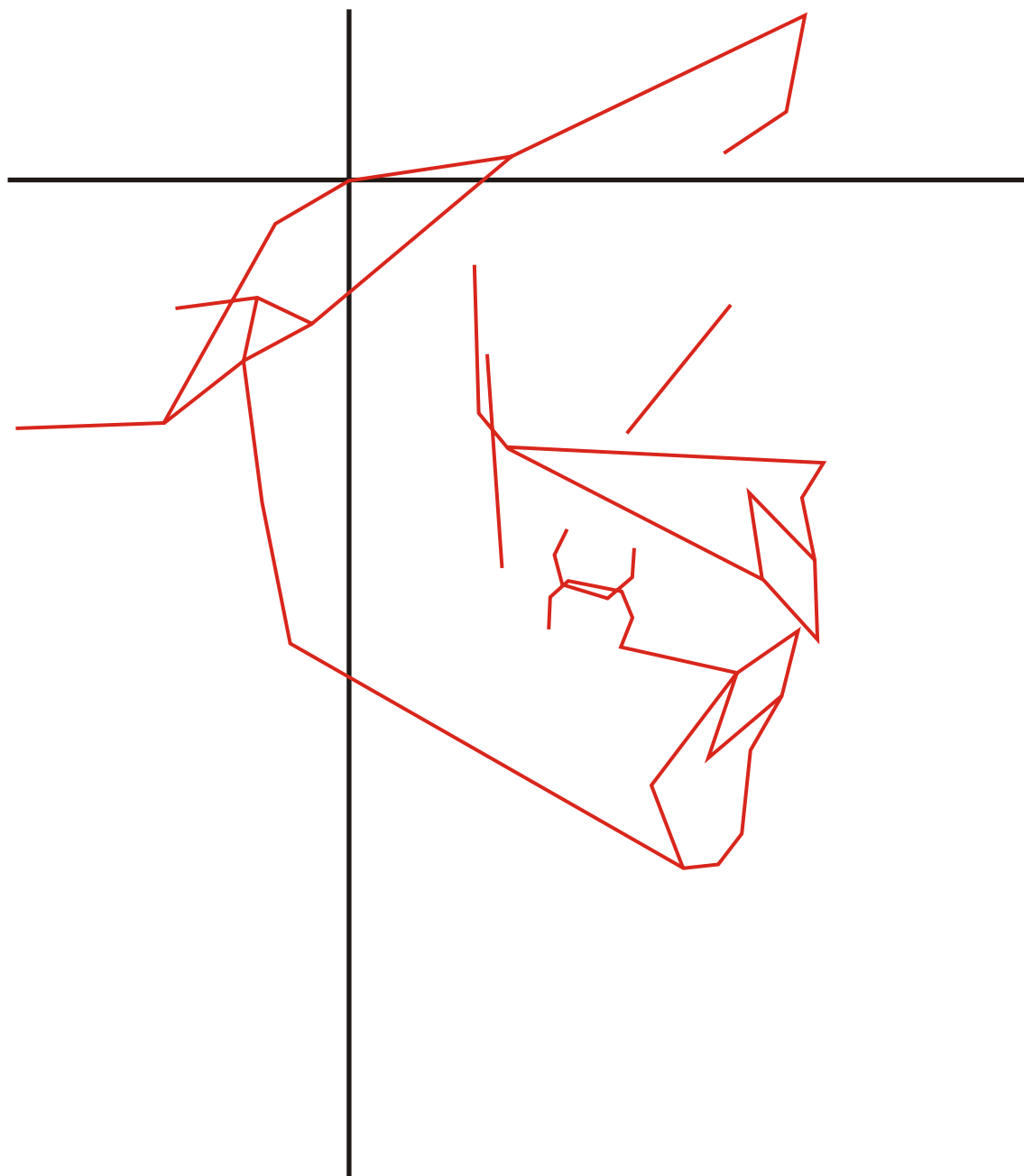
Guatemalan Non-Indian Female

Age: 12.56 - 13.55 Years



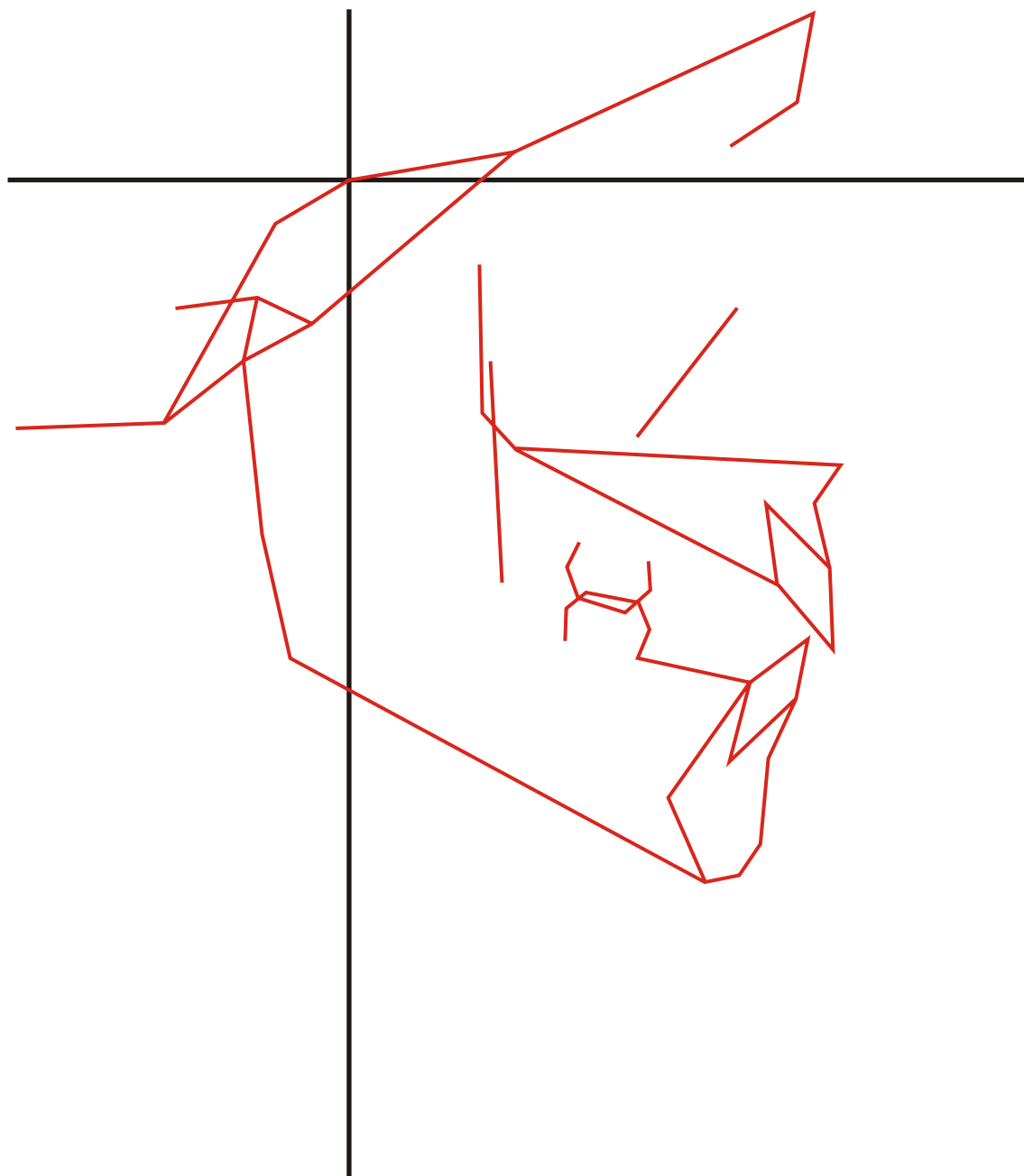
Guatemalan Non-Indian Female

Age: 13.56 - 14.55 Years



Guatemalan Non-Indian Female

Age: 14.56 - 15.55 Years



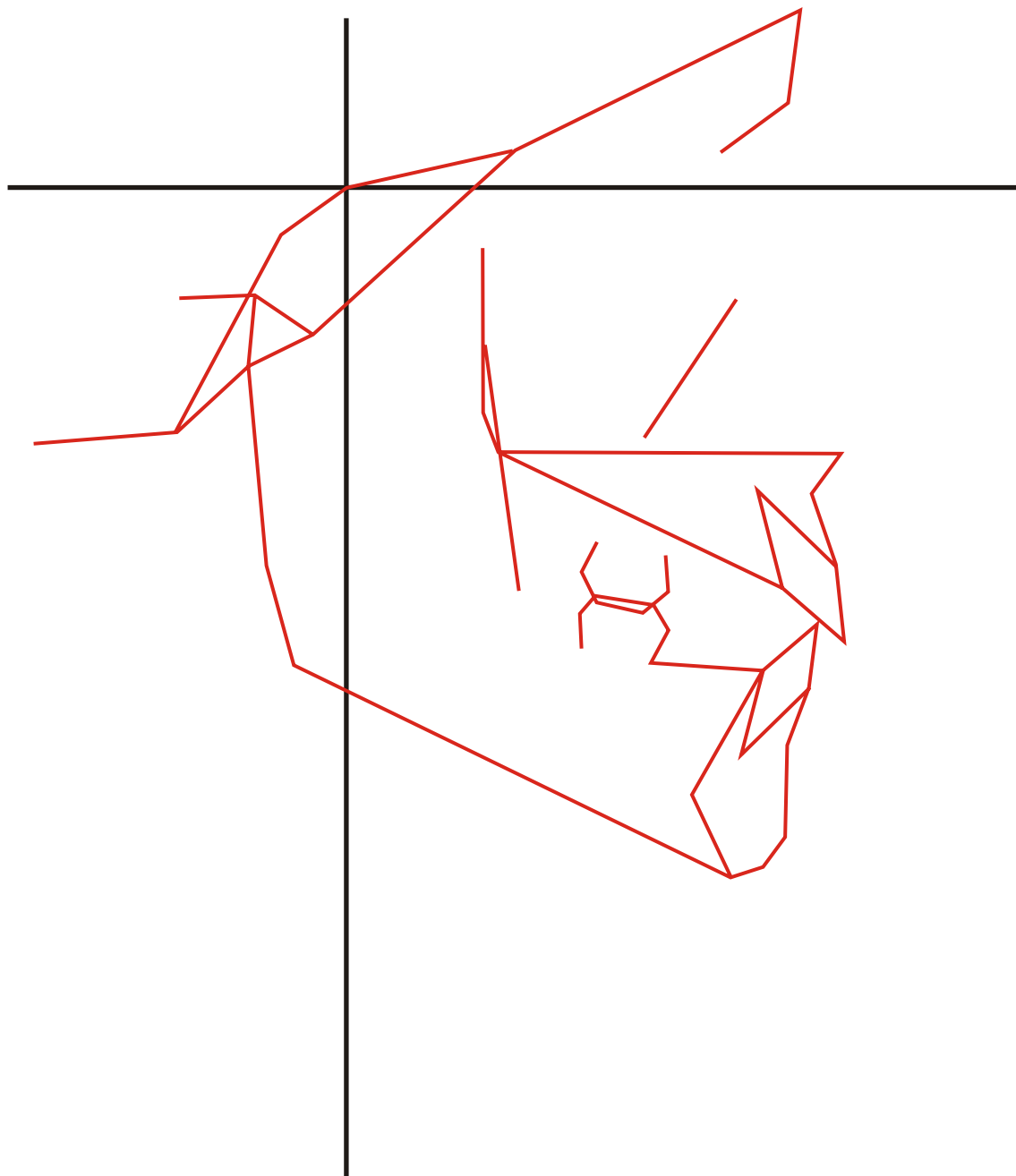
Guatemalan Non-Indian Female

Age: 15.56 - 16.55 Years



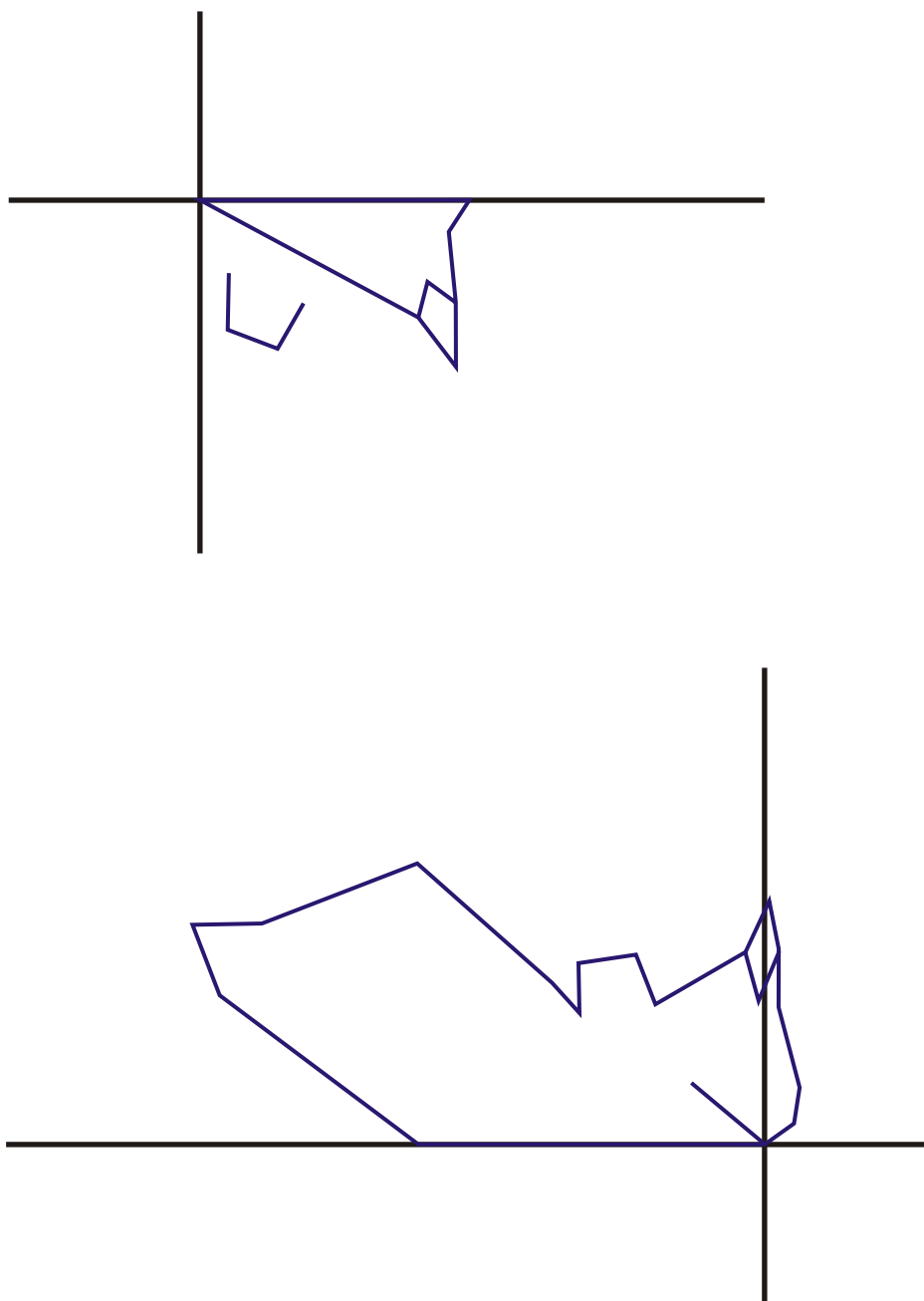
Guatemalan Non-Indian Female

Age: 16.56 - 17.55 Years

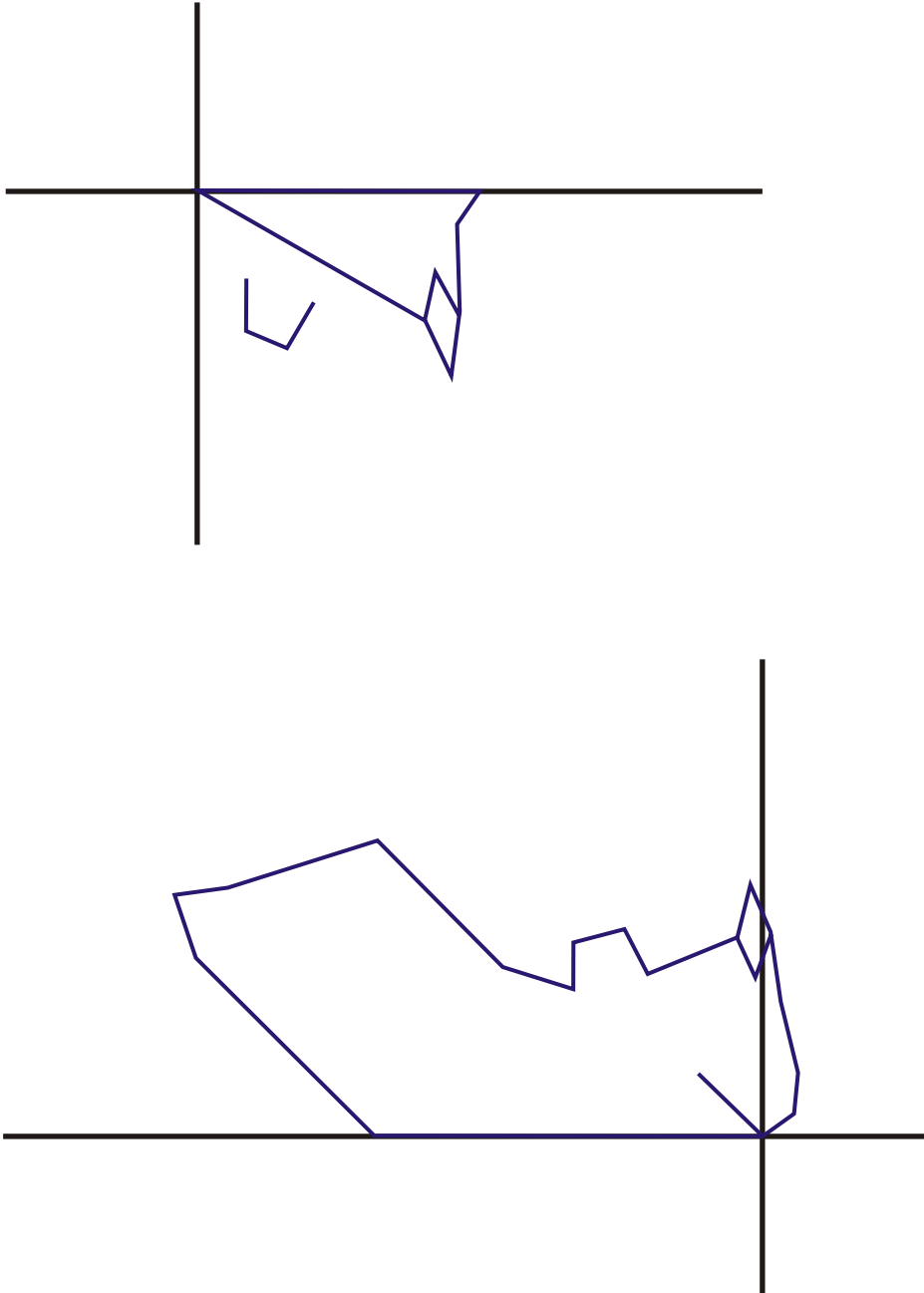


Guatemalan Non-Indian Male

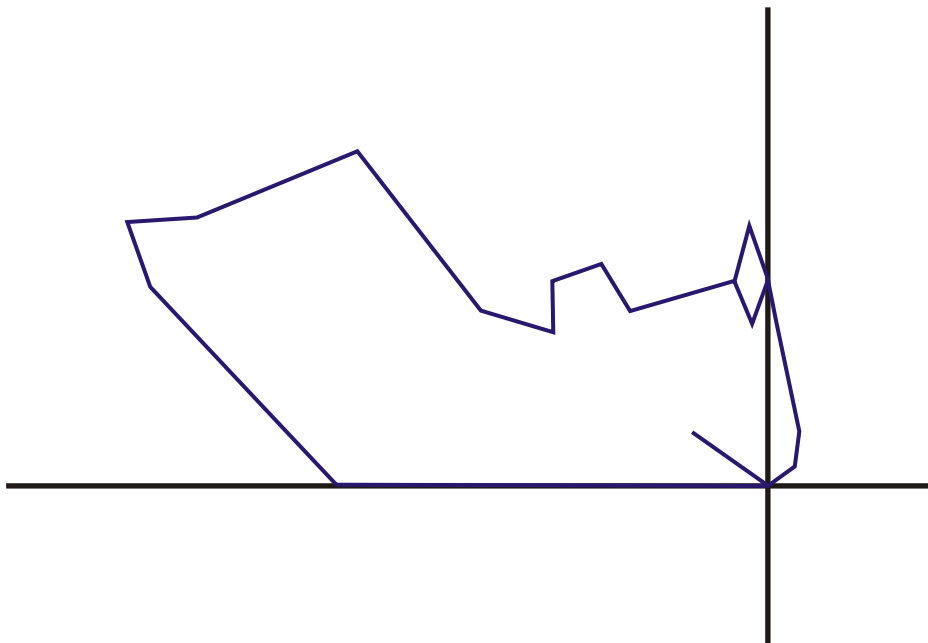
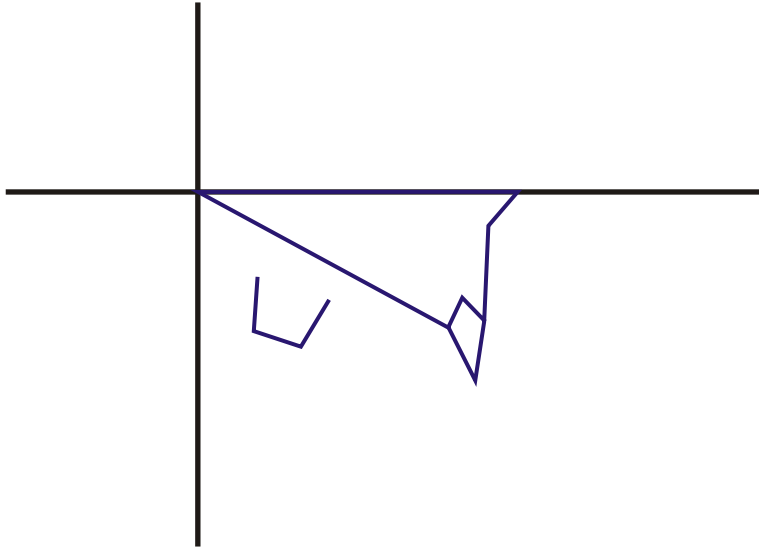
Age: 4.56 - 5.55 Years



