An investigation of dermatoglyphic variation among ethnic populations in Kenya

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AN INVESTIGATION OF DERMATOGLYPHIC VARIATION AMONG ETHNIC POPULATIONS IN KENYA

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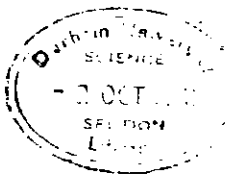

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TABLES

Table I.1: Major human biological surveys of Kenyan populations up to the commencement of present survey (1973)

AUTHOR	NOTES
1. Johnston, 1902.	Anthropometric measurements (large range) from Kenya and Uganda. Kenyan samples include Luyia, Swahili, Pokot, Maasai, Ogiek, Tugen, Nandi, Kipsigis. Samples mostly males, with small sample sizes often under 10.
2. Leys and Joyce, 1913.	Five anthropometric measurements from large range of East African populations. Kenyan samples are: Somali, Turkana, Pokot, Nandi, Tugen, Pokot, Njemps, Luo, Luyia (general), Luyia (Kakamega), Kikuyu, Embu, Kamba, Bajun, Giriama, Duruma, Digo, Rabai, Segeju - also non African Arab and Asian samples. Samples are male only, drawn from prisoners, police recruits and hospital patients. Nilotic and Cushitic samples are small, but the Bantu samples are large exceeding 350 for the Kikuyu. Total sample for African exceeds 1000.
3. Elsdon-Dew, 1939.	ABO bloodgroups. Sampled Luo, Kamba, Kikuyu, Gusii. Large samples of over 400.
4. Field, 1952.	Haircolour and form, eye colour, nose profile, teeth, anthropometric measurements for varying sample sizes of Maasai (maximum number 149), collected in the field at Kadjiado, Ngong and Selengei.
5. Allison, et.al., 1952.	ABO, Rhesus, MN bloodgroups from large Luo, Maasai and Kikuyu samples.
6. Danby, 1953.	Stature, weight and somatypic data from 98 tribal Kikuyu, 68 prison Kikuyu, 32 prison Luo, 14 prison Maasai and 5 prison Lumbwa (Kipsigis).

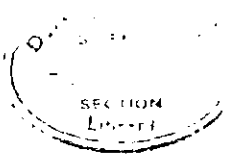

Table I.1 (continued)

AUTHOR	NOTES
7. Foy, et.al., 1954.	ABO blood groups and sickle cell haemoglobin. Sampled Boni, Sanye, Chonyi, Duruma, Giriama, Jibana, Kambe, Kauma, Rabai, Ribe, Pokomo, Swahili, Bajun, Galla, Kipsigis, Luo, Digo, Luyia (Kakamega), Kamba, Kikuyu. Sample sizes medium to large, mostly ranging between 50 and 100.
8. Allison & Barnicot, 1960.	Haptoglobins and transferrins from 50 Maasai hospital patients collected in Kampala.
9. Allison, 1960.	G6PD deficiency in Digo, Giriama and Kikuyu samples of both sexes.
10. Buettner-Janusch, et.al., 1960.	ABO, MN, P, K, Diego bloodgroups from 86 Maasai (ABO only), 50 Kamba and 42 Pokomo/Giriama.
11. Buettner-Janusch & Buettner-Janusch, 1970.	240 African hospital patients examined for haemoglobin, haptoglobin, and transferrin phenotypes. Tribal samples deduced from names on register, and include 27 Nilo-Hamites, 44 Nilotes, 97 Central Bantu and 20 Nyanza Bantu.
12. Corrain (see bibliography)	In a series of fieldwork trips into Northern Kenya Corrain collected detailed anthropometric and serological data from Nyandarua Kikuyu, El Molo, Samburu, Rendille, Somali, Gabbra, Boran and southern Central Bantu samples. The results were mostly published after the present survey was started, and are too numerous to summarise here.