Guatemalan Non-Indian Male
Age: 5.56 - 6.55 Years

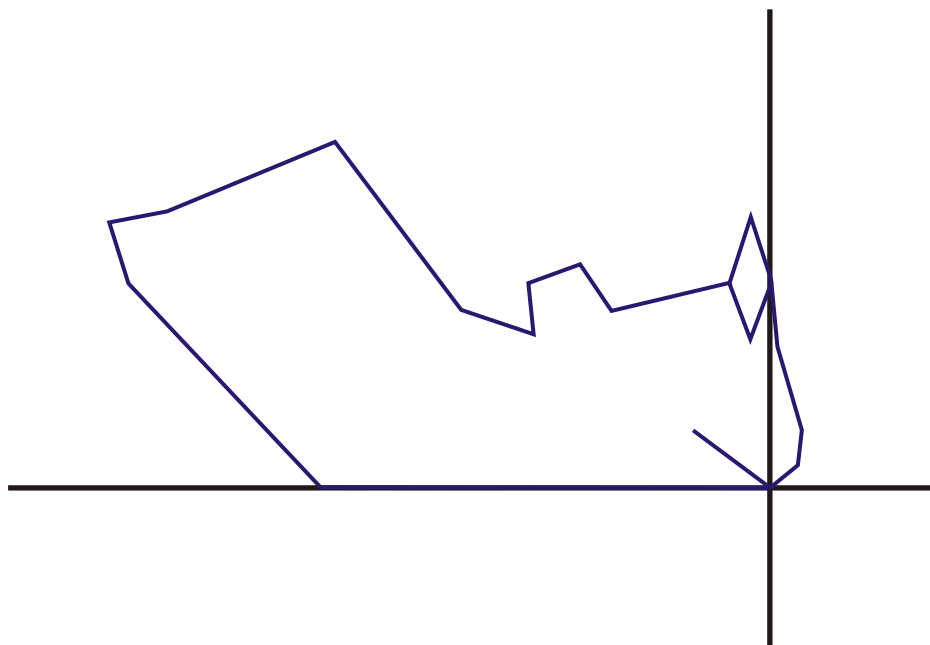
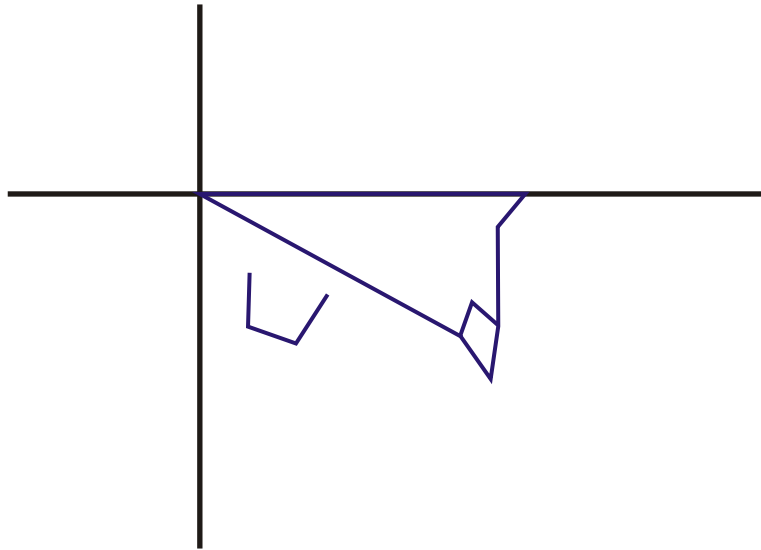


Guatemalan Non-Indian Male
Age: 6.56 - 7.55 Years

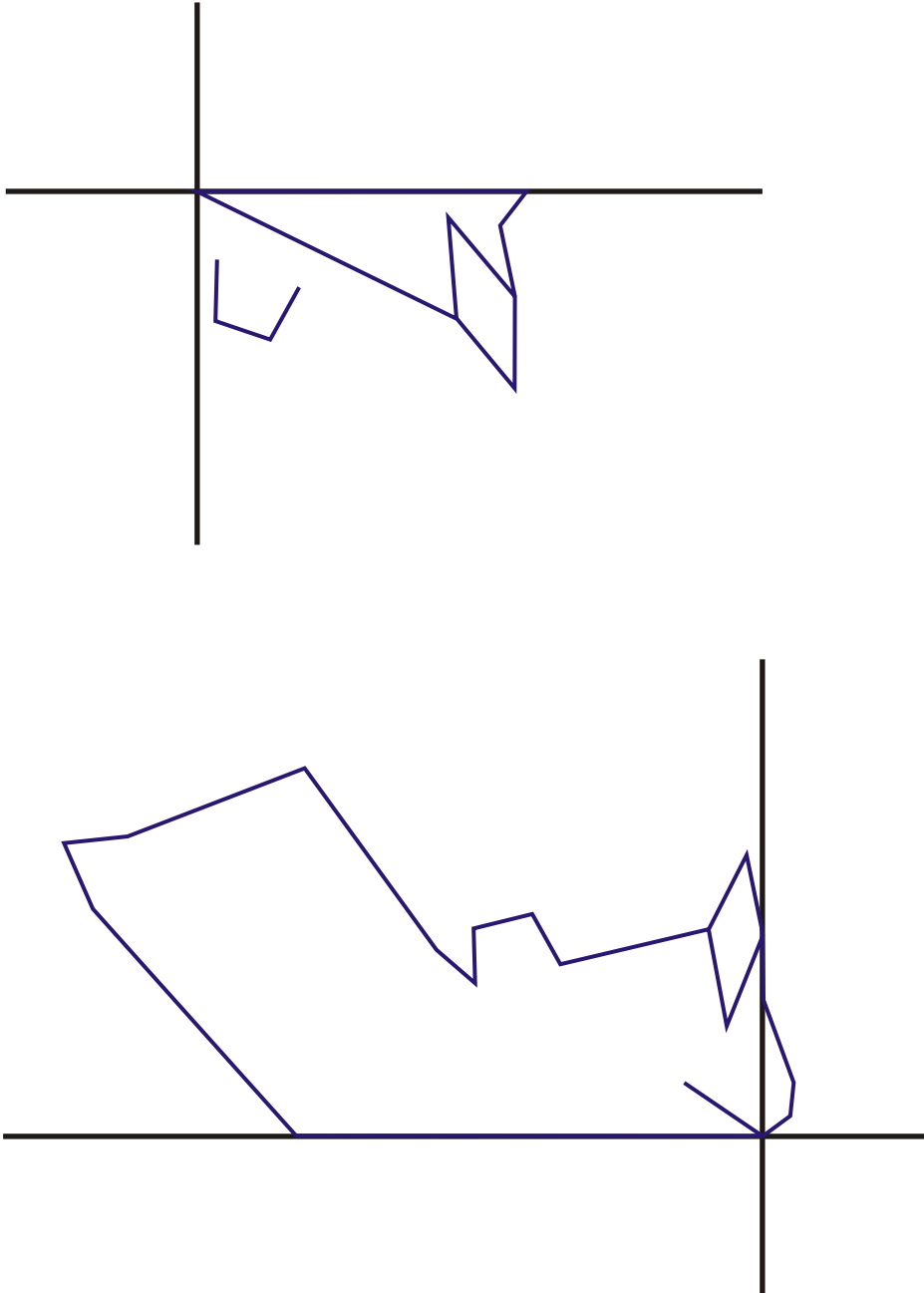


Guatemalan Non-Indian Male

Age: 7.56 - 8.55 Years

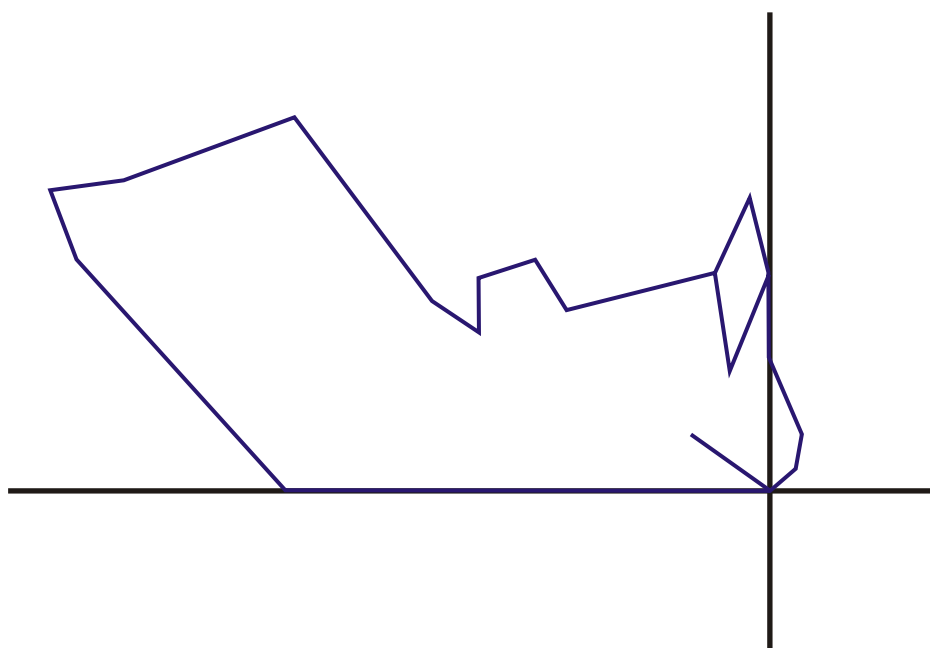
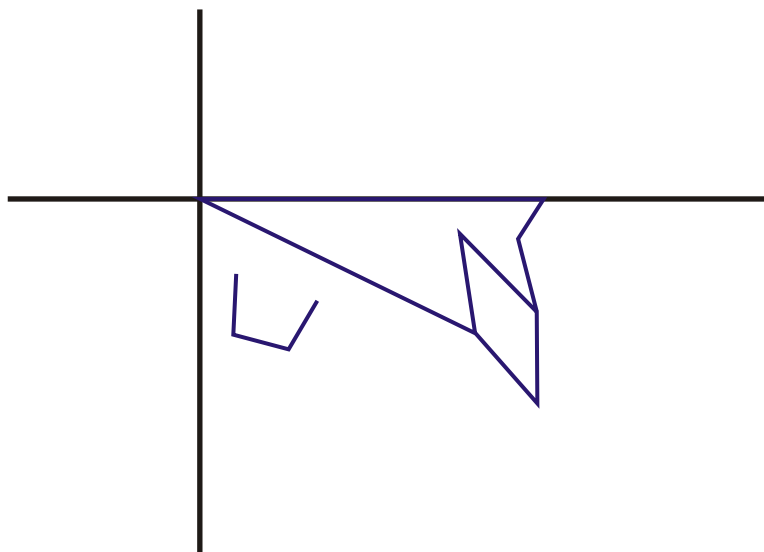


Guatemalan Non-Indian Male
Age: 9.56 - 10.55 Years

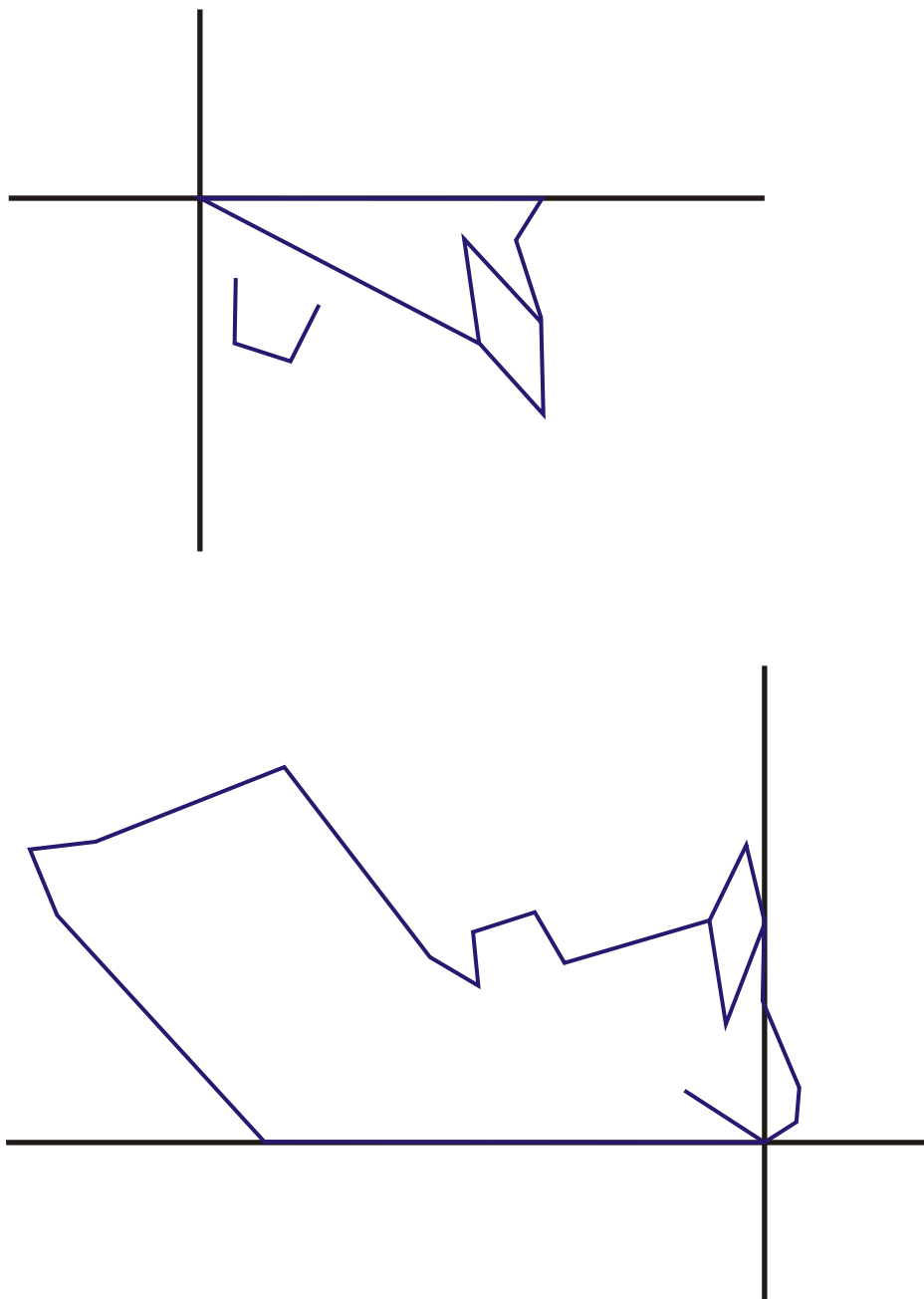


Guatemalan Non-Indian Male

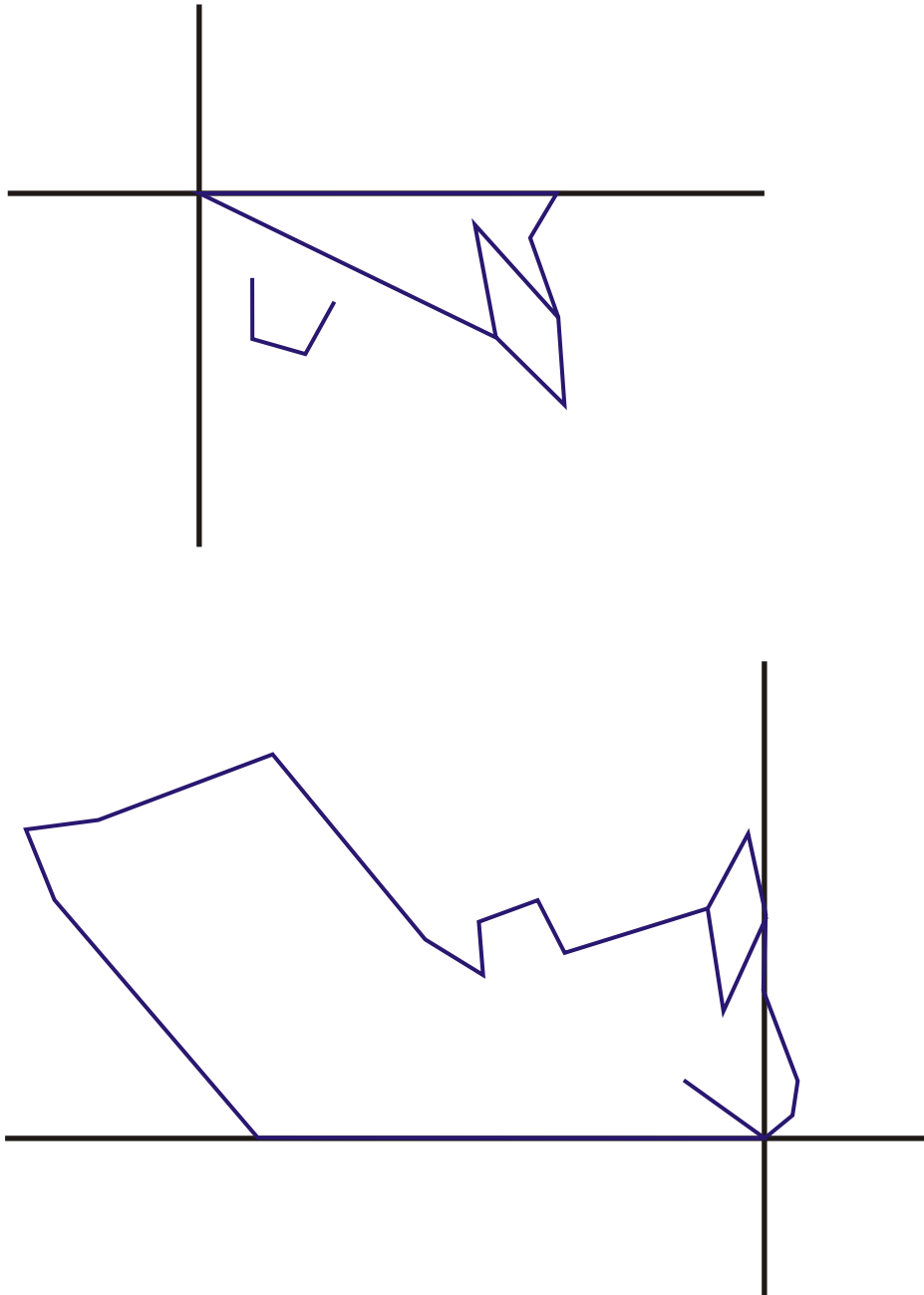
Age: 10.56 - 11.55 Years



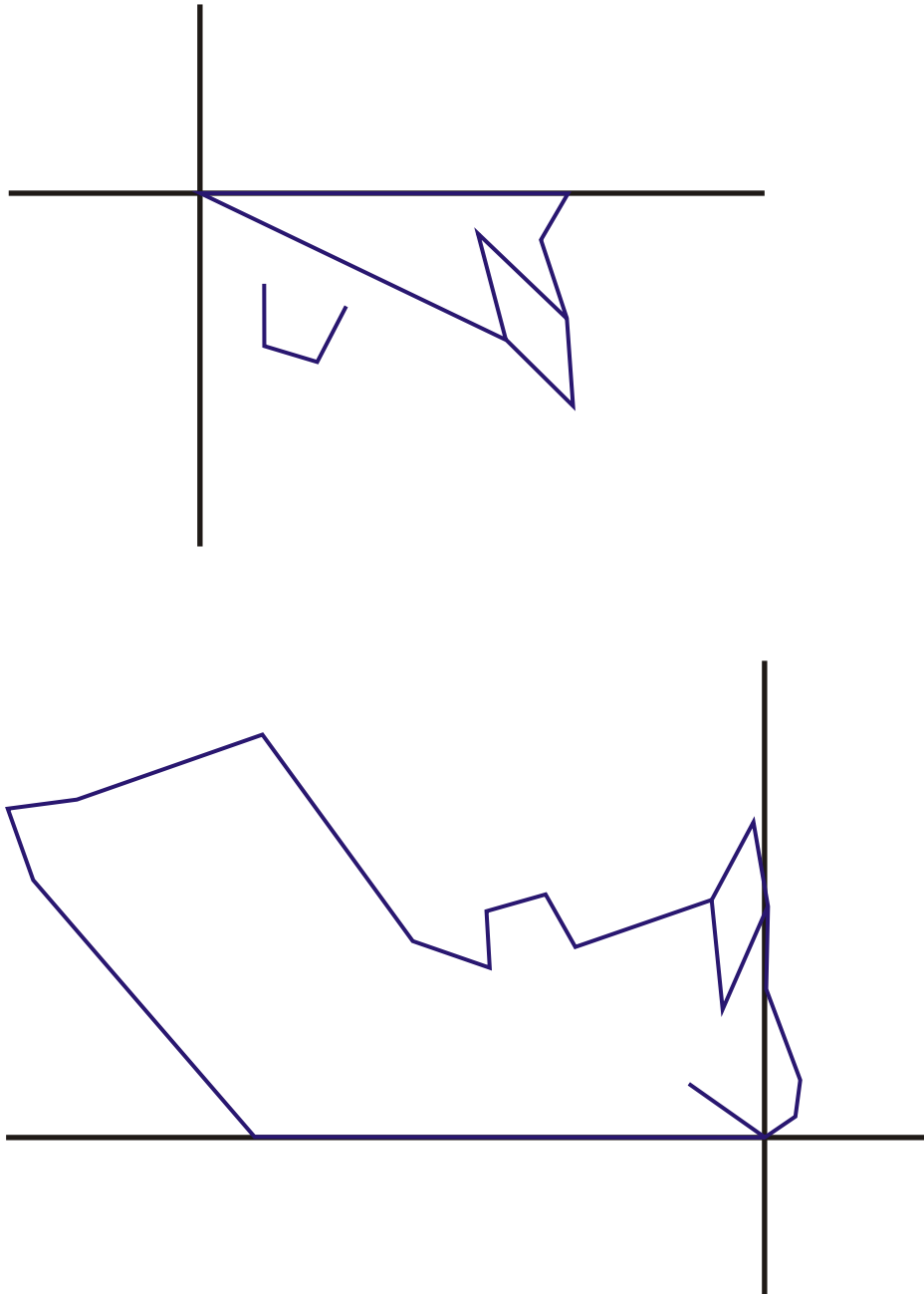
Guatemalan Non-Indian Male
Age: 11.56 - 12.55 years



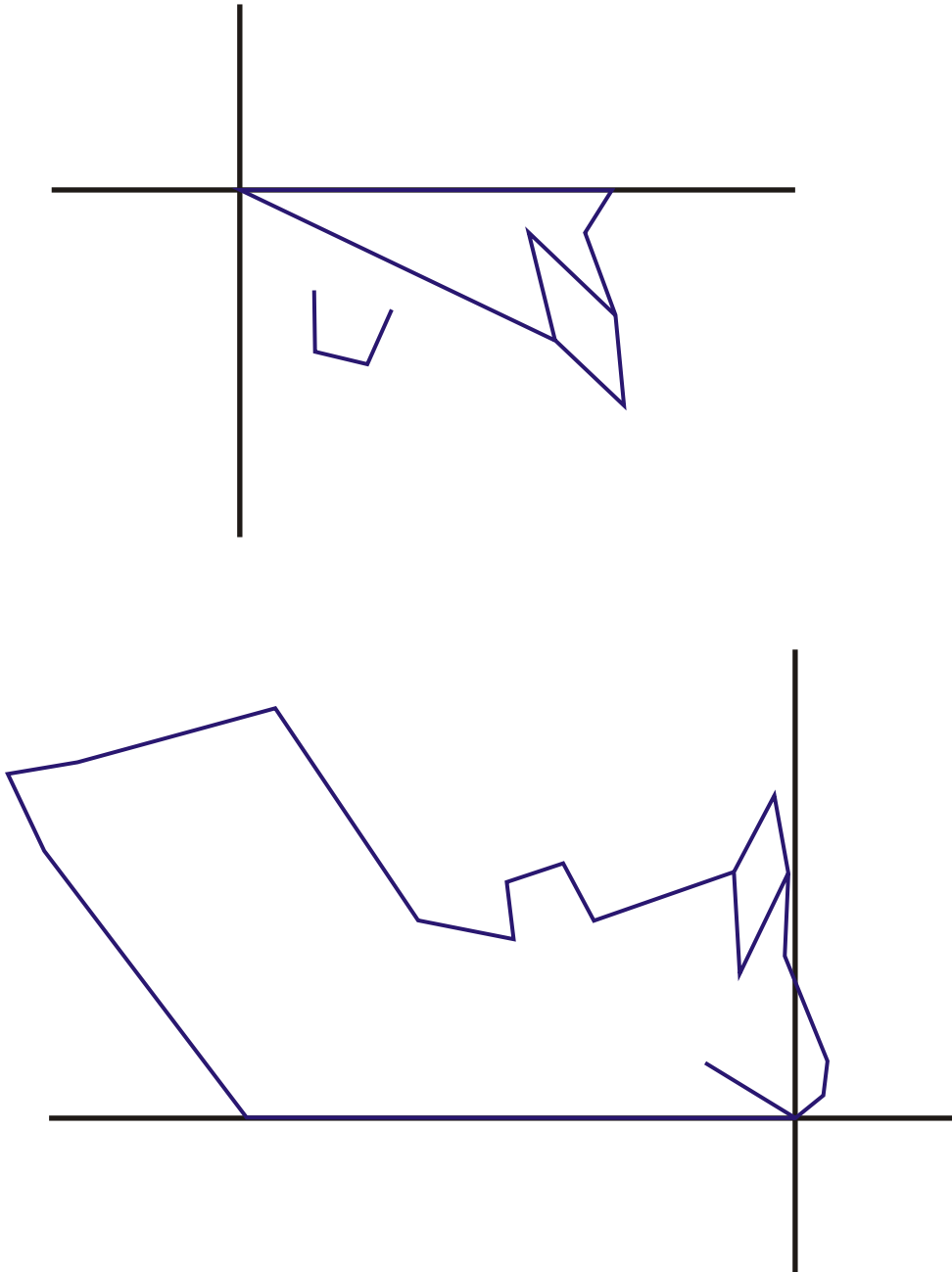
Guatemalan Non-Indian Male
Age: 12.56 - 13.55 Years



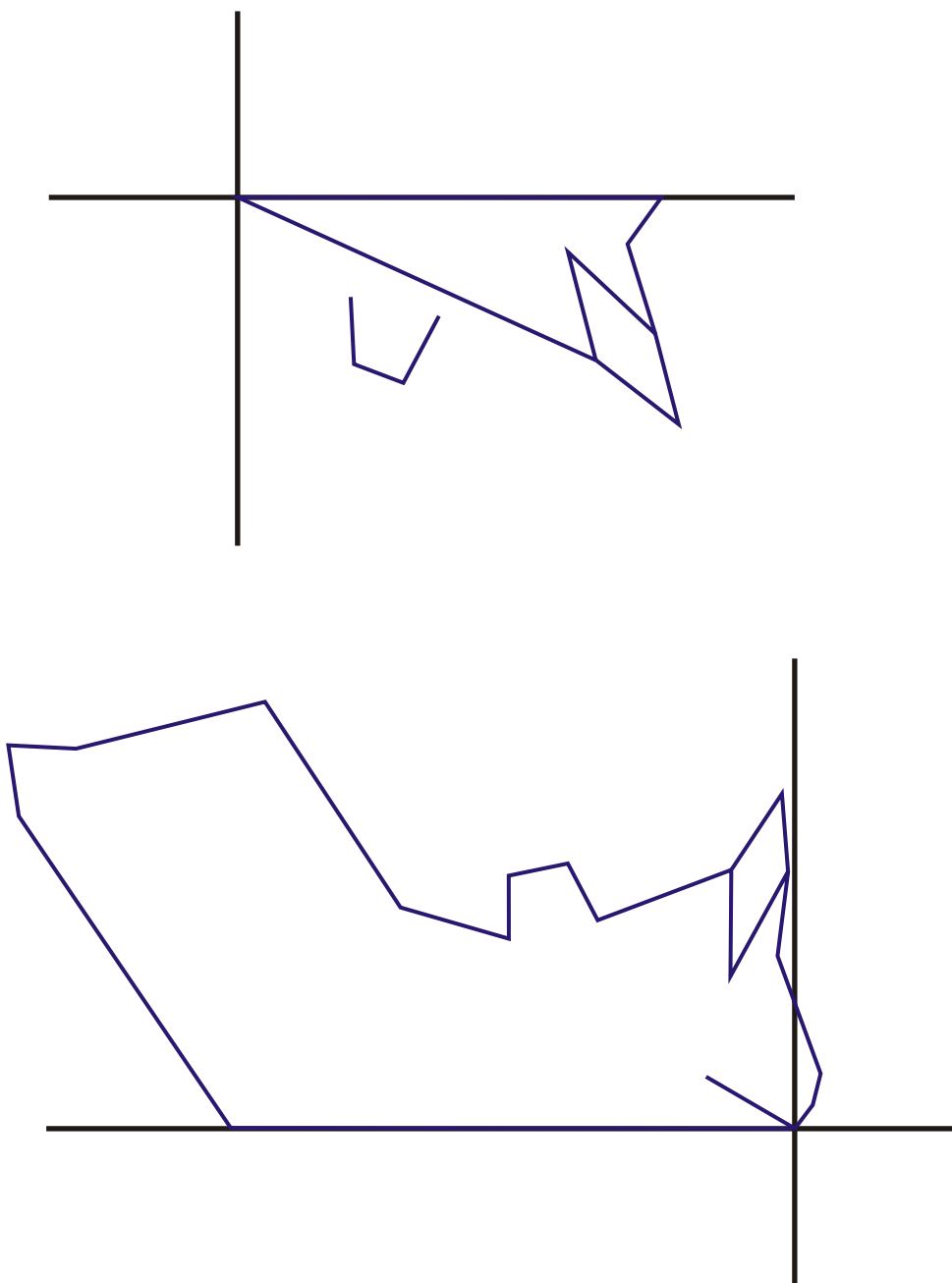
Guatemalan Non-Indian Male
Age: 13.56 - 14.55 Years



Guatemalan Non-Indian Male
Age: 14.56 - 15.55 Years

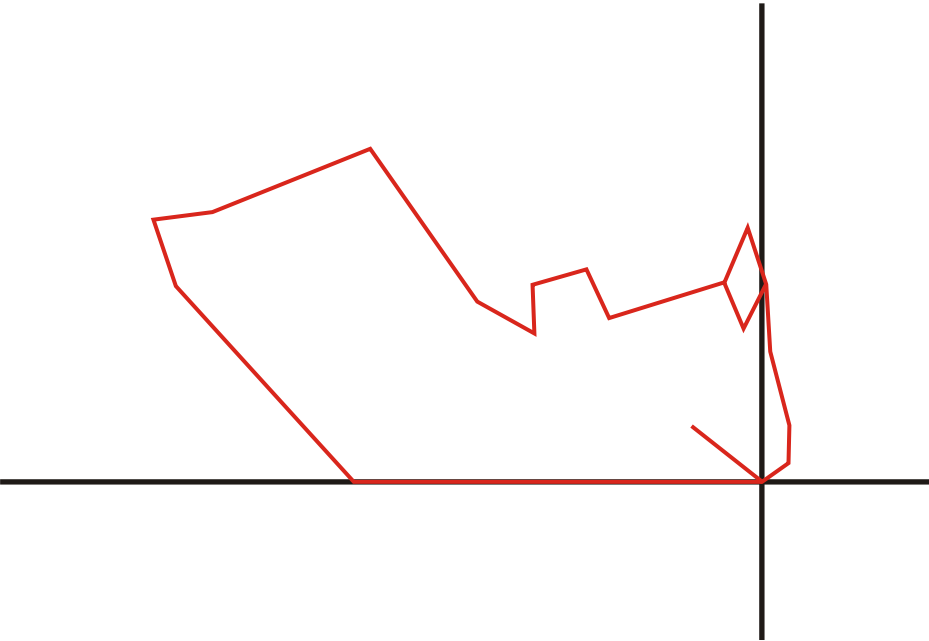
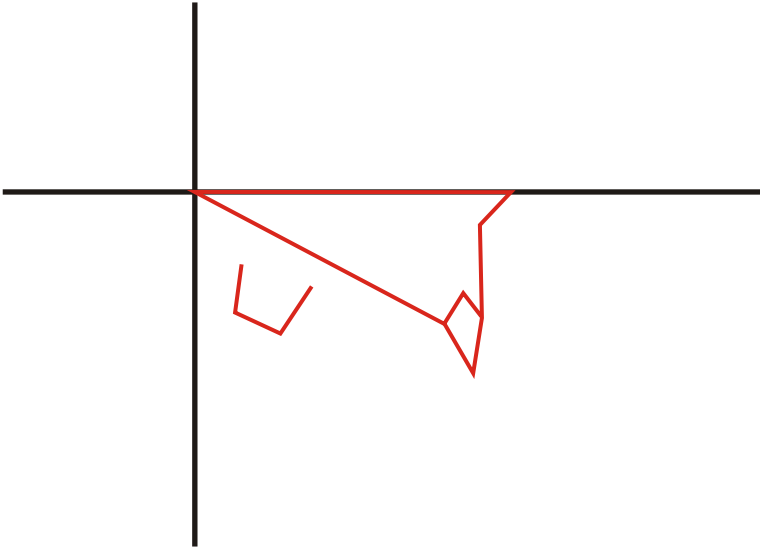


Guatemalan Non-Indian Male
Age: 15.56 - 16.55 Years



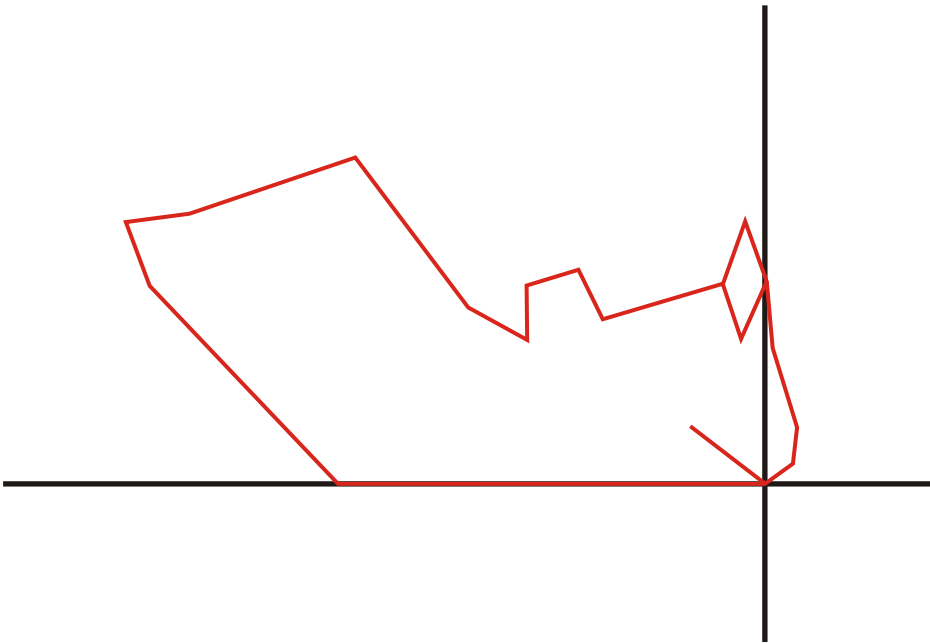
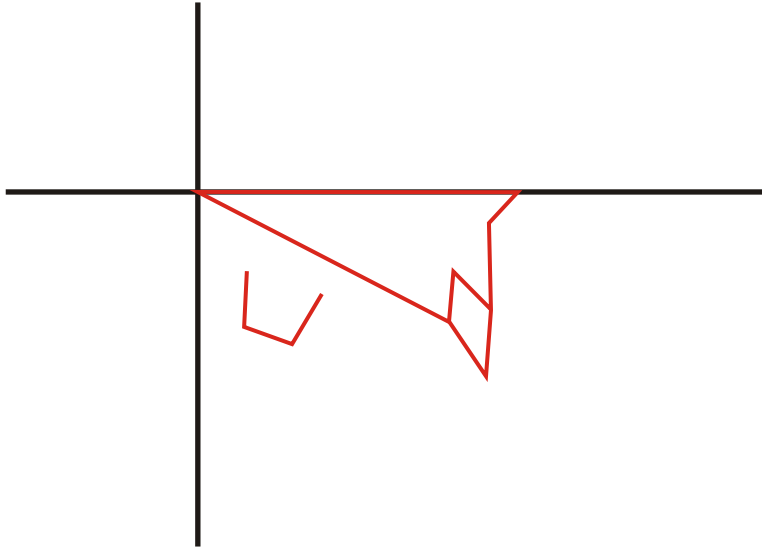
Guatemalan Non-Indian Female

Age: 6.56 - 7.55 Years

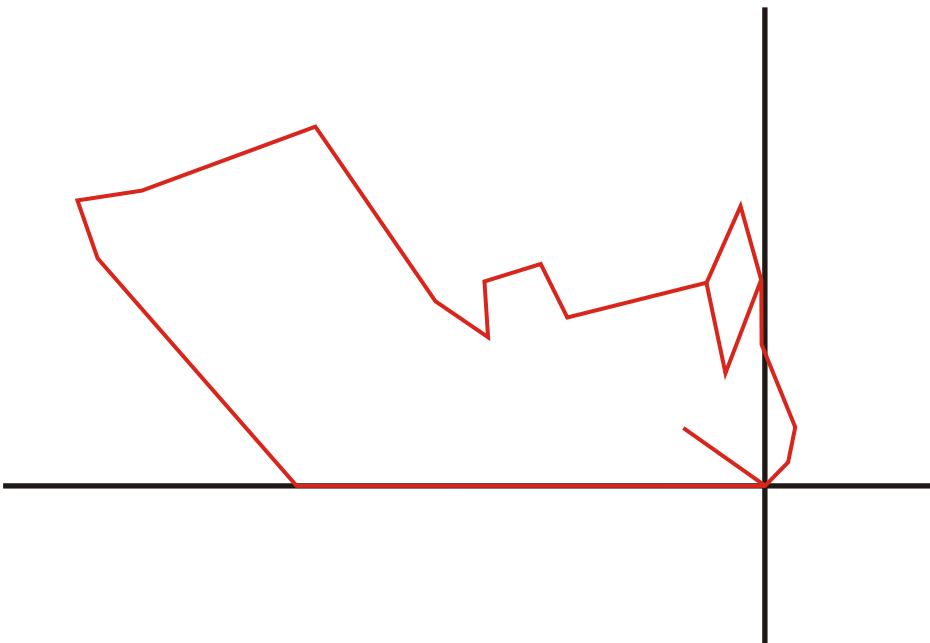
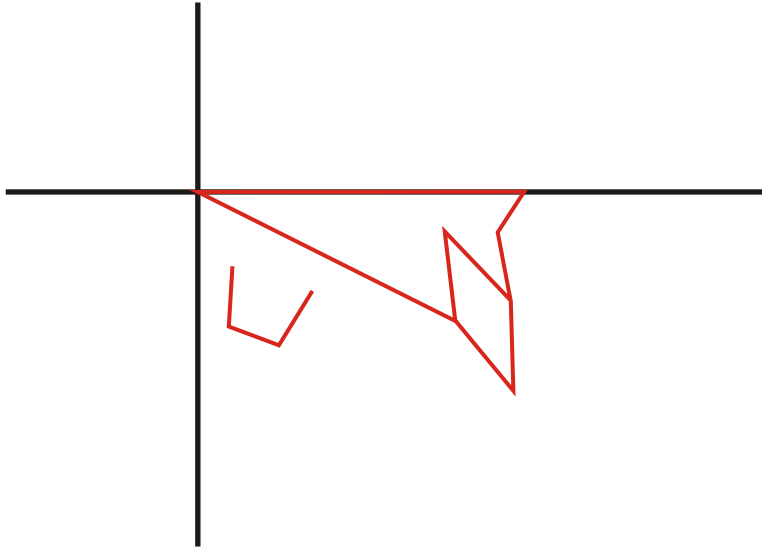


Guatemalan Non-Indian Female

Age: 7.56 - 8.55 Years

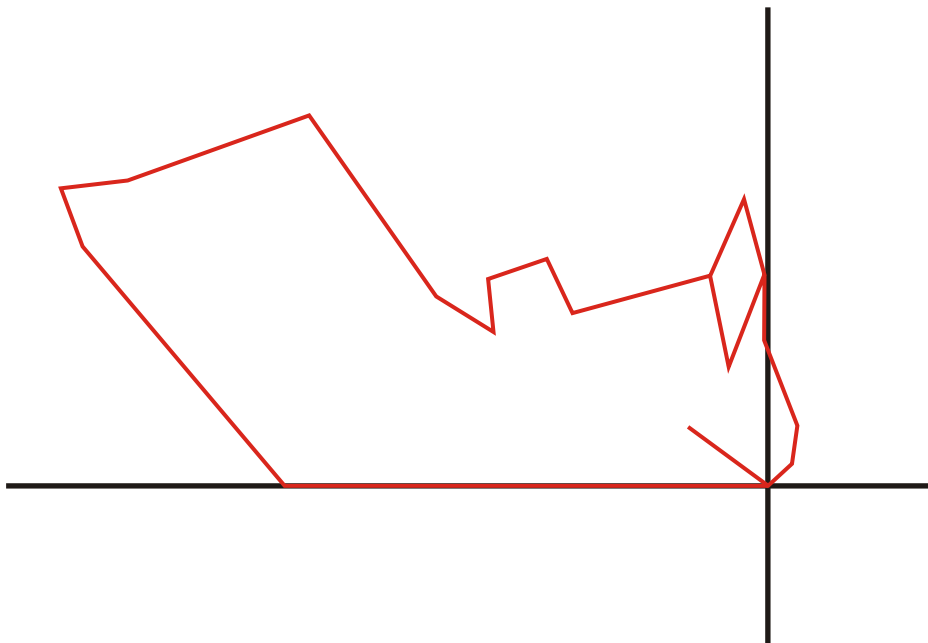
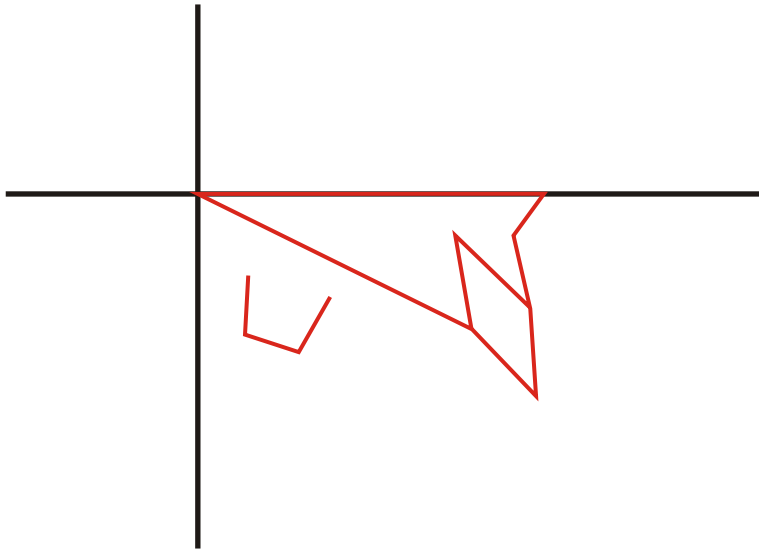