Table 1.1 The peoples of Kenya and their linguistic classification

A) NIGER-CONGO LANGUAGE FAMILY

Major Division present in Kenya: BENUE-CONGO
Sub-Division present in Kenya: BANTU

BANTU LINGUISTIC GROUPS

INTERLACUSTRINE	HIGHLAND	COASTAL
Luyia Group:	Central Bantu Group.	Swahili Group:
Bukusu	Kikuyu sub-group:	Swahili
Wanga		Bajun
Bukhayo	Karura (Kiambu)	
Marach	Metume (Muranga)	Mji Kenda Group:
Samia	Gaki (Nyeri)	
Bunyala (north)	Ndia	Giriama
Busonga	Gichugu	Duruma
Marama		Digo
Kisa	Embu	Chonyi
Bunyore	Mbere	Kauma
Maragoli	Kamba	Kambe
Tiriki		Jibana
Idakho	Meru sub-group:	Rabai
Isukhe		Ribe
Butsotso	Chuka	
Bunyala (south)	Muthambi	Pokomo Group:
Kabras	Mwimbi	
Tachoni	Igoji	Zubaki
	Miutoni	Malalulu
	Imenti	Ndura
	Igembe	Kinakombe
	Tigania	Gwano
		Ndira
	Tharaka	Mwina
		Ngatana
	Coastal sub-group:	Dzunza
		Buuu
	Segeju	Kalinde
	Western sub-group:	Malakote (Korokoro)
	Gusii	
	Kuria	Taita Group:
	Suba	Taita (Dabida, Sagalla, Kasigau)
		Taveta

Table 1.1 - (continued)

B) CHARI-NILE LANGUAGE FAMILY

Major Division present in Kenya: EASTERN SUDANIC
Sub-Division present in Kenya: NILOTIC

NILOTIC LINGUISTIC GROUPS

RIVER-LAKE	PLAINS	HIGHLANDS
Lwoo Division:	Itunga/Karimojong Division:	Kalenjin Division:
Luo Group:		Northern sub-group:
	Iteso	
Ugenya	Turkana	Pokot
Alego		
Gem	Maasai Division:	Elgon sub-group:
Yimbo		
Sakwa	Agricultural Group:	Kony
Asembo		Pok
Seme	Uasin Gishu (extinct)	Bongomek
Uyoma		Sebei
Kisumu	Pastoral Group:	
Kajulu		Nandi sub-group:
Miwani	Samburu	
Kano	Loita	Nandi
Nyakach	Damat	Kipsigis
Karachuonjo	Purko	Nyangori
Kabondo	Isiria	Tugen
Kasipul	Moitanik	Keyo
Nyokal	Kaputie	Marakwet
Kanyado	Kelani	Endo
Kasigunga	Kankere (Dalalekutuk)	
Konyango	Matapato	Hunting sub-group:
Kamagambo	Keekonyokie	
Sakwa		Ogiek Bands
Kanyamkago	Hunting and Fishing	
Kaksingiri	Groups:	
Gwassi	El Molo	
Mohoru	Njemps	
Suna	Ndigiri	
	Ngwesi	
	Luasi	
	Momonyot	
	Suiei	

Table 1.1 - (continued)

C) AFROASIATIC LANGUAGE FAMILY

Major Division present in Kenya: CUSHITIC
Sub-Divisions present in Kenya: SOUTHERN CUSHITIC
EASTERN CUSHITIC

SOUTHERN CUSHITIC GROUP

Dahalo (Hunters)*

Eastern Cushitic Groups:

SOMALI	GALLA	BURJI +
Somali Group: =	Sagwiya Boran	Burji
	Gabbra Boran	Konzo
Abdwak	Orma	
Aulihan	Sakuye +	
Muhammed Zubier	Korokoro	
Degodia		
Murille +	Hunting Group:	
Gurreh		
Abdullah	Sanye/Liangulo Bands: * =	
Adjuran	Mukogodo	
Gosha		

Rendille sub-divison:

Rendille

Hunters:

Boni Bands * =

* Linguistic classification problematic
\+ Exact status unsure
= Exact composition of sub-groups not known precisely.

TABLE 1.2—POPULATION DISTRIBUTION AND GROWTH BY TRIBE AND NATIONALITY

Tribe and Nationality	TOTAL				MALE				FEMALE				PER CENT CHANGE		
	1962		1969		1962		1969		1962		1969				
	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent	Total	Male	Female
Kikuyu	1,642,065	19·0	2,201,632	20·1	810,856	19·0	1,091,413	19·9	831,209	19·1	1,110,219	20·3	34·1	34·6	33·6
Embu	95,647	1·1	117,969	1·1	47,048	1·1	58,223	1·1	48,599	1·1	59,746	1·1	23·3	23·8	22·9
Meru	439,921	5·1	554,256	5·1	214,991	5·0	276,325	5·0	224,930	5·2	277,931	5·1	26·0	28·5	23·6
Mbere	38,172	0·4	49,247	0·5	17,692	0·4	23,166	0·4	20,480	0·5	26,081	0·5	29·0	30·9	27·3
Kamba	933,219	10·8	1,197,712	10·9	455,215	10·6	592,889	10·8	478,004	11·0	604,823	11·1	28·3	30·2	26·5
Tharaka	38,474	0·4	51,883	0·5	18,244	0·4	25,159	0·5	20,230	0·5	26,724	0·5	34·9	37·9	32·1
Luhya	1,086,409	12·6	1,453,302	13·3	533,180	12·5	723,071	13·2	553,229	12·7	730,231	13·4	33·8	35·6	32·0
Kisii	538,343	6·2	701,679	6·4	266,978	6·2	356,730	6·5	271,365	6·2	344,949	6·4	30·3	33·6	27·1
Kuria	41,885	0·5	59,875	0·5	20,992	0·5	30,570	0·6	20,893	0·5	29,305	0·5	43·0	45·6	40·3
Mijikenda	414,887	4·8	520,520	4·8	199,587	4·7	255,508	4·7	215,300	4·9	265,012	4·9	25·5	28·0	23·1
Pokomo/Riverine	30,350	0·4	35,181	0·3	15,094	0·4	17,110	0·3	15,256	0·3	18,071	0·3	15·9	13·4	18·5
Taveta	4,855	0·1	6,324	0·1	2,373	0·1	2,942	0·1	2,482	0·1	3,382	0·1	30·3	24·0	36·3
Taita	83,613	1·0	108,684	1·0	39,895	0·9	52,501	1·0	43,718	1·0	55,993	1·0	29·8	31·6	28·1
Swahili/Shirazi	8,657	0·1	9,971	0·1	4,473	0·1	5,048	0·1	4,184	0·1	4,923	0·1	15·2	12·9	17·7
Bajun	11,280	0·1	24,387	0·2	5,471	0·1	11,808	0·2	5,809	0·1	12,579	0·2	116·2	115·8	116·5
Boni/Sanye	4,797	0·1	3,972	..	2,513	0·1	2,062	..	2,284	0·1	1,910	..	–17·2	–17·9	–16·4
Luo	1,148,335	13·3	1,521,595	13·9	561,721	13·1	763,080	13·9	586,614	13·5	758,515	13·9	32·5	35·8	29·3
Nandi	170,085	2·0	261,969	2·4	83,535	2·0	131,001	2·4	86,550	2·0	130,968	2·4	54·0	56·8	51·3
Kipsigis	341,771	4·0	471,459	4·3	172,527	4·0	237,578	4·3	173,556	3·9	233,881	4·3	37·9	39·4	36·5
Elgeyo	100,871	1·2	110,908	1·0	51,310	1·2	57,002	1·0	49,561	1·1	53,906	1·0	10·0	11·1	8·8
Marakwet	66,695	0·8	79,713	0·7	34,119	0·8	41,187	0·8	32,846	0·8	38,526	0·7	19·0	20·7	17·3
Pokot	76,537	0·9	93,437	0·9	37,954	0·9	45,606	0·8	38,583	0·9	47,831	0·9	22·1	20·2	24·0
Sabaot	28,012	0·3	42,468	0·4	13,684	0·3	21,196	0·4	14,328	0·3	21,272	0·4	51·6	54·9	48·5