Guatemalan Non-Indian Female
Age: 10.56 - 11.55 Years



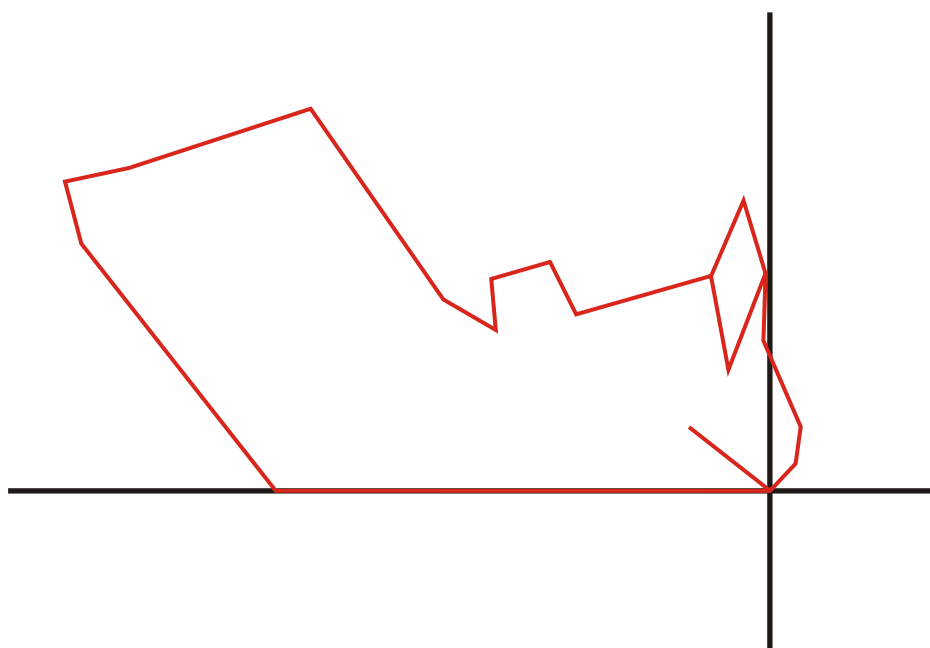
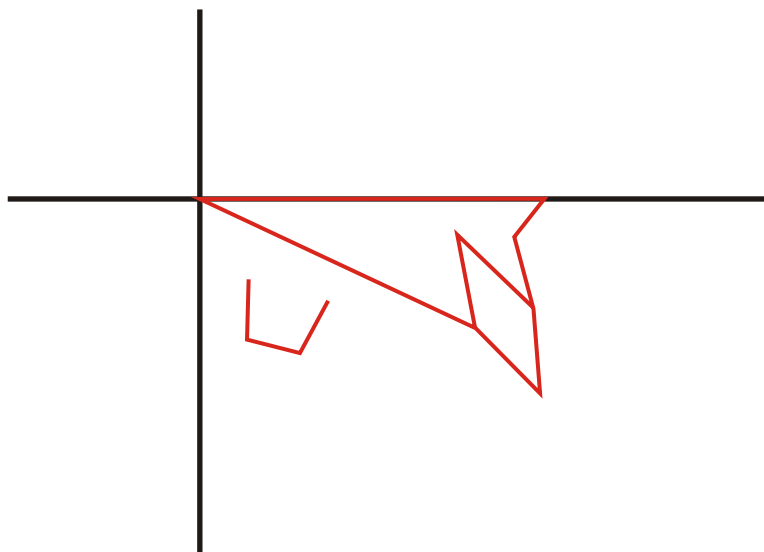
Guatemalan Non-Indian Female

Age: 11.56 - 12.55 Years



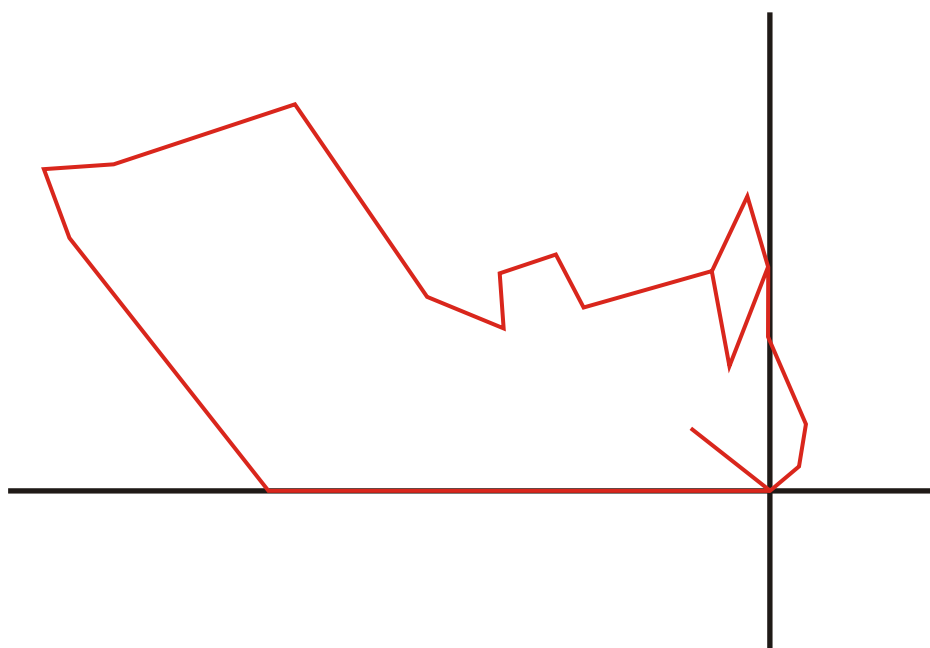
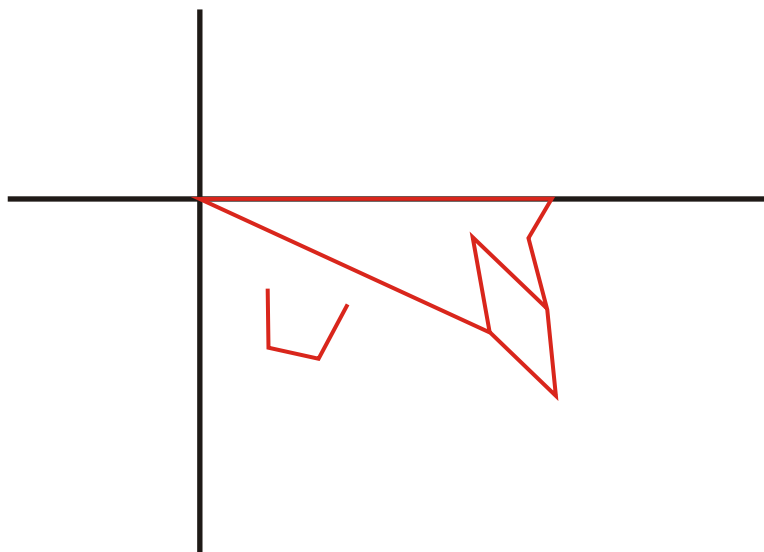
Guatemalan Non-Indian Female

Age: 12.56 - 13.55 Years



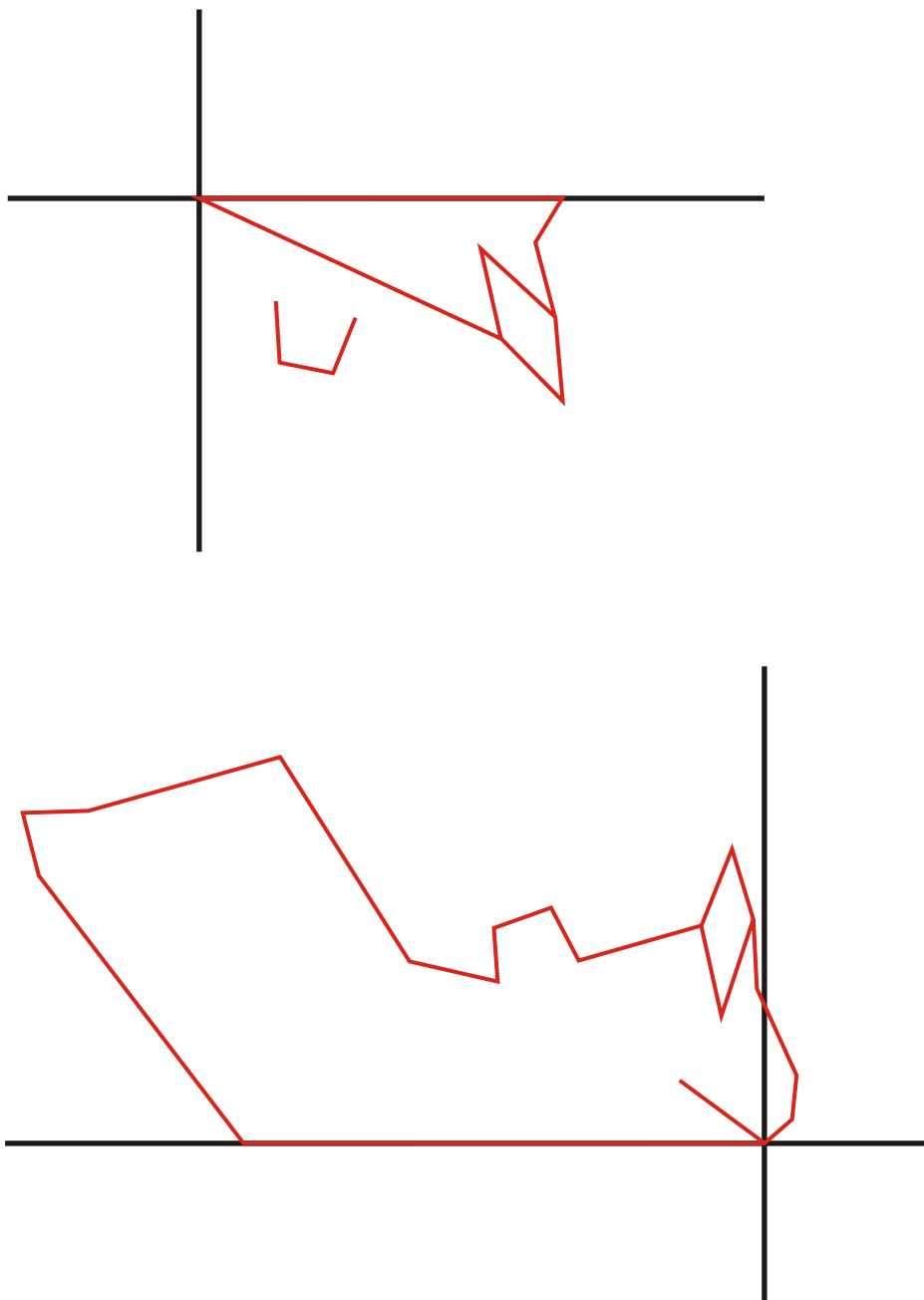
Guatemalan Non-Indian Female

Age: 13.56 - 14.55 Years



Guatemalan Non-Indian Female

Age: 14.56 - 15.55 Years



Guatemalan Non-Indian Female

Age: 15.56 - 16.55 Years



Guatemalan Non-Indian Female

Age: 16.56 - 17.55 Years

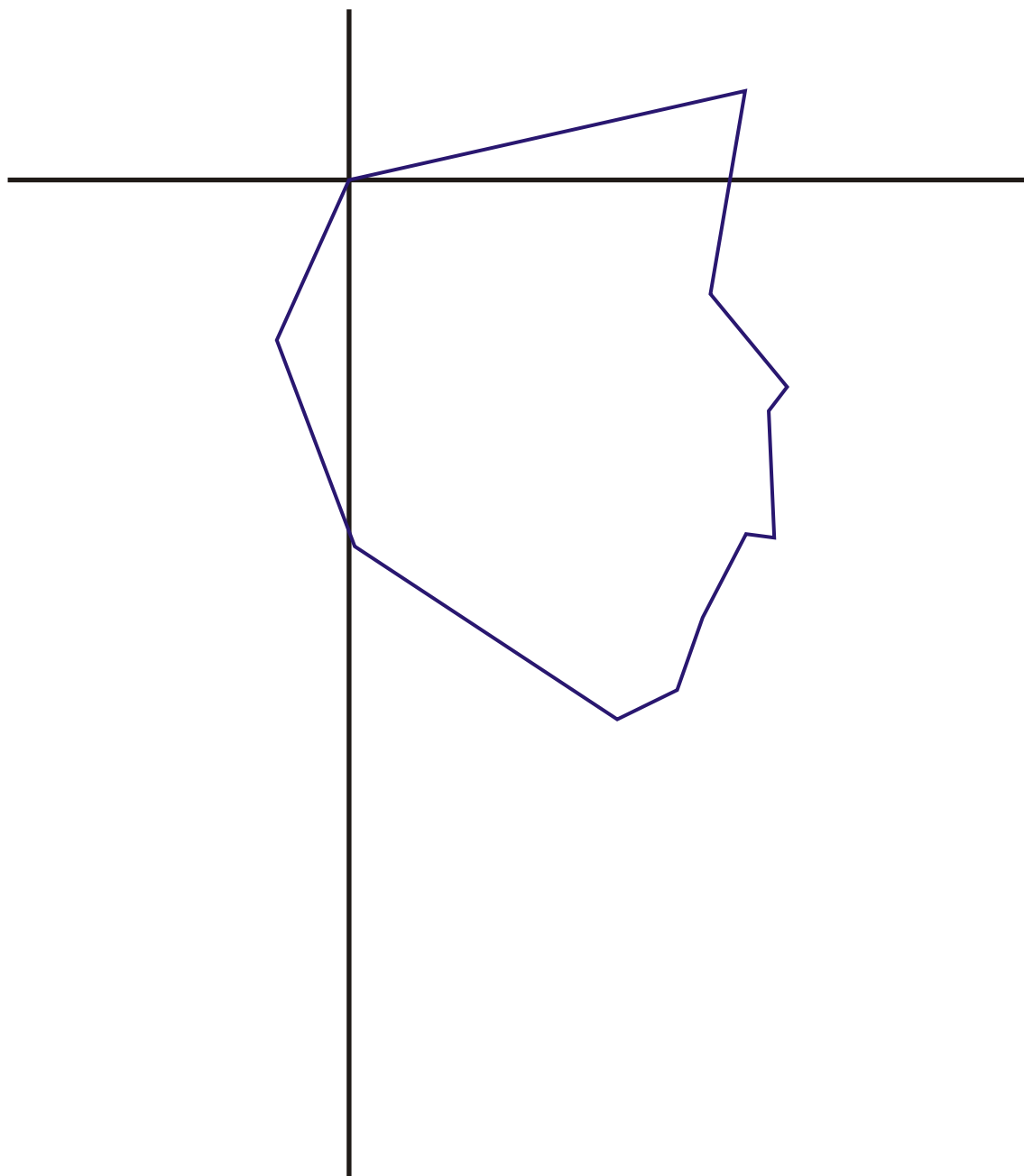




11. DIAGRAMAS DEL PERFIL CEFALOMETRICO CEPHALOMETRIC PROFILOGRAMS

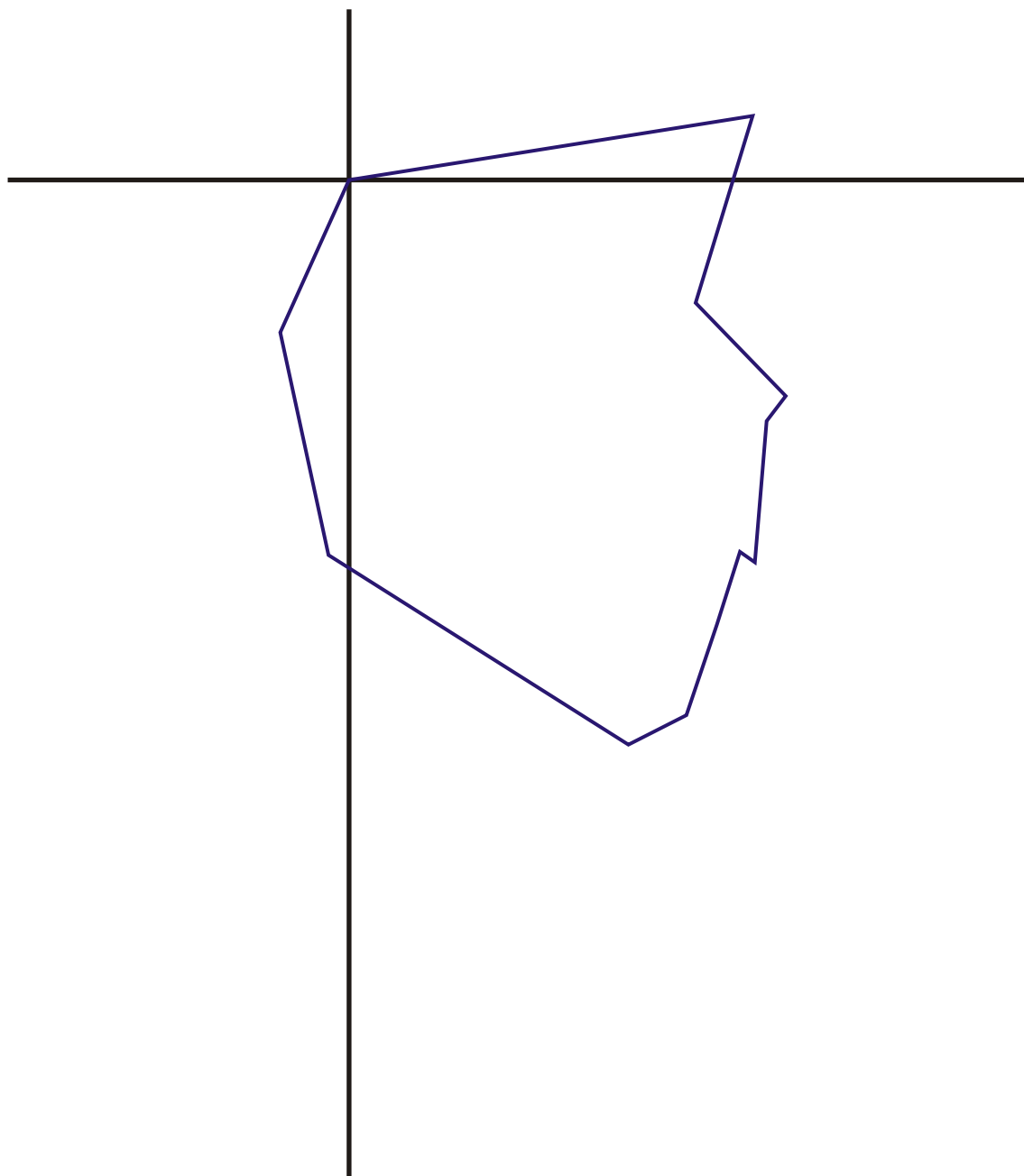
Guatemalan Non-Indian Male

Age: 4.56 - 5.55 Years



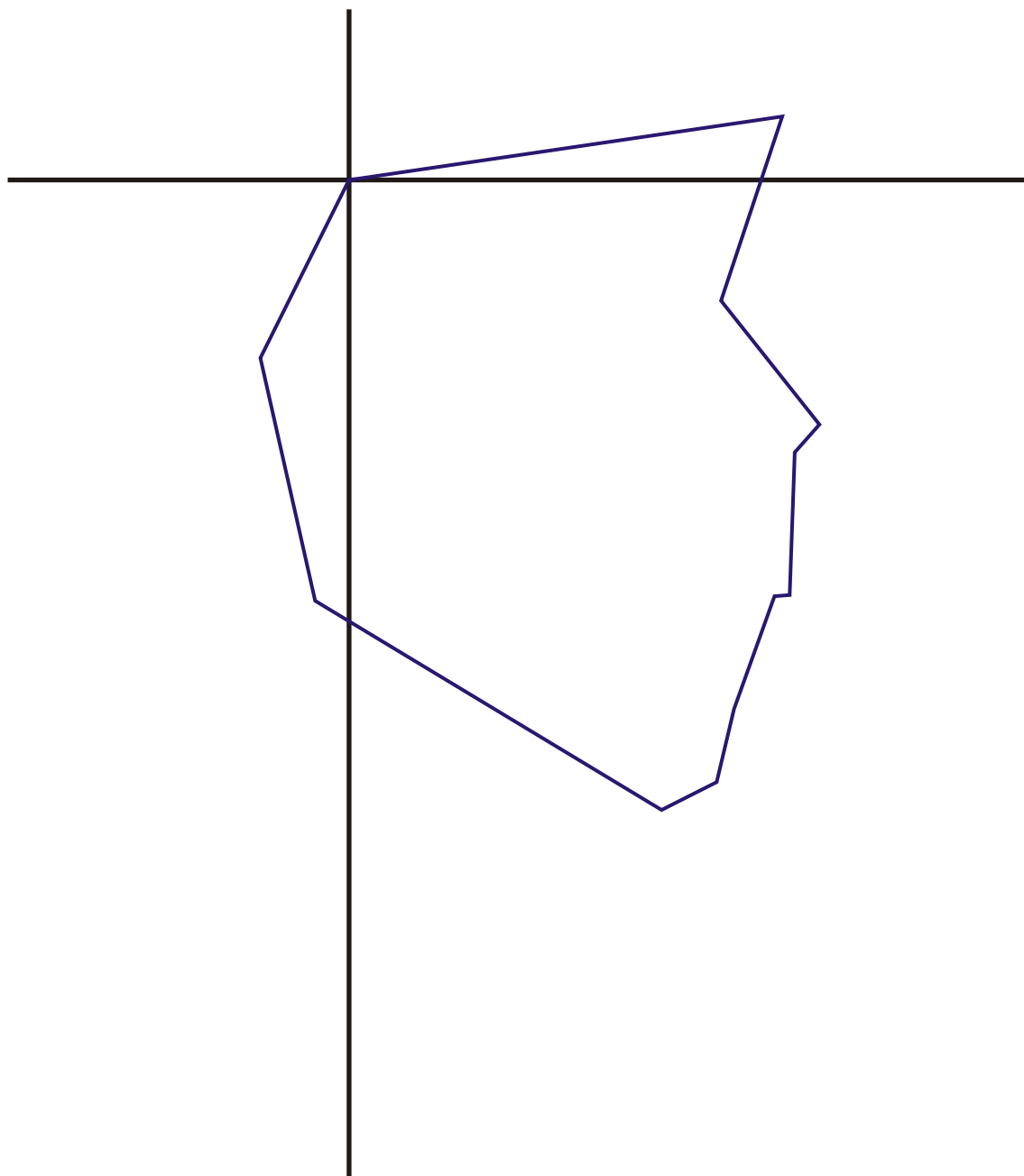
Guatemalan Non-Indian Male

Age: 5.56 - 6.55 Years



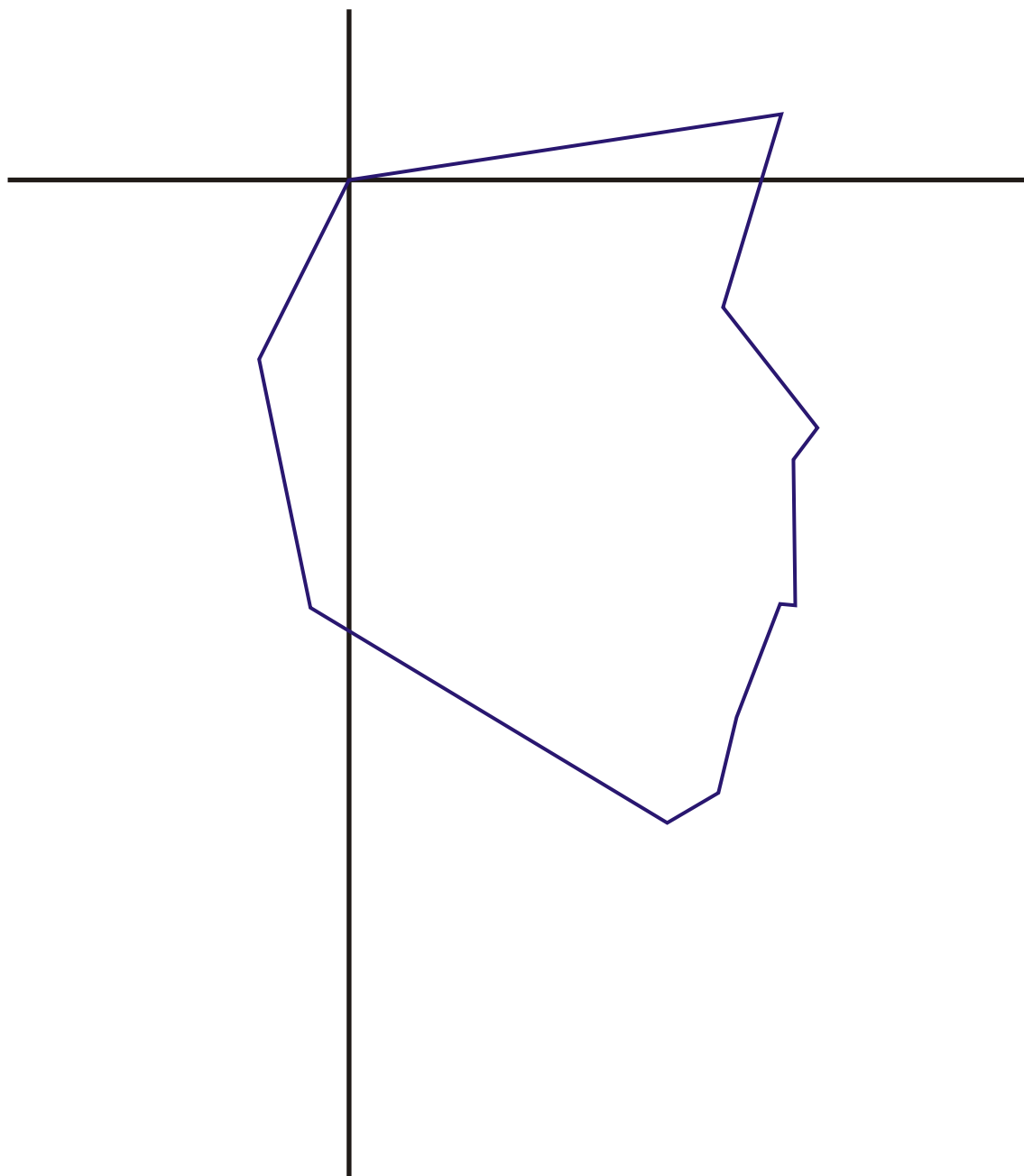
Guatemalan Non-Indian Male

Age: 7.56 - 8.55 years



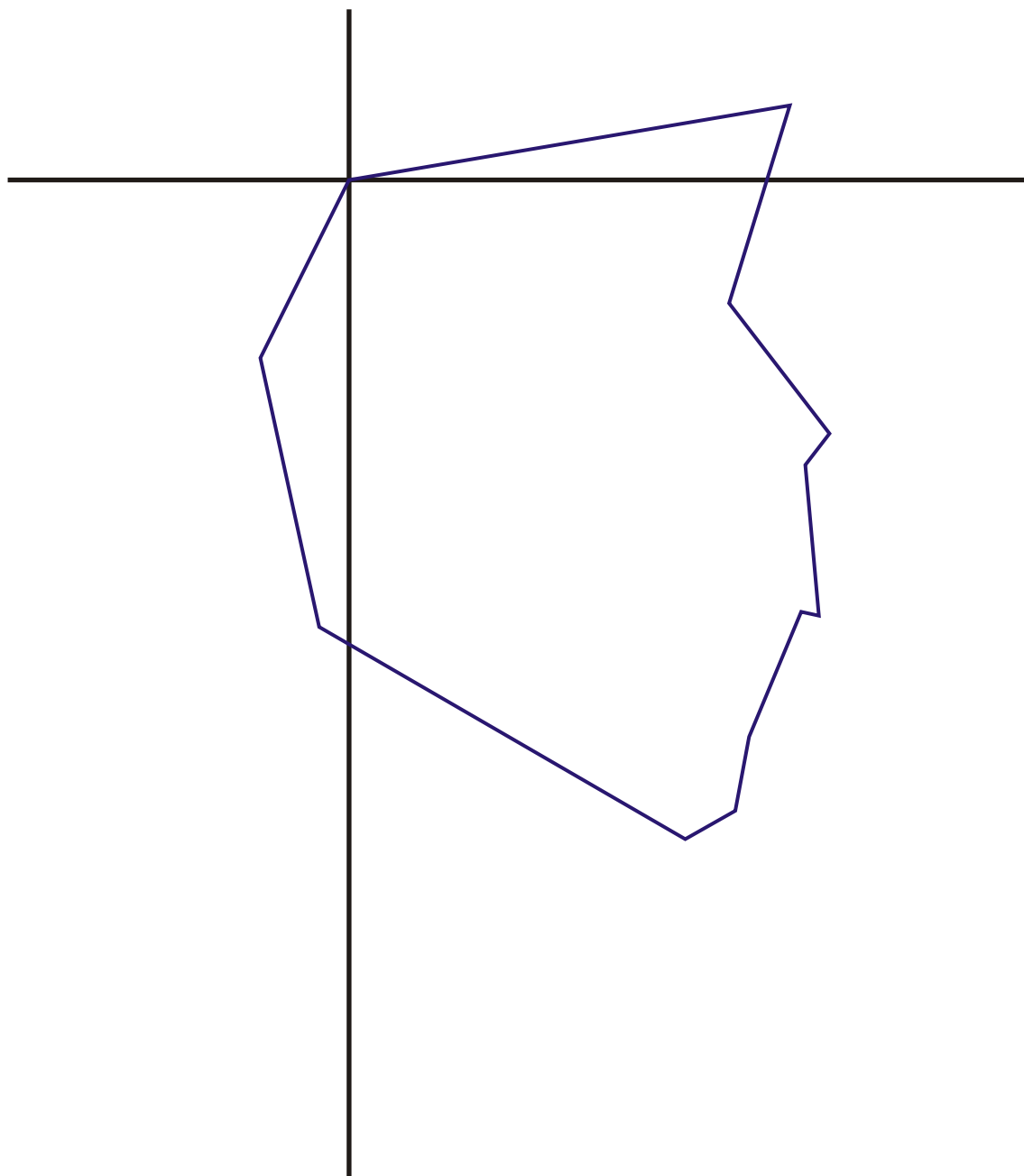
Guatemalan Non-Indian Male

Age: 8.56 - 9.55 Years



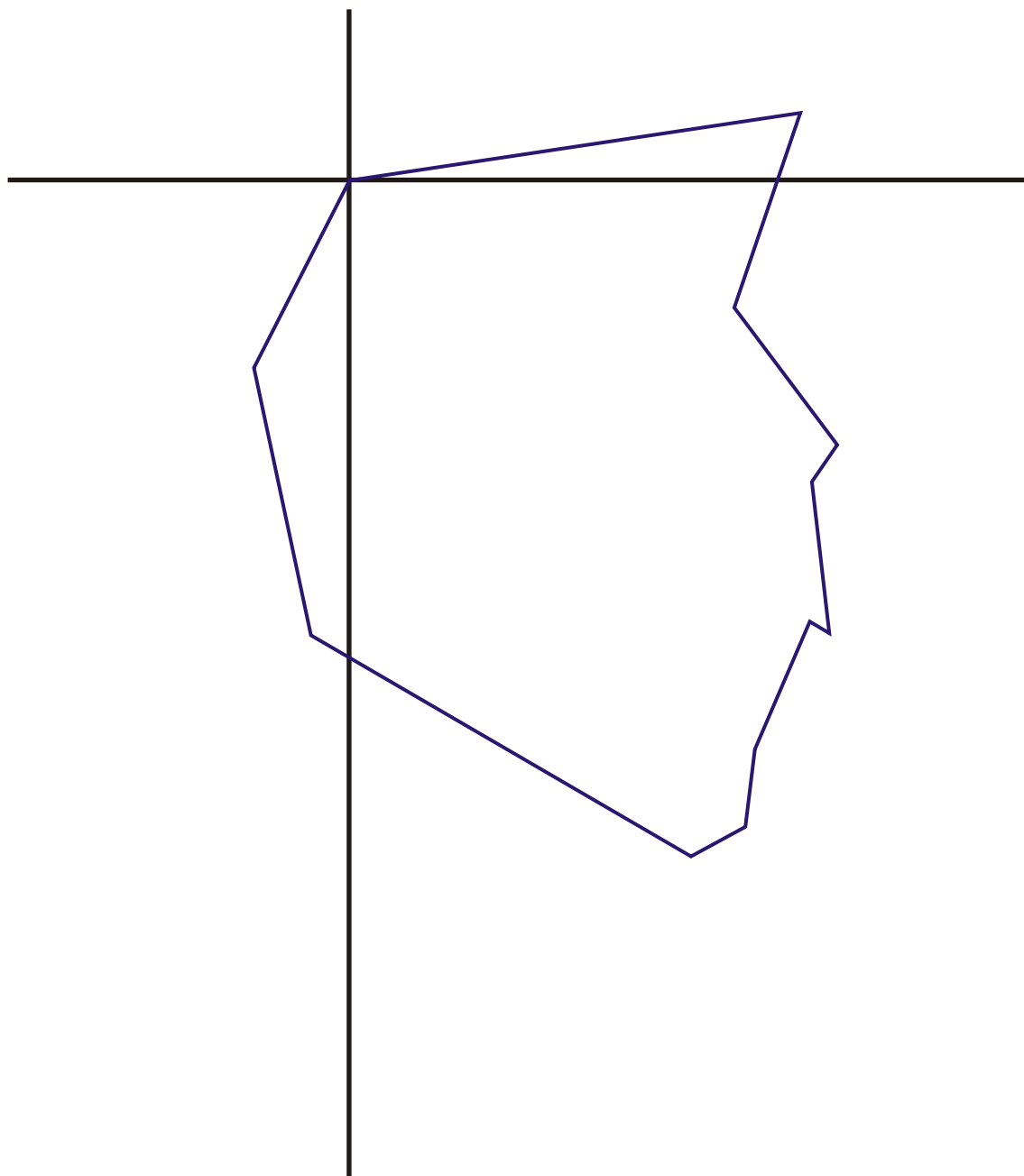
Guatemalan Non-Indian Male

Age: 9.56 - 10.55 Years



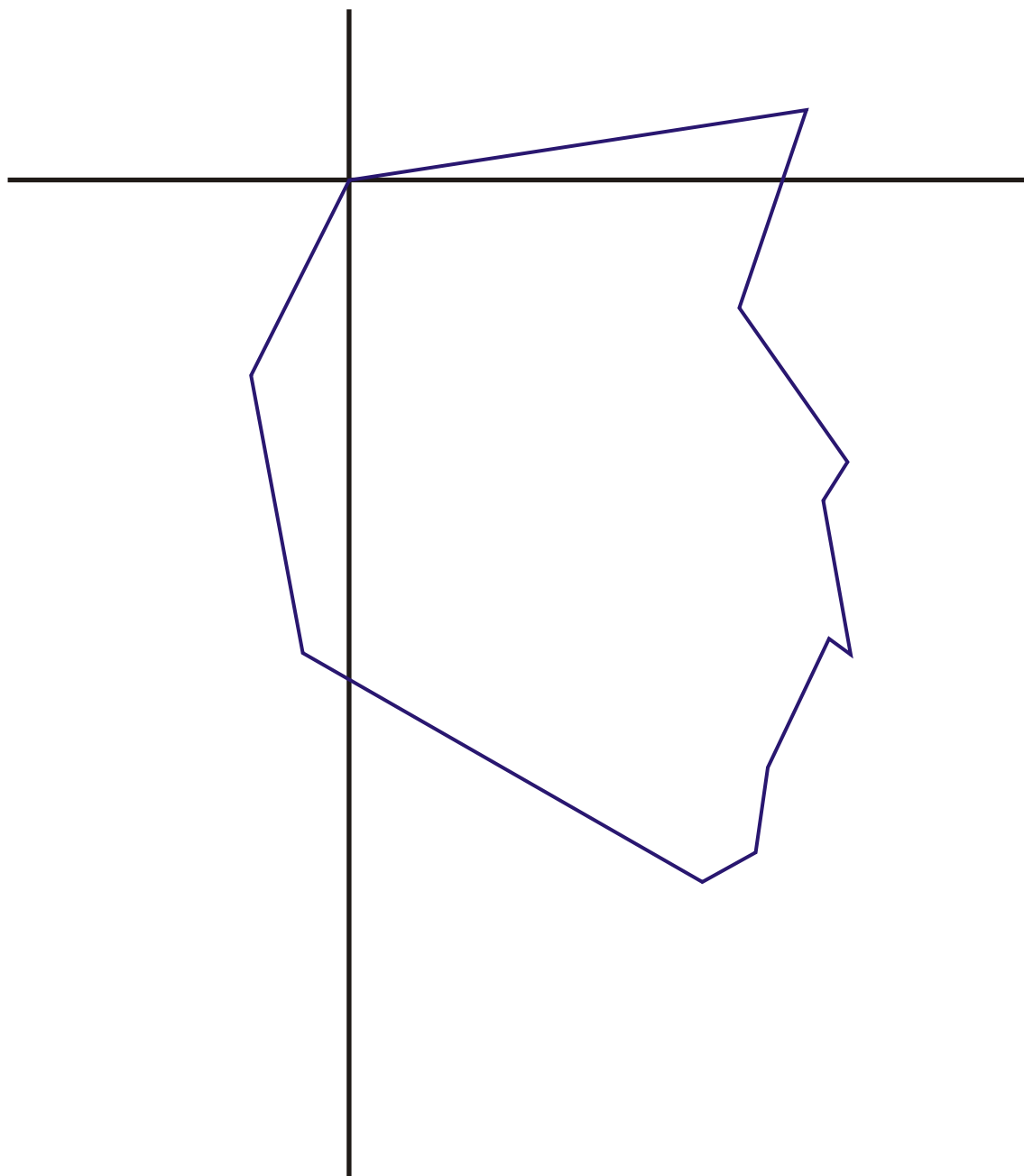
Guatemalan Non-Indian Male

Age: 10.56 - 11.55 years



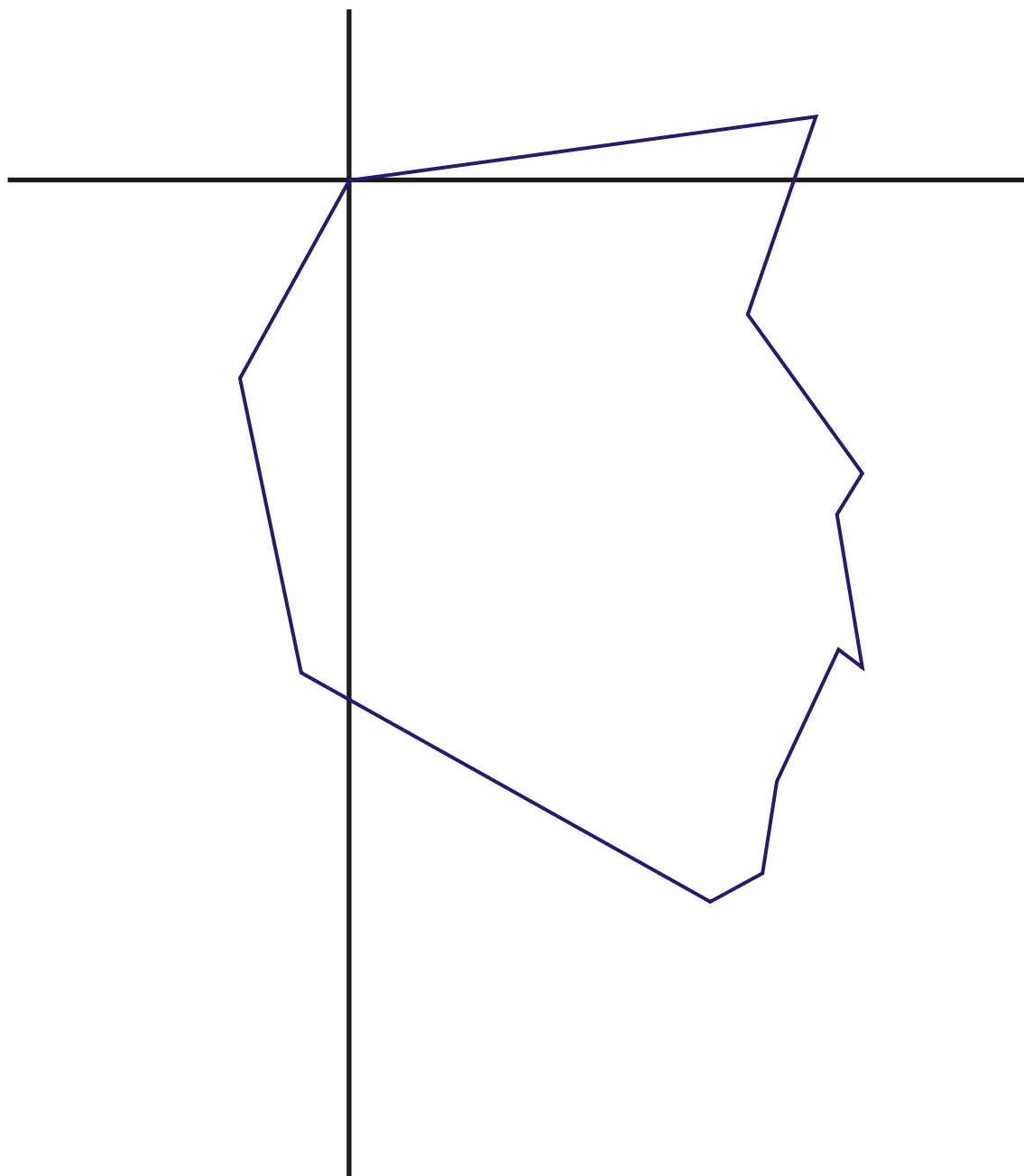
Guatemalan Non-Indian Male

Age: 12.56 - 13.55 years



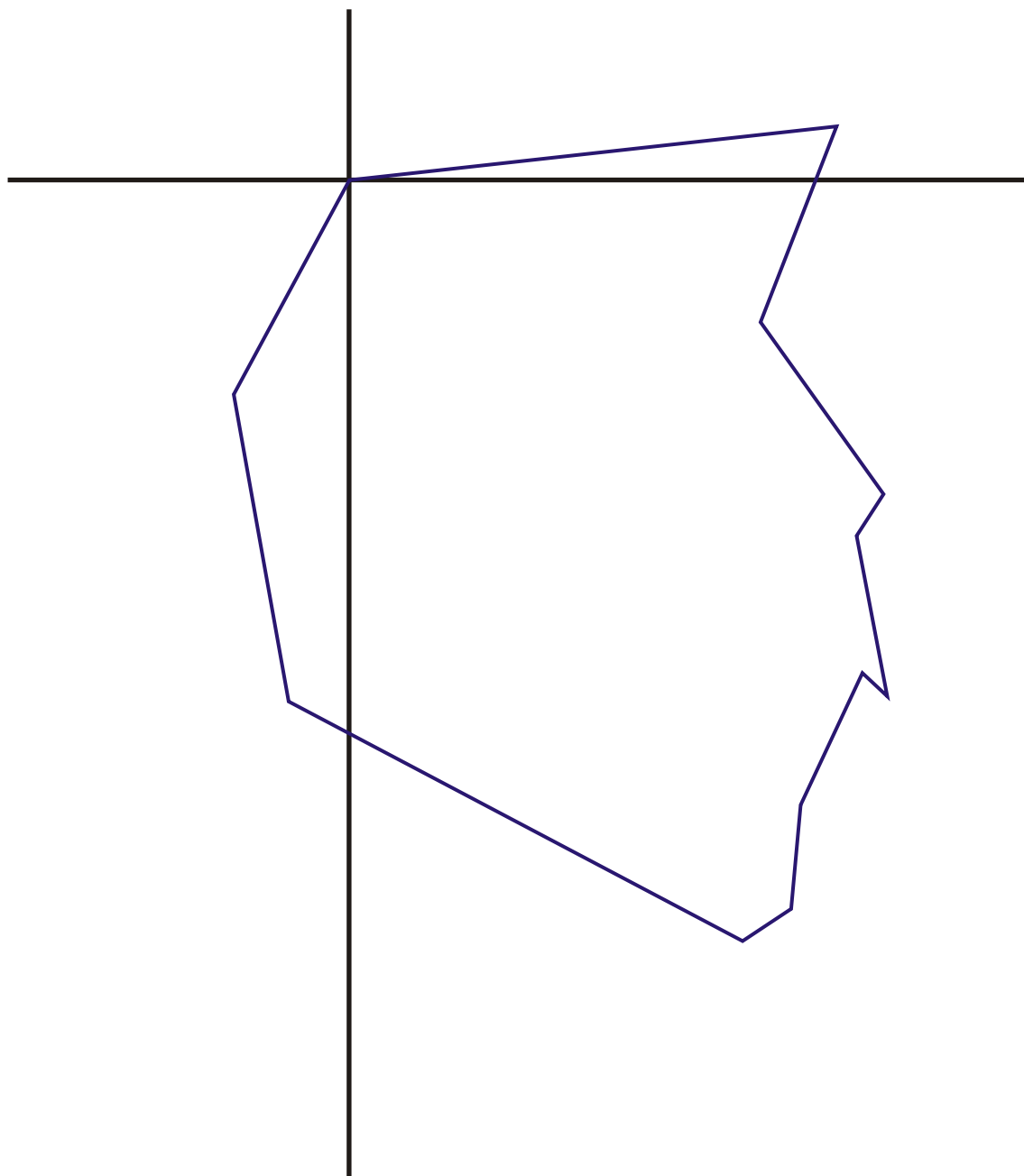
Guatemalan Non-Indian Male

Age: 13.56 - 14.55 years



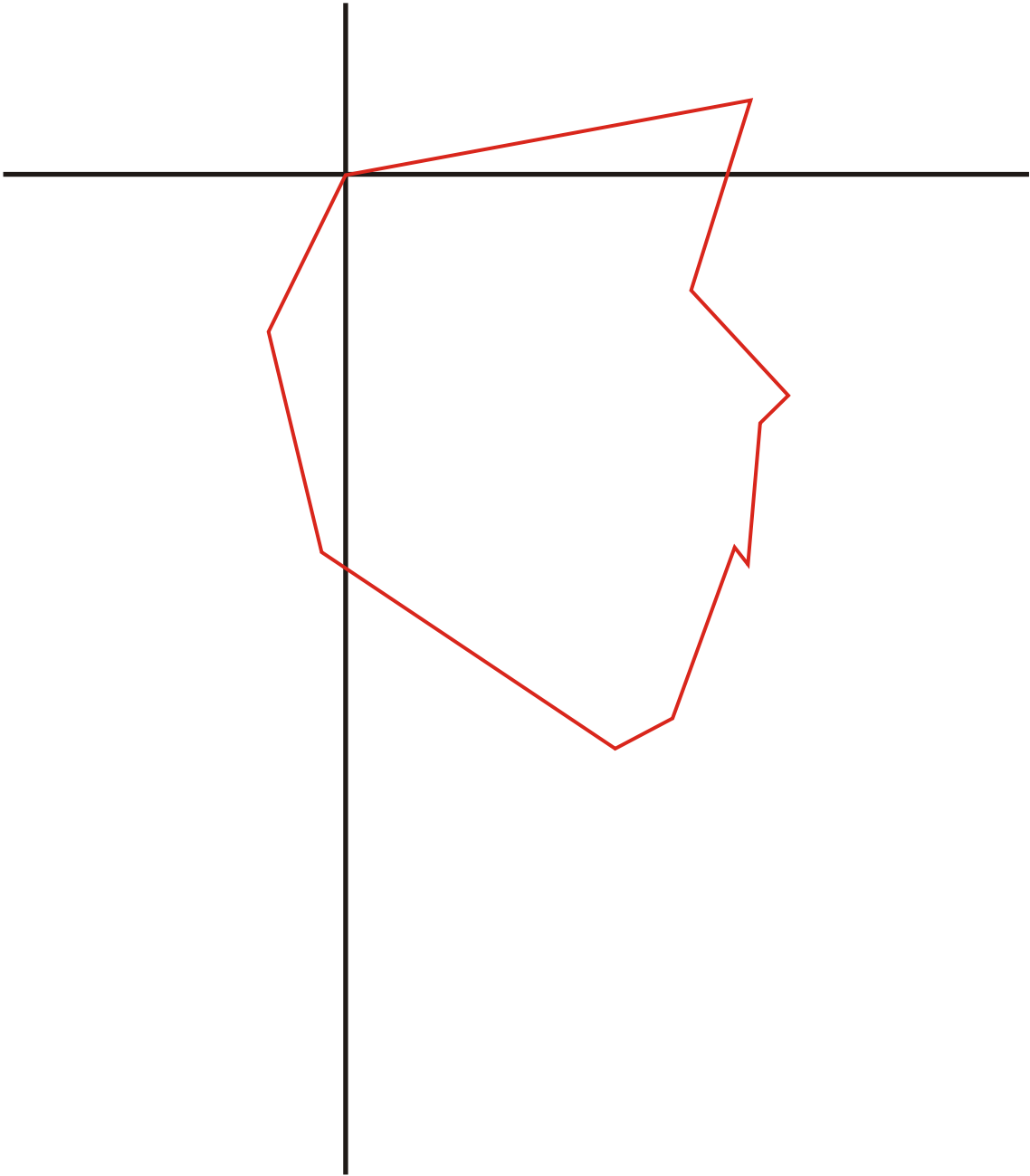
Guatemalan Non-Indian Male

Age: 14.56 - 15.55 years



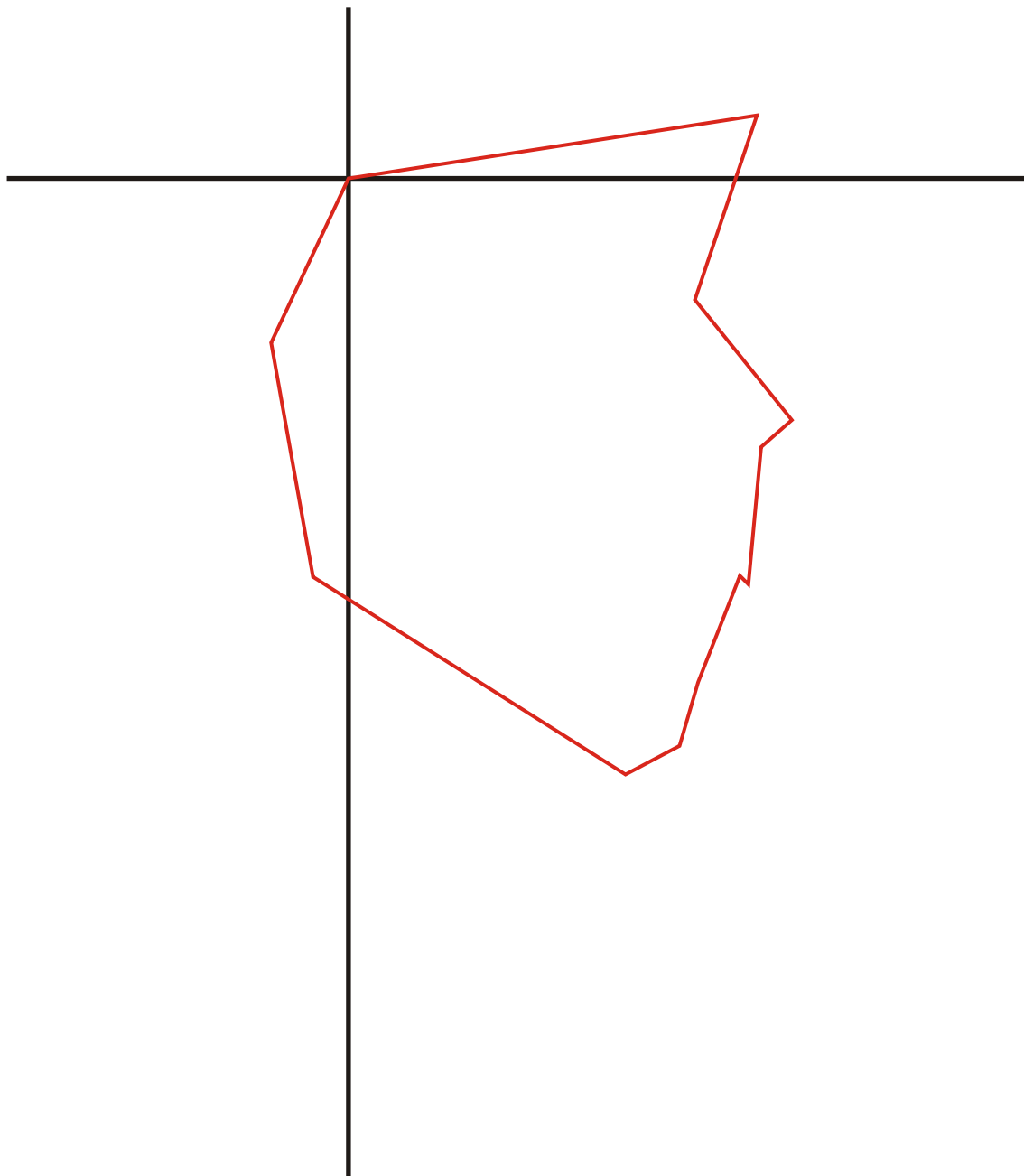
Guatemalan Non-Indian Female

Age: 5.56 - 6.55 years



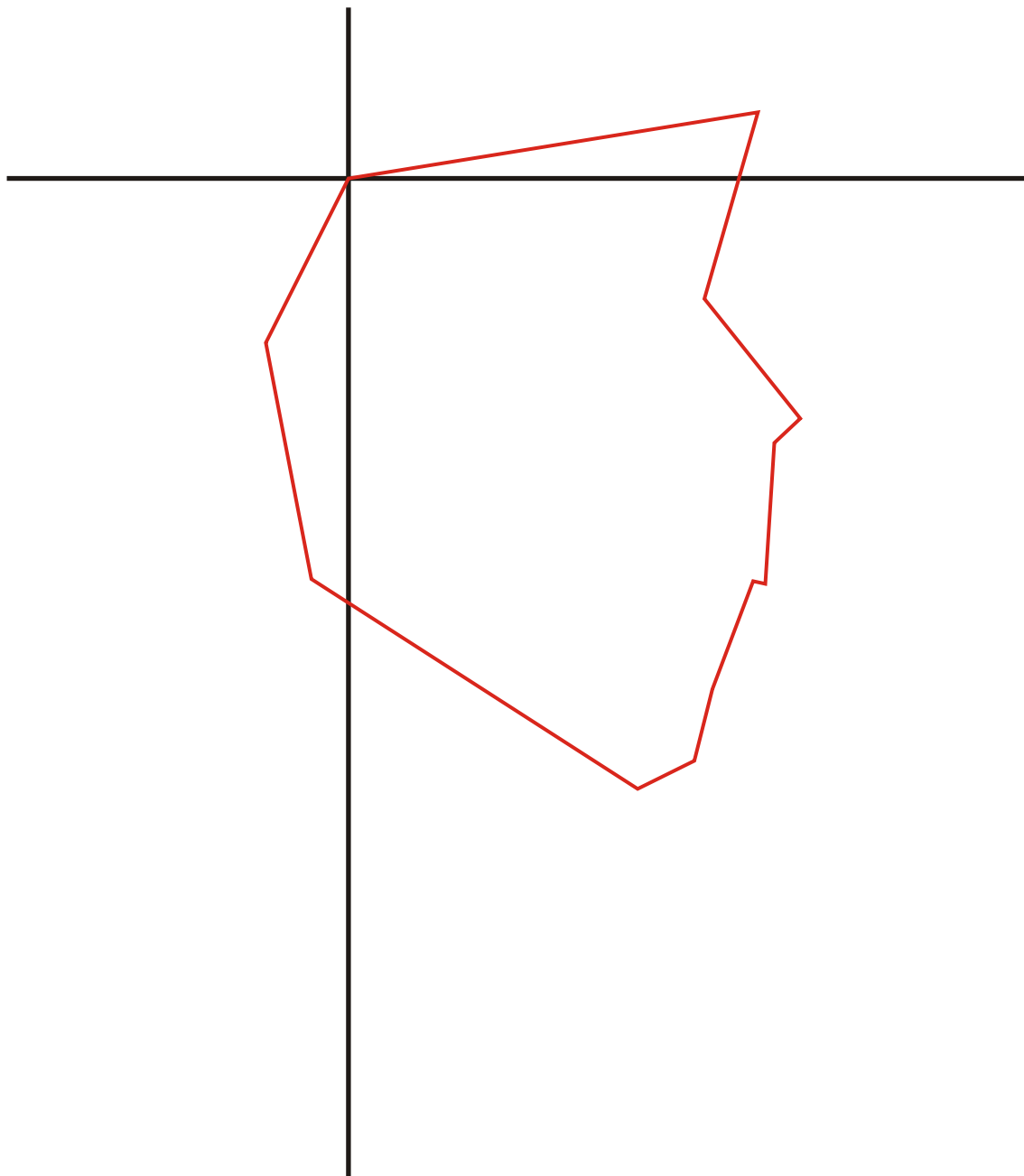
Guatemalan Non-Indian Female

Age: 6.56 - 7.55 years



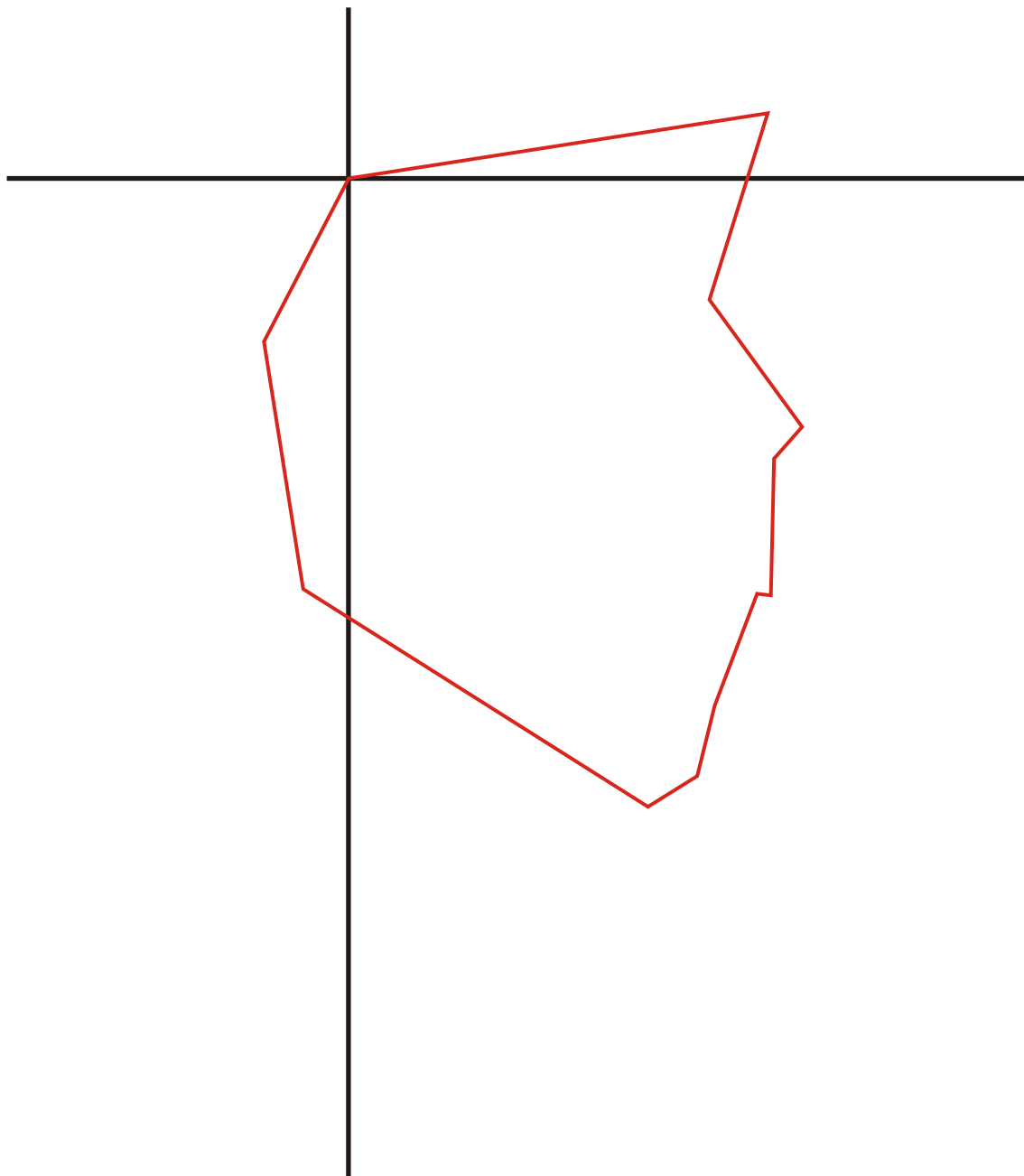
Guatemalan Non-Indian Female

Age: 7.56 - 8.55 years



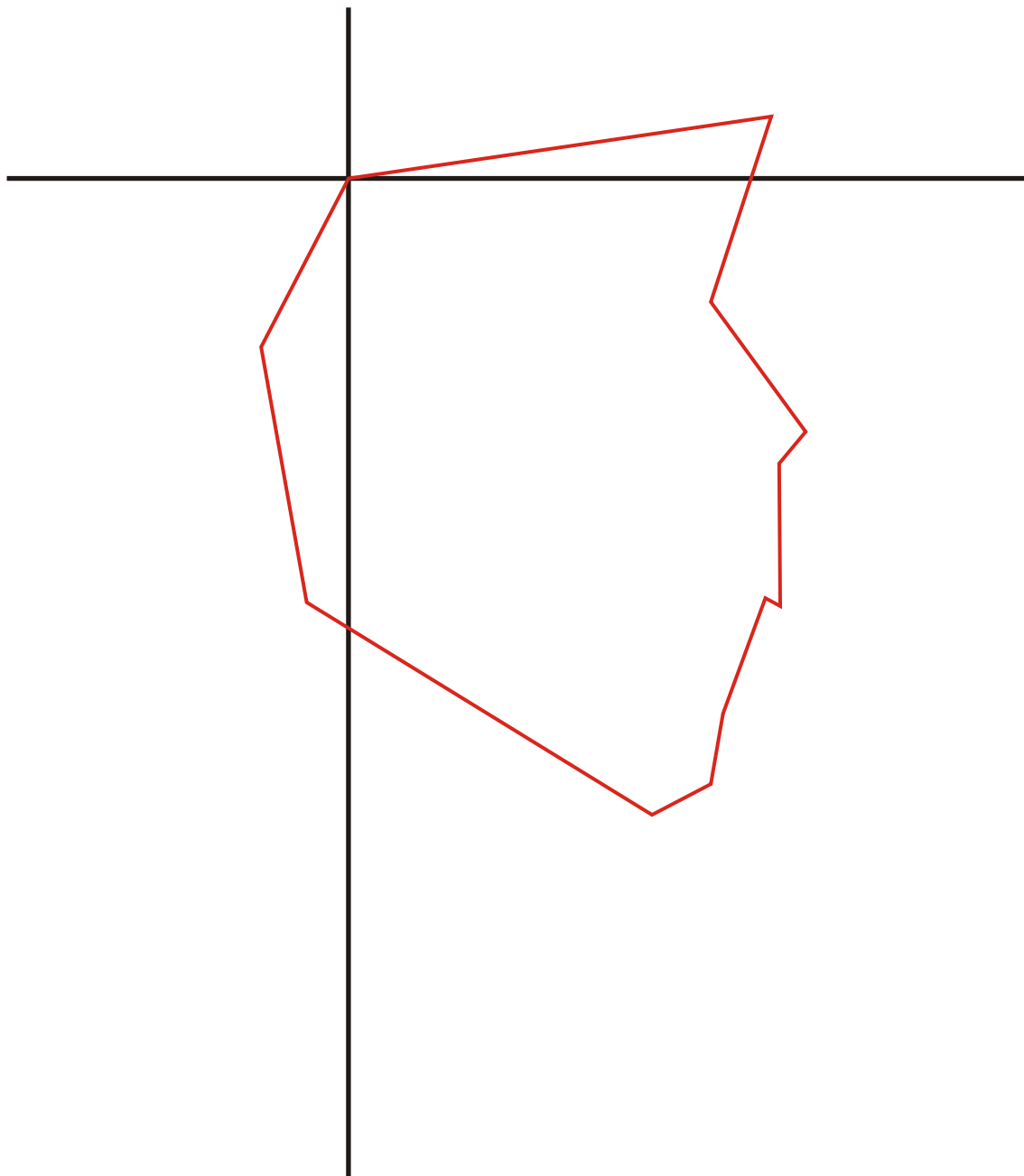
Guatemalan Non-Indian Female

Age: 8.56 - 9.55 years



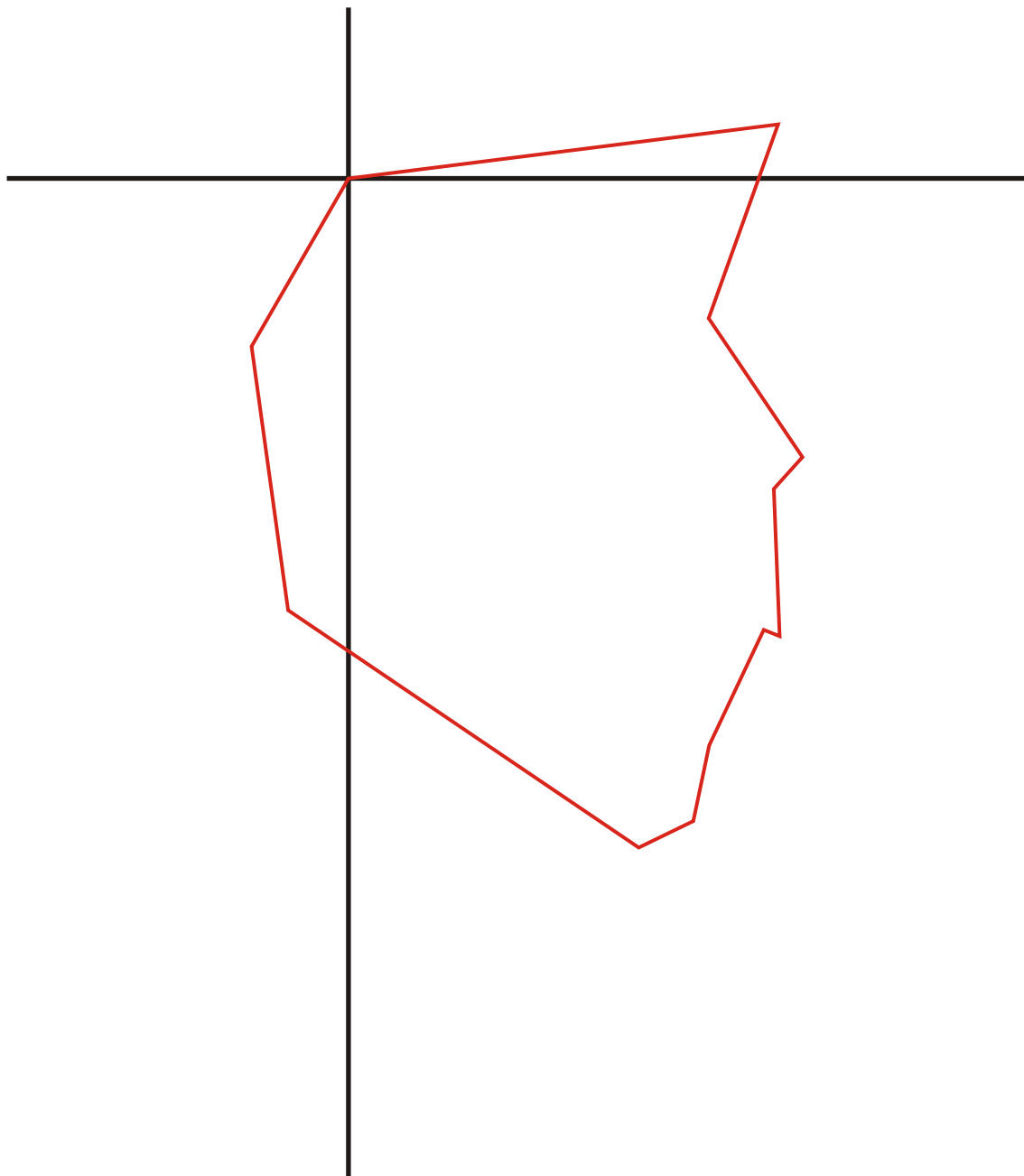
Guatemalan Non-Indian Female

Age: 9.56 - 10.55 years



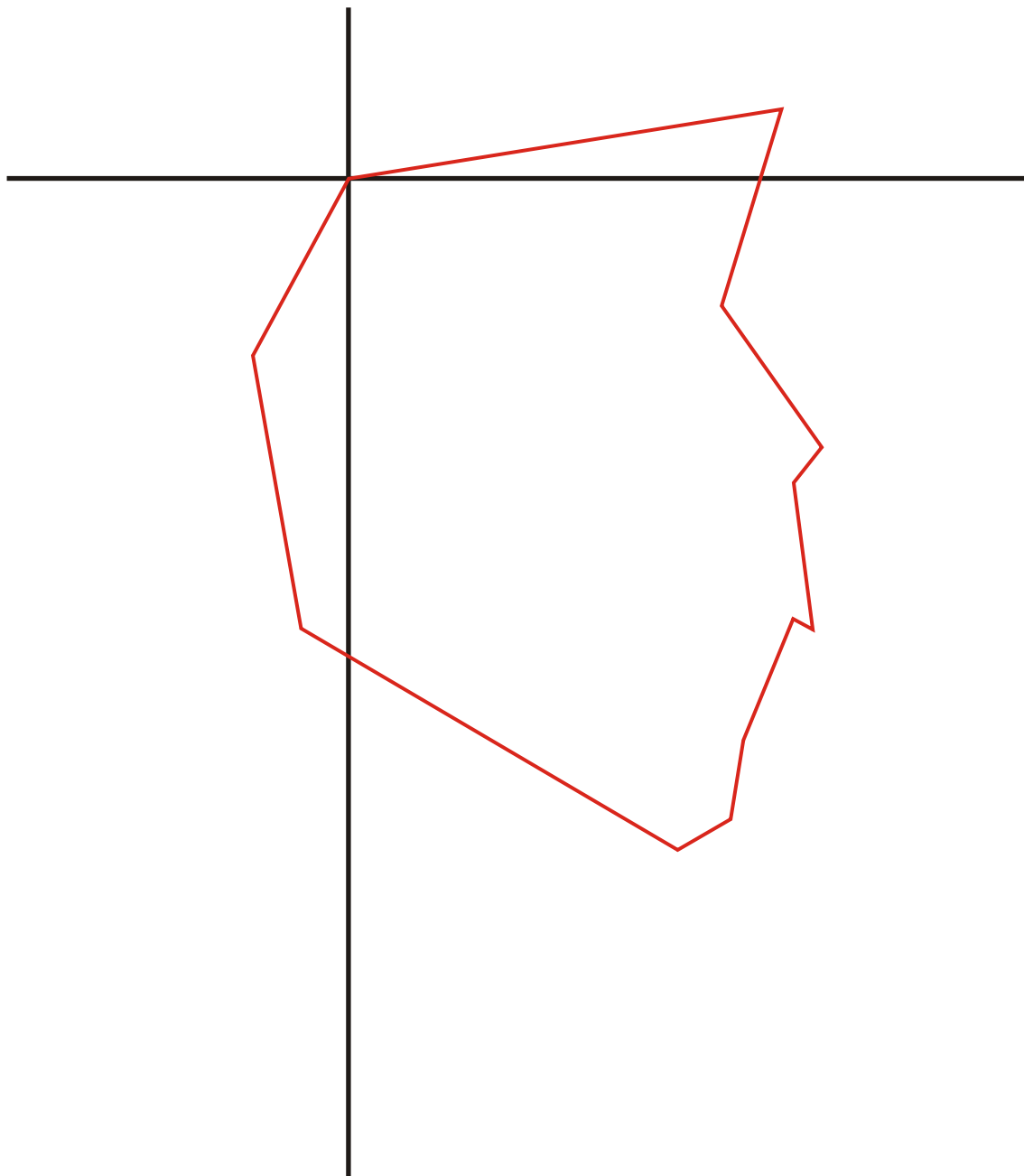
Guatemalan Non-Indian Female

Age: 10.56 - 11.55 years



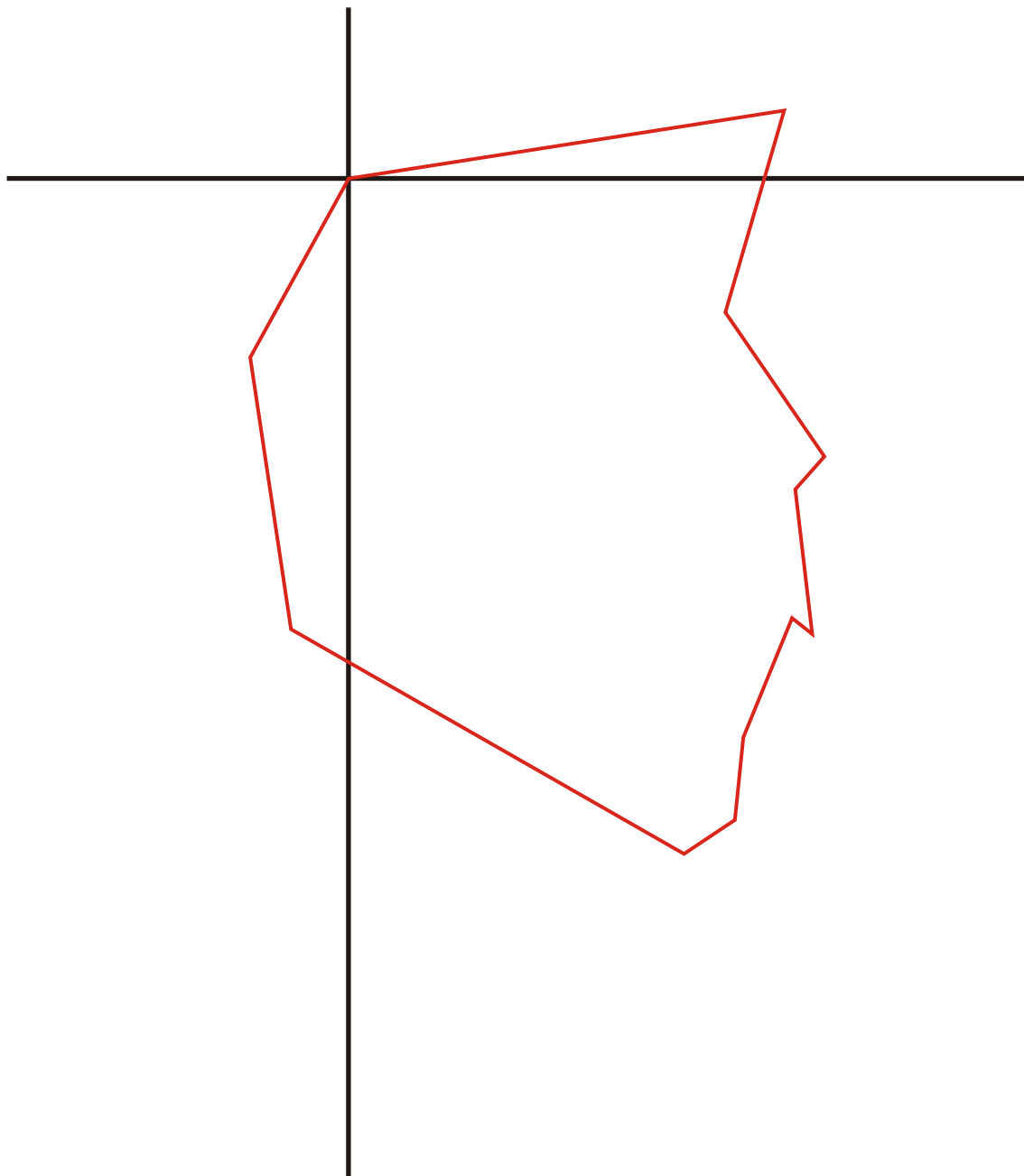
Guatemalan Non-Indian Female

Age: 11.56 - 12.55 years



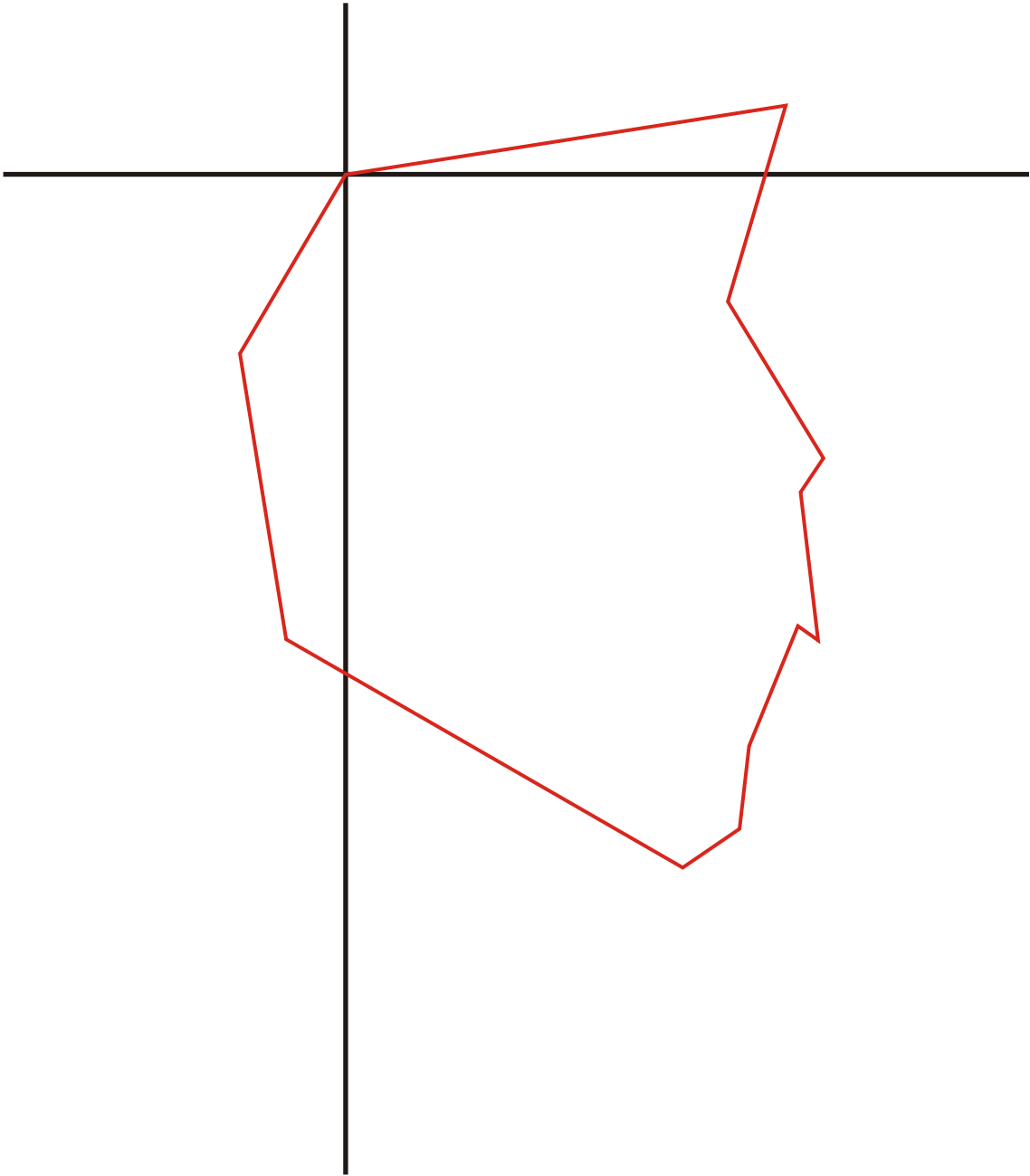
Guatemalan Non-Indian Female

Age: 12.56 - 13.55 years



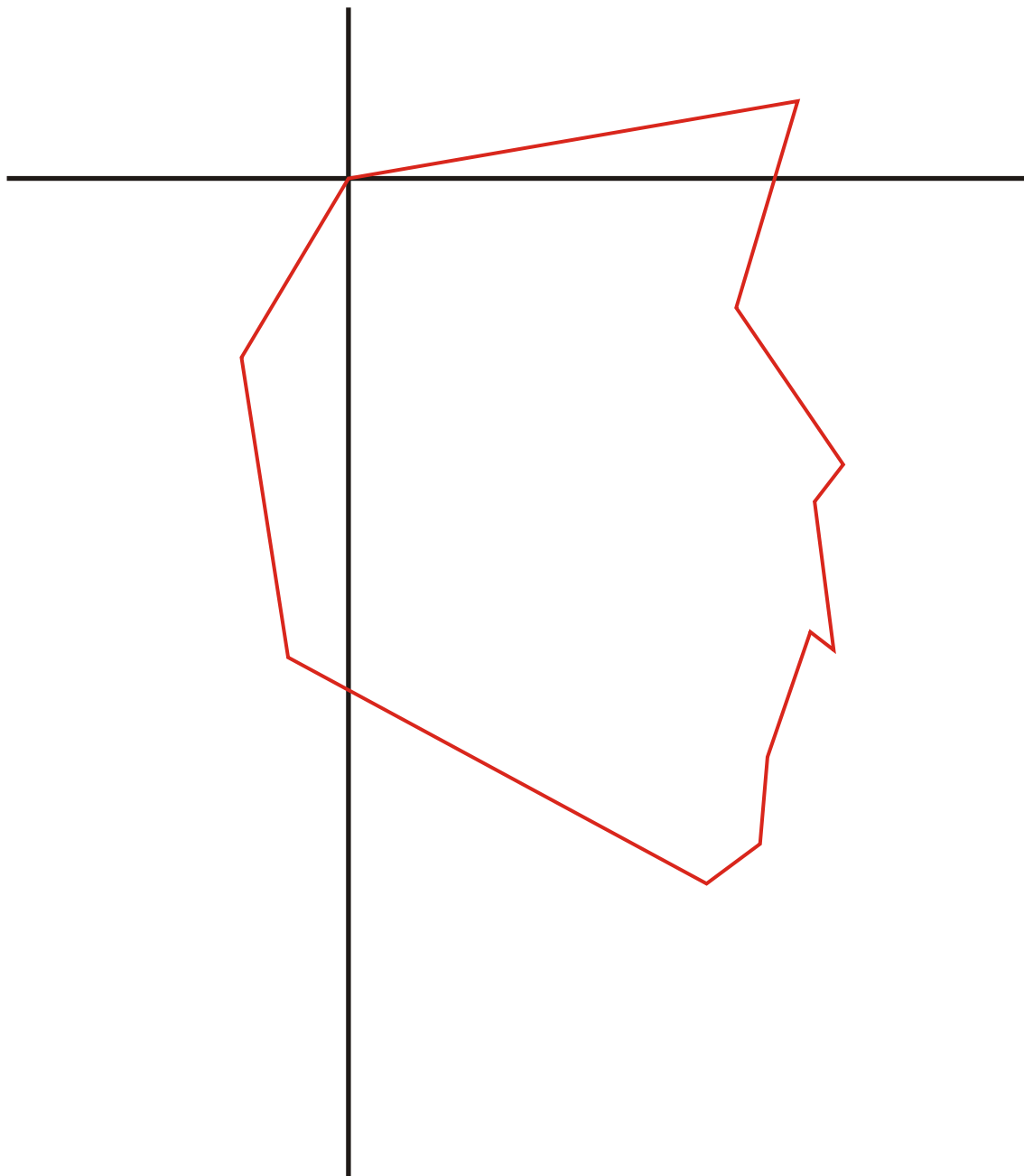
Guatemalan Non-Indian Female

Age: 13.56 - 14.55 years



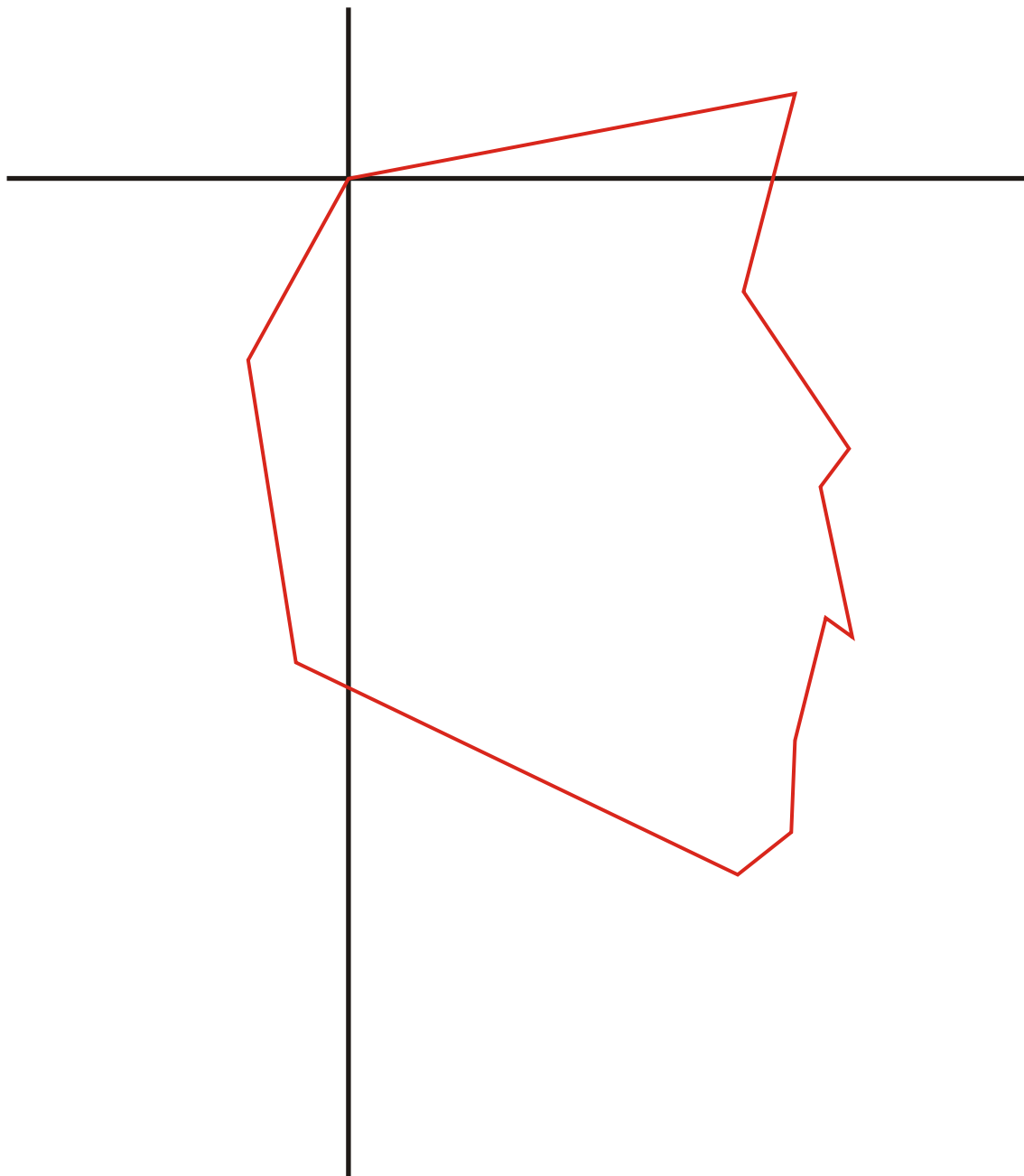
Guatemalan Non-Indian Female

Age: 14.56 - 15.55 years



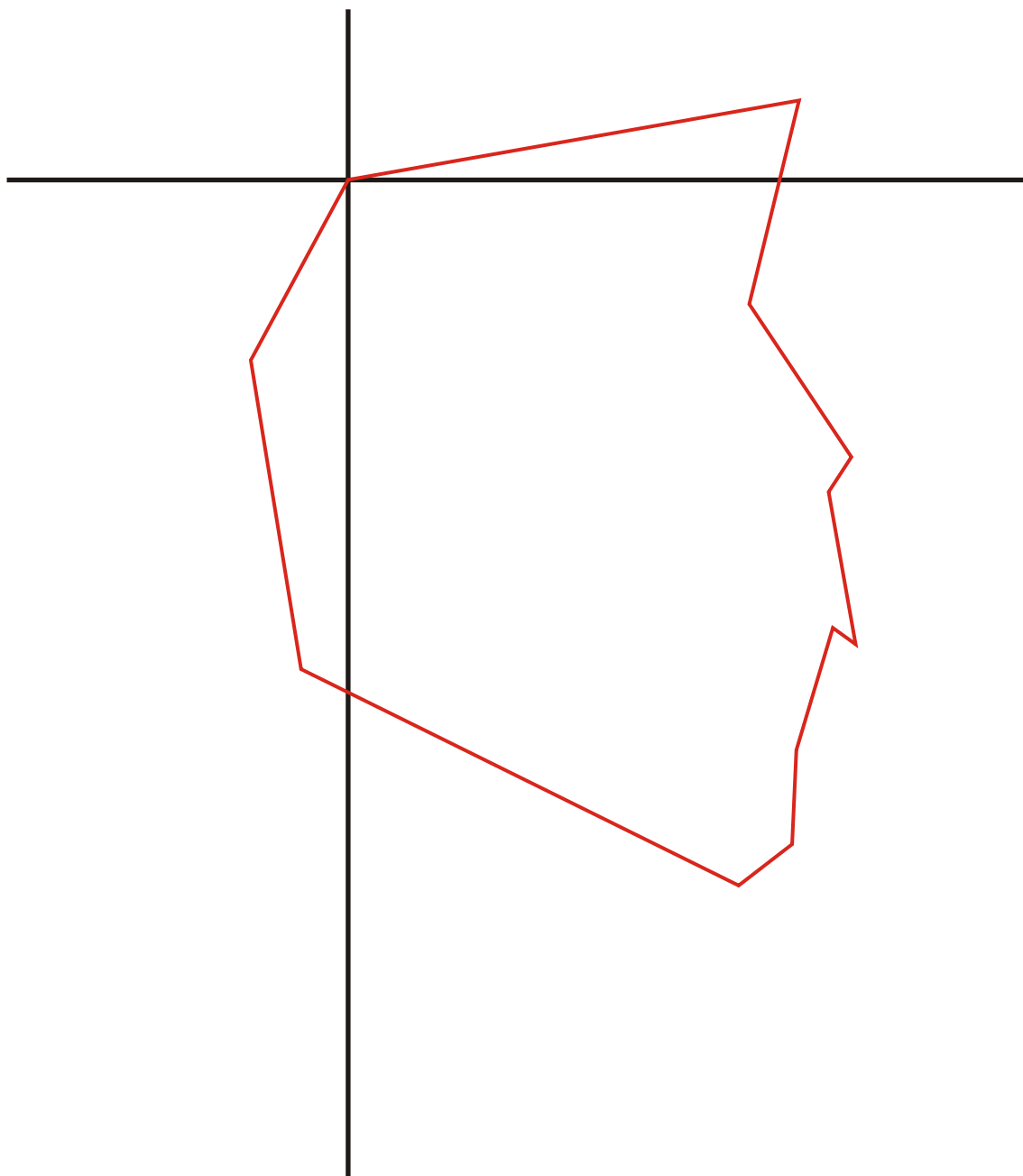
Guatemalan Non-Indian Female

Age: 15.56 - 16.55 years

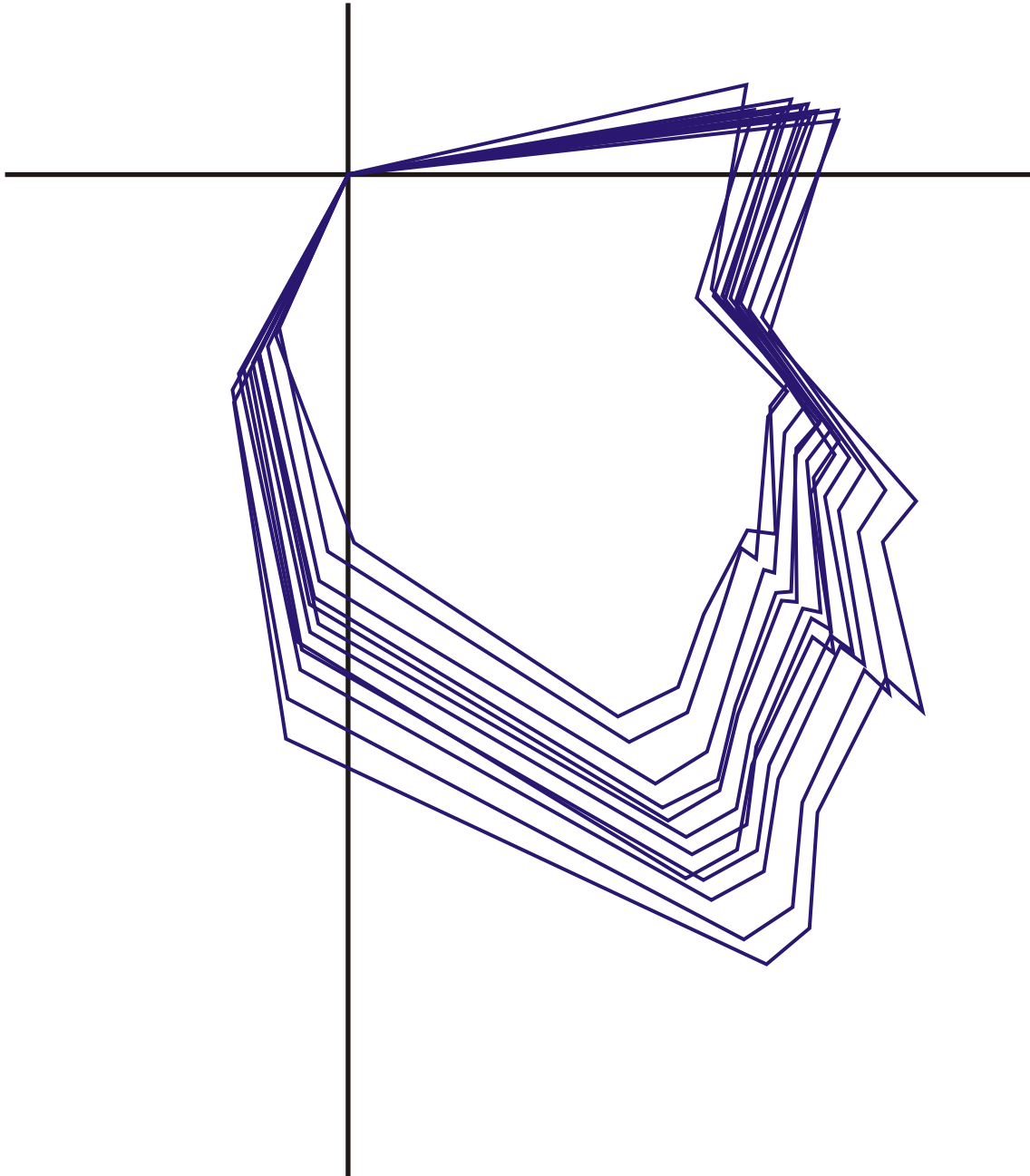


Guatemalan Non-Indian Female

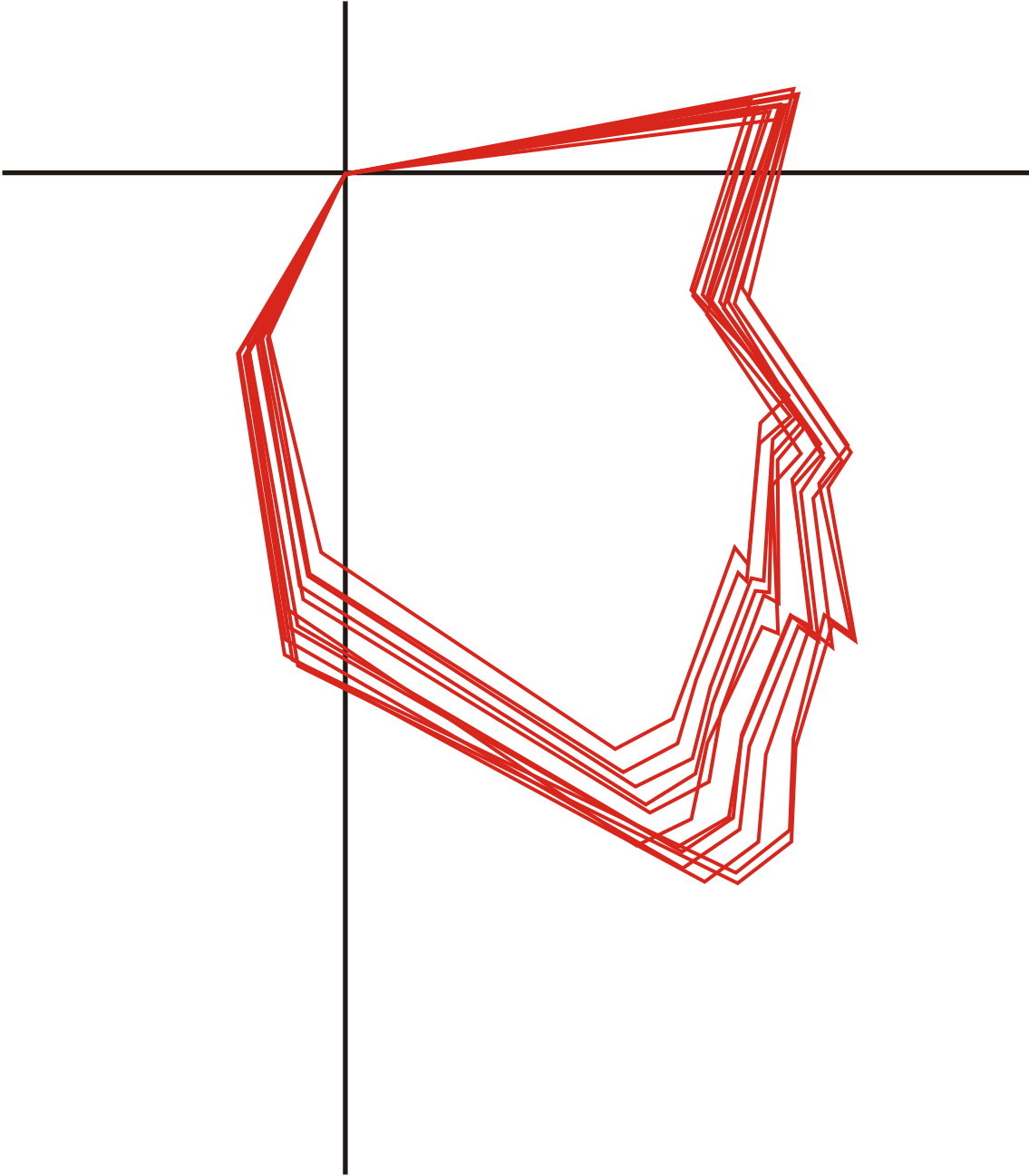
Age: 16.56 - 17.55 years



Guatemalan Non-Indian Male



Guatemalan Non-Indian Female



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13. INDICE

A POINT (A, 9)

Variable Angular

- B Point - Functional Occlusal Plane	73.1
- B Point - Nasion	4
- B Point / Nasion - Pogonion	51
Nasion - A Point - Pogonion	52
- Nasion / Condylar Plane	30
- Nasion / Frankfort Plane	19
- Nasion / Palatal Plane	39
- Nasion / Upper Incisor	60
- Pogonion / Lower Incisor	72
Sella - Nasion - A Point	2

Variable Lineal

- Basion	182
⊥ Nasion - Pogonion	142
- Nasion ⊥ Upper Incisor Incisal Edge	144
- Pogonion ⊥ Lower Incisor Incisal Edge	115
- Pogonion ⊥ Upper Incisor Incisal Edge	145
⊥ PM Vertical	126
- Posterior Nasal Spine	117
- Pterygo - Maxillary Fissure	121
- Sella	164

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Variable Angular

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- Nasion / Frankfort Plane	18