TABLE 1.2—POPULATION DISTRIBUTION AND GROWTH BY TRIBE AND NATIONALITY—*(Contd.)*

Tribe and Nationality	TOTAL				MALE				FEMALE				PER CENT CHANGE		
	1962		1969		1962		1969		1962		1969				
	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent	Total	Male	Female
Tugen	109,691	1·3	130,249	1·2	54,934	1·3	66,461	1·2	54,757	1·3	63,788	1·2	18·7	21·0	16·5
Masai	154,079	1·8	154,906	1·4	75,002	1·8	77,745	1·4	79,077	1·8	77,161	1·4	0·5	3·7	−2·4
Samburu	48,750	0·6	54,796	0·5	25,005	0·6	27,989	0·5	23,745	0·5	26,807	0·5	12·4	11·9	12·9
Turkana	181,387	2·1	203,177	1·9	89,973	2·1	107,249	2·0	91,414	2·1	95,928	1·8	12·0	19·2	10·5
Teso	72,357	0·8	85,800	0·8	35,810	0·8	42,703	0·8	36,547	0·8	43,097	0·8	18·6	19·2	17·9
Nderobo	14,378	0·2	21,034	0·2	7,123	0·2	10,741	0·2	7,255	0·2	10,293	0·2	46·3	50·8	41·9
Njemps	4,681	0·1	6,526	0·1	2,231	0·1	3,155	0·1	2,450	0·1	3,371	0·1	39·4	41·4	37·6
Rendille	13,724	0·2	18,729	0·2	7,007	0·2	9,884	0·2	6,717	0·2	8,845	0·2	36·5	41·1	31·7
Boran	58,346	0·7	34,086	0·3	30,863	0·7	17,472	0·3	27,483	0·6	16,614	0·3	−41·6	−43·4	−39·5
Gabbra	11,478	0·1	16,108	0·1	5,876	0·1	8,772	0·2	5,602	0·1	7,336	0·1	40·3	49·3	31·0
Sakuye	1,681	..	4,369	..	860	..	2,115	..	821	..	2,254	..	159·9	145·9	174·5
Orma	11,646	0·1	16,306	0·1	6,139	0·1	8,350	0·2	5,507	0·1	7,956	0·1	40·0	36·0	44·5
Gosha	2,926	0·1	2,928	..	3,397	0·1	1,560	..	3,860	0·1	1,368	..	−59·7	−54·1	−64·6
Ogaden	90,118	1·4	90,118	0·8	66,507	1·6	48,729	0·9	55,138	1·3	41,389	0·8	−25·9	−26·7	−24·9
Ajuran	15,544	0·2	15,544	0·1	10,404	0·2	8,174	0·1	9,515	0·2	7,370	0·1	−22·0	−21·4	−22·5
Gurreh	49,241	0·4	49,253	0·5	18,454	0·4	26,452	0·5	16,149	0·4	22,801	0·4	42·3	43·3	41·2
Other Somali	91,817	1·1	91,094	0·9	51,454	1·2	49,861	0·9	40,363	0·9	41,233	0·8	3·7	1·0	7·1
Non-Kenyan African	47,872	0·6	56,123	0·5	28,031	0·7	33,200	0·6	19,861	0·5	22,923	0·4	17·2	18·5	15·4
European	55,759	0·6	40,593	0·4	15,105	0·7	21,129	0·4	25,812	0·6	19,464	0·4	−27·2	−29·4	−24·6
Asian	176,613	2·0	139,037	1·3	45,716	2·2	71,599	1·3	84,228	1·9	67,438	1·2	−21·3	−22·5	−19·9
Arab	34,048	0·4	27,886	0·3	559	0·4	14,773	0·3	15,964	0·4	13,113	0·2	−18·1	−18·3	−17·9
Others	3,901	..	1,987	..	864	..	975	..	1,988	..	1,012	..	−49·1	−49·0	−49·1
Not Stated	11,169	0·1	..	..	11,169	0·1	..	..	5,037	0·1	..	..	..	..	..

TABLE 1,3 —PER CENT DISTRIBUTION OF POPULATION BY WHETHER OR NOT BORN IN SAME DISTRICT OF RESIDENCE BY TRIBE AND NATIONALITY

Tribe and Nationality	Total	Birthplace Same as District of Residence	Birthplace not Same as District of Residence			
			Elsewhere in Province	Elsewhere in Kenya	Outside Kenya	Not Stated
Total	100·0	82·6	4·1	11·3	1·4	0·7
Kikuyu	100·0	72·5	6·4	20·4	0·1	0·6
Embu	100·0	93·6	1·4	4·5	—	0·5
Meru	100·0	95·6	1·1	2·6	—	0·6
Mbere	100·0	92·7	2·1	1·6	—	3·6
Kamba	100·0	87·6	2·0	9·9	0·1	0·5
Tharaka	100·0	59·3	24·6	14·6	—	1·6
Luhya	100·0	82·1	1·3	15·4	0·7	0·4
Kisii	100·0	87·6	0·5	11·7	—	0·2
Kuria	100·0	84·7	0·8	12·8	1·3	0·4
Mijikenda	100·0	83·4	7·6	8·1	0·2	0·7
Pokomo/Riverine	100·0	43·8	21·6	7·7	—	26·9
Taveta	100·0	71·2	2·5	5·6	19·8	1·0
Taita	100·0	67·3	20·8	7·5	0·5	3·8
Swahili/Shirazi	100·0	84·0	5·1	8·2	1·7	1·0
Bajun	100·0	78·8	17·9	2·5	0·3	0·4
Boni/Sanye	100·0	82·7	13·6	3·0	—	0·7
Luo	100·0	83·6	3·8	11·6	0·4	0·5
Nandi	100·0	87·0	8·0	4·6	0·3	0·1
Kipsigis	100·0	91·7	5·4	2·6	—	0·2
Elgeyo	100·0	76·7	15·5	7·3	0·1	0·4
Marakwet	100·0	94·1	3·9	1·8	—	0·2
Pokot	100·0	97·0	2·1	0·6	0·1	0·2
Sabaot	100·0	87·3	2·7	7·8	2·1	0·2
Tugen	100·0	91·2	6·9	1·8	—	0·1
Masai	100·0	91·0	5·0	3·5	0·5	—
Samburu	100·0	87·7	3·2	4·5	0·1	4·6
Turkana	100·0	58·1	17·6	6·2	0·1	18·0
Teso	100·0	94·2	1·5	3·2	1·0	0·2
Nderobo	100·0	77·0	6·6	15·4	—	1·0
Njemps	100·0	92·6	2·3	4·1	0·4	0·5
Rendille	100·0	52·3	1·3	43·2	—	3·1
Boran	100·0	79·7	3·9	12·2	2·9	1·2
Gabra	100·0	86·5	2·6	6·3	2·4	2·3
Sakuye	100·0	88·3	3·9	7·3	0·1	0·3
Orma	100·0	88·0	2·6	0·9	0·3	8·2
Gosha	100·0	89·5	1·7	5·0	3·3	0·5
Hawiya	100·0	84·6	2·3	11·2	0·9	1·0
Ogaden	100·0	96·4	0·6	2·4	0·4	0·2
Ajurran	100·0	92·7	1·2	5·5	0·4	0·1
Gurren	100·0	91·4	3·5	3·1	1·1	0·8
Degodia	100·0	93·0	1·8	4·7	0·3	0·1
Other Somali	100·0	88·6	1·5	7·3	1·8	0·9
"Non-Kenya Africa"	100·0	28·5	1·8	8·0	60·6	1·1
European "Kenyan"	100·0	21·8	2·8	21·8	52·7	0·9
"Non-Kenyan"	100·0	14·7	0·8	10·3	73·1	1·2
Asians—"Kenyan"	100·0	68·8	2·5	16·6	16·3	0·8
"Non-Kenyan"	100·0	38·6	1·3	12·4	46·4	1·2
Arabs—"Kenyan"	100·0	76·0	10·2	5·6	7·1	1·1
"Non-Kenyan"	100·0	51·9	3·0	8·8	33·3	3·0

Table 1.4 Number and Percentage of People from each ethnic population living inside their traditional home provinces and districts.