- Nasion / Palatal Plane	38
Sella - Nasion - Anterior Nasal Spine	1

Variable Lineal

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- Menton	158
- Nasion	130
⊥ PM Vertical	127
- Posterior Nasal Spine	116
- Pterygo-Maxillary Fissure	120
- Sella	163
- Supradentale	132
- Upper Incisor Incisal Edge	131

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- Gonial Intersection / Condylar Plane	35
- Gonial Intersection / Frankfort Plane	27
- Gonial Intersection / S-N Plane	14
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- B Point	84
- Gnathion	86
- Gonion	88
- Infradentale	83

- Lower Incisor Incisal Edge	82
- Menton	87
- Nasion	178
- Pogonion	85
- Posterior Nasal Spine	179
- Sella	174

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Variable Angular

- A Point	73.1
A Point - Nasion - B Point	4
- A Point / Nasion - Pogonion	51
- Nasion / Condylar Plane	31
- Nasion / Frankfort Plane	20
- Nasion / Lower Incisor	73
- Nasion / Palatal Plane	40
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- Articulare	84
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- Condylion	77
- Gonion	91
- Nasion ⊥ Lower Incisor Incisal Edge	108
- Nasion ⊥ Pogonion	107
- Sella	169

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Variable Angular

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Sella - Nasion - Basion	17

Variable Lineal

- A Point	182
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- B Point	185
- Gnathion	187
- Infradentale	184
- Menton	188
- Nasion	154
- Opisthion	155
- Pogonion	186
- Posterior Nasal Spine	180
- Sella	152
- Spheno - Occipital Synchrondrosis	153
- Supradentale	183

CONDYLAR PLANE (CO-OR, 33-40)

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/ Downs Occlusal Plane	33
/ Frankfort Plane	22
/ Functional Occlusal Plane	32
/ Lower Incisor	65
/ Mandibular Plane	34

/ Nasion - A Point	30		
/ Nasion - Anterior Nasal Spine	29		
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/ PM Vertical	37		
/ Sella - Gnathion	36		
/ S-N Plane	8		
/ Upper Incisor	55		
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- Gonion	81		
- Infradentale	76		
- Lower Incisor Incisal Edge	75		
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- Posterior Nasal Spine	177		
- Sella	175		
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/ Lower Incisor	68		
/ Palatal Plane	43		
/ PM Vertical	47		
/ S-N Plane	11		
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ETHMOID REGISTRATION POINT (SE, 36)			
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- Nasion	146		
- Posterior Nasal Spine	128		
- Sella	150		
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/ Anterior Nasal Spine - Nasion	18		
/ Condylar Plane	22		
/ Downs Occlusal Plane	25		
/ Functional Occlusal Plane	24		
/ Gonial Intersection - Articulare	27		
/ Lower Incisor	63		
/ Mandibular Plane	26		
/ Nasion - A Point	19		
/ Nasion - B Point	20		
/ Nasion - Pogonion	21		
/ PM Vertical	23		
/ Sella - Gnathion	28		
/ S-N Plane	7		
/ Upper Incisor	54		
FRONTO-MAXILLARY NASAL SUTURE (FMN, 39)			
<u>Variable Lineal</u>			
- Ethmoid Registration Point	147		
- Menton	161		
- Sella	148		
FUNCTIONAL OCCLUSAL PLANE (PMC-UDT, 46-23)			
<u>Variable Angular</u>			
/ A Point - B Point	73.1		
/ Condylar Plane	32		
/ Frankfort Plane	24		
/ Lower Incisor	66		
/ Palatal Plane	42		
/ PM Vertical	46		