Population	Total No.	Number in Traditional Home Province(s)	%	Number in Traditional Home District(s)	%	Movement Within Province %
Kikuyu	2,201,632	1,798,537	81.7	1,631,068	74.1	7.6
Embu	117,969	110,184	93.4	109,174	92.6	0.8
Meru	554,256	540,377	97.5	536,689	96.8	0.7
Mbere	49,247	48,223	97.9	46,703	94.8	3.1
Kamba	1,197,712	1,038,810	86.7	1,036,473	86.5	0.2
Tharaka	51,883	51,142	98.6	51,119	98.5	0.1
Luyia	1,453,302	1,191,143	82.0	1,191,143	82.0	-
Kisii	701,679	665,298	94.8	661,465	94.3	0.5
Kuria	59,875	56,790	94.9	56,053	93.6	1.3
Mji Kenda	520,520	516,761	99.3	512,142	98.4	0.9
Pokomo	35,181	32,628	92.7	29,124	82.8	9.9
Taveta	6,324	5,666	89.6	5,285	83.6	3.0
Taita	108,494	103,387	95.3	86,964	80.1	15.2
Swahili	9,971	7,884	79.1	7,318	73.4	5.7
Bajun	24,387	23,600	96.8	14,709	60.3	36.5
Boni/Sanye	3,972	3,803	95.8	3,735	94.0	1.8
Luo	1,521,595	1,326,784	87.2	1,321,523	87.2	-
Nandi	261,969	254,755	97.2	163,959	62.6	34.6
Kipsigis	471,459	460,694	97.7	389,728	82.7	15.0
Keyo	110,908	109,064	98.3	75,455	68.0	30.3
Marakwet	79,713	79,078	99.2	74,643	93.6	5.6
Pokot	93,437	92,950	99.5	89,876	96.2	3.3
Sabaot	42,468	42,086	99.1	40,507	95.4	3.7
Tugen	130,249	129,256	99.2	119,156	91.5	7.7
Maasai	154,906	150,372	97.1	142,204	91.8	5.3
Samburu	54,796	53,118	96.9	51,503	94.0	2.9
Turkana	203,177	196,073	96.5	176,547	86.9	9.6
Iteso	85,800	76,413	89.1	75,277	87.7	1.4
Nderobo	21,034	20,856	99.2	19,952	94.9	4.3
Njemps	6,521	6,170	94.6	5,933	90.9	3.7
Rendille	18,729	17,993	96.1	17,931	95.7	0.4
Boran	34,086	29,757	87.3	29,315	86.0	1.3
Gabbra	16,108	15,968	99.1	15,890	98.6	0.5
Sakuye	4,369	4,185	95.8	4,173	95.5	0.3
Orma	16,306	15,985	98.0	15,610	95.7	2.3
Somali	249,731	239,900	96.1	239,900	96.1	-

Table 1.5 Distribution of those sections of ethnic populations who do not inhabit traditional home provinces. (Qualification >10 per cent outside home province).

Population	Number's Outside Home Province	PROVINCE OR CITY									
		Central	Nairobi	Coastal (ex Mombasa)	Mombasa	Eastern	North Eastern	Nyanza ex Kisumu	Kisumu	Rift Valley	Western
Kikuyu	403,095	-	-	1.1	3.7	6.1	0.2	0.7	0.8	84.7	2.7
Kamba	158,902	15.1	38.2	18.0	18.5	-	0.3	0.3	0.5	8.7	0.5
Luyia	262,159	3.3	24.8	1.7	5.8	0.9	0.1	9.6	5.9	47.8	-
Taveta	658	36.9	16.1	-	-	4.4	2.3	2.4	0.5	34.5	2.9
Swahili	2,087	9.0	18.5	-	-	25.5	0.5	6.8	14.0	24.0	1.6
Luo	194,811	4.1	32.3	4.7	11.3	1.6	0.1	-	-	35.5	10.3
Iteso	9,387	1.2	5.0	0.8	1.5	1.0	0.3	1.3	5.3	83.6	-
Boran	4,329	10.7	24.5	10.1	4.6	-	7.7	1.0	0.8	39.4	1.1

Table 1.6 Distribution within home province of those sections of ethnic populations who do not inhabit traditional home districts. (Qualification >7 per cent movement within province).

Population	No. Outside home district within R.V. Province	DISTRICT (RIFT VALLEY PROVINCE)												
		Baringo	Elgeyo Marakwet	Kajiado	Kericho	Laikipia	Nakuru	Nandi	Narok	Samburu	Trans Nzoia	Turkana	Uasin Gishu	West Pokot
Nandi	90,796	0.2	0.5	0.2	1.8	4.7	6.3	-	1.4	0.1	15.0	0.1	68.9	1.0
Keyo	33,609	0.7	-	0.1	0.3	2.2	2.9	0.5	0.2	0.1	1.0	0.1	91.6	0.4
Kipsigis	70,966	0.7	0.3	0.2	-	2.8	36.8	10.2	43.4	0.1	1.1	0.1	4.2	0.2
Tugen	10,100	-	18.5	0.3	1.2	2.6	39.4	1.5	0.7	0.2	2.5	1.5	25.8	6.0
Turkana	19,526	4.3	2.1	0.1	0.7	21.9	15.1	2.6	0.2	-	31.6	-	14.4	7.1