/ S-N Plane	10		
/ Upper Incisor	57		
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- Gonion / Lower Incisor	69		
- Gonion / S-N Plane	12		
Nasion - Sella - Gnathion	15		
- Sella / Basion - Nasion	74		
Sella / Condylar Plane	36		
- Sella / Frankfort Plane	28		
Sella - Nasion - Gnathion	6		
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- Basion	187		
- Condylion	79		
- Gonion	93		
- Sella	171		
GONION (GO, 27)			
<u>Variable Angular</u>			
- Gnathion / Lower Incisor	69		
- Gnathion / S-N Plane	12		
- Articulare / Condylar Plane	35		
- Articulare / Frankfort Plane	27		
- Articulare / S-N Plane	14		
Menton - Gonial Intersection - Articulare	50		
<u>Variable Lineal</u>			
- Articulare	88		
- B Point	91		
- Condylion	81		
- Gnathion	93		
- Infradentale	90		
- Lower Incisor Incisal Edge	89		
- Menton	94		
- Pogonion	92		
- Sella	173		

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Variable Lineal

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- Basion	184
- Condylion	76
- Gonion	90
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- Sella	168
- Supradentale	156

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/ Downs Occlusal Plane	67
/ Downs Occlusal Plane	68
/ Frankfort Plane	63
/ Functional Occlusal Plane	66
/ Gonion - Gnathion	69
/ Mandibular Plane (-90°)	70
/ Mandibular Plane	71
/ Nasion - B Point	73
/ Palatal Plane	64
/ S-N Plane	62
/ Upper Incisor	61

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Variable Lineal

- Lower Incisor Incisal Edge	105
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Variable Lineal

⊥ A Point - Pogonion	115
- Articulare	82
- Condylion	75
- Gonion	89
- Lower Incisor Incisal Apex	105
- Lower Molar Distal Contact Point	113
⊥ Lower Molar Mesial Contact Point	111
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⊥ Mandibular Plane	101
- Menton	104
⊥ Nasion - B Point	108
⊥ Nasion - Pogonion	114
⊥ Pogonion parallel to Nasion - B Point	109
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/ Lower Incisor (-90°)	70
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/ Palatal Plane	44
/ PM Vertical	48
/ S-N Plane	13
/ Upper Incisor	59

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⊥ Condylion	96
⊥ Coronoid Process	97
⊥ Infradentale	102
⊥ Lower Incisor Incisal Edge	101
⊥ Lower Incisor Lingual Bony Contact Point	100
⊥ Lower Molar Mesial Cemento-Enamel Junction	99
⊥ Lower Molar Mesial Cusp Tip	98

MENTON (ME, 1)

Variable Angular

- Gonial Intersection - Articulare	50
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Variable Lineal

- Anterior Nasal Spine	158
- Articulare	87
- Basion	188
- Condylion	80
- Gonion	94
- Fronto-maxillary Nasal Suture	161
- Infradentale	103
- Lower Incisor Incisal Edge	104
- Nasion	160
⊥ Palatal Plane	159
- Sella	172

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- A Point / Condylar Plane	30	/ S-N Plane	9
- A Point / Frankfort Plane	19	/ Upper Incisor	56
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- A Point / Upper Incisor	60	⊥ Orbitale	129
- Anterior Nasal Spine / Condylar Plane	29	⊥ Supradentale	133
- Anterior Nasal Spine / Frankfort Plane	18	⊥ Upper Incisor Incisal Edge	134
- Anterior Nasal Spine / Palatal Plane	38	⊥ Upper Molar Mesial Cemento-Enamel Junction	135
- B Point / Condylar Plane	31	⊥ Upper Molar Mesial Cusp Tip	136
- B Point / Frankfort Plane	20		
- B Point / Lower Incisor	73		
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- Pogonion / A Point	51		
- Pogonion / Frankfort Plane	21	PM VERTICAL (PTM-SE, 43-36)	
- Pogonion / Mandibular Plane	49	<u>Variable Angular</u>	
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- Anterior Nasal Spine	130	⊥ Supradentale	125
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- B Point ⊥ Lower Incisor Incisal Edge	108		
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- Basion	154	<u>Variable Lineal</u>	
- Condylion	176	- A Point	117
- Ethmoid Registration Point	146	- Anterior Nasal Spine	116
- Menton	160	- Articular	17g
- Pogonion ⊥ A Point	142	- Basion	180
- Pogonion ⊥ Lower Incisor Incisal Edge	114	- Condylion	177
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/ Nasion - A Point	39		
/ Nasion - B Point	40		
/ Nasion - Anterior Nasal Spine	38		

Variable Lineal

- A Point \perp Lower Incisor Incisal Edge	115
- A Point \perp Upper Incisor Incisal Edge	145
- Articulare	85
- Basion	186
- Condylion	78
- Gonion	92
- Lingual Symphyseal Point	106
- Nasion \perp A Point	142
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- Nasion \perp Lower Incisor	114
- Sella	170
- Nasion \perp Upper Incisor Incisal Edge	143

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- Supradentale	122
- Upper Incisor Incisal Edge	123

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- Gnathion / Condylar Plane	36
- Gnathion / Frankfort Plane	28
Nasion - Sella - Gnathion	15
Sella - Nasion - A Point	2
Sella - Nasion - Anterior Nasal Spine	1
Sella - Nasion - B Point	3
Sella - Nasion - Basion	17
Sella - Nasion - Gnathion	6
Sella - Nasion - Pogonion	5

Variable Lineal

- A Point	164
- Articulare	174
- Anterior Nasal Spine	163
- B Point	169
- Basion	152
- Condylion	175
- Ethmoid Registration Point	150
- Fronto-Maxillary Nasal Suture	148
- Gnathion	171
- Gonion	173
- Infradentale	168
- Lower Incisor Incisal Edge	167
- Menton	172
- Nasion	149
- Pogonion	170
- Posterior Nasal Spine	162
- Spheno-Occipital Synchrondrosis	151
- Supradentale	165
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Variable Angular

/ Condylar Plane	8
/ Downs Occlusal Plane	11
/ Frankfort Plane	7
/ Functional Occlusal Plane	10
/ Gonial Intersection - Articulare	14
/ Gonion - Gnathion	12
/ Lower Incisor	62
/ Mandibular Plane	13
/ Palatal Plane	9
/ PM Vertical	16
/ Upper Incisor	53

SUPRADENTALE (SD, 8)

Variable Lineal

- Anterior Nasal Spine	132
- Basion	183
- Infradentale	156
\perp Palatal Plane	133
\perp PM Vertical	125
- Posterior Nasal Spine	118
- Pterygo-Maxillary Fissure	122
- Sella	165
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/ Downs Occlusal Plane	58
/ Frankfort Plane	54
/ Functional Occlusal Plane	57
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/ Mandibular Plane	59
/ Nasion - A Point	60
/ Palatal Plane	56
/ Sella - Nasion	53

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Variable Lineal

- Upper Incisal Edge	137
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UPPER INCISOR INCISAL EDGE (UIE, 7)

Variable Lineal

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\perp Nasion - A Point	144
\perp Nasion - Pogonion	143

⊥ PM Vertical	124
- Posterior Nasal Spine	119
- Pterygo-Maxillary Fissure	123
- Sella	166
- Upper Incisal Apex	137
- Upper Incisor Incisal Edge	134
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