Population	No. Outside Home district within Coast Province	DISTRICT (COAST PROVINCE)					
		Kilifi	Kwale	Lamu	Mombasa	Taita	Tana
Bajun	8,891	33.1	2.3	-	59.9	0.3	4.4
Pokomo	3,504	14.9	4.9	18.1	60.2	2.0	-
Taita	16,423	4.1	6.0	0.4	88.6	-	0.8

Kikuyu: Number outside home districts within Central Province (excluding NAIROBI) = 358,836

Distribution = 46.7% in Nyandarua District: 53.3% in Nairobi.

Table 2.1 List of minimal populations surveyed and numbers sampled

(TOTAL SAMPLE = 6,235 - 3,551 males & 2,684 females).

	Males	Females	Total
Cushitic Speakers:			
Somali	224	103	327
Rendille	153	46	199
Gabbra	27	63	90
Boran	128	60	188
Burji	64	57	121
Misc:			
Orma	4	1	5
Konzo	8	2	10
Nilotic Speakers:			
Samburu	87	46	133
Keekonyokie Maasai	63	150	213
Purko Maasai	37	9	46
Kony	37	23	60
Nandi	52	50	102
Kipsigis	57	43	100
Tugen	108	102	210
Keyo	50	50	100
Marakwet	50	56	106
Pokot	45	54	99
Iteso	52	47	99
Turkana	66	43	109
Luo	170	107	277
Bantu Speakers:			
Western Highland Bantu			
Gusii	50	51	101
Luyia Group:			
Tiriki	26	25	51
Maragoli	26	24	50
Bunyore	30	20	50
Idakho	39	15	54
Marama	25	25	50
Wanga	25	24	49
Marach	25	24	49
Bukhayo	23	26	49
Samia	24	26	50
Butsotso	20	27	47
Bunyala (north)	25	25	50
Kabras	26	26	52
Bukusu	61	29	90

	Males	Females	Total
Central Bantu:			
Kiambu Kikuyu	65	39	104
Muranga Kikuyu	56	46	102
Nyeri Kikuyu	49	51	100
Ndia	56	66	122
Kamba	78	42	120
Embu	87	72	159
Mbere	64	66	130
Meru sub-group:			
Chuka	75	61	136
Muthambi	76	83	159
Mwimbi	62	43	105
Igoji	78	95	173
Imenti	61	39	100
Tigania	64	36	100
Igembe	66	33	99
Tharaka	54	46	100
Misc:			
Urban Kikuyu	14	10	24
Coastal Bantu:			
Pokomo	114	90	204
Malakote/ Korokoro	41(7)	-	41
Giriama	64	38	102
Chonyi	79	14	93
Mid Mji Kenda	32	27	59
Digo	116	100	216
Taita	55	45	100
Taveta	59	48	107
Hunters:			
Mukogodo	41	9	50
Ngwesi	38	6	44

TOTAL:	3,551	males
	2,684	females
	6,235	

Table 2.2 Sampling itinerary during fieldwork 1973 and 1975

Population	Samples	Localities	District
June 3rd to June 28th			
Kamba	Farm:2P.S.	Embakasi;Mukua;Kibwezi	Machakos
Taita	3S.S	Mwatate;Wundanyi; Wusi	Taita
Taveta	3P.S.	Near Taveta Town	Taita
Kiambu Kikuyu	2P.S.	Kahuho;Urithu	Kiambu
Muranga Kikuyu	1P.S.	Muranga Town	Muranga
July 1973: Major delays (no Kleenprint paper, car undergoing major repairs).			
August 1st to August 10th 1973			
Nyeri Kikuyu	1P.S.	Thego	Nyeri
Imenti	1S.S.	Near Meru Town	Meru
Igembe	1P.S.	Gate	Meru
Tigania	1P.S.	Muthara	Meru
Tharaka	1P.S.	Chiokarige	Meru
August 11th to September 5th 1973: (School holidays).			
Bukusu	Mission	Kiminini	Trans Nzoia
Turkana	2 Farms	Kwanza;Endebess	Trans Nzoia
Pokot	1 Farm Mission H.	Kwanza;Ortum	Trans Nzoia Pokot
September 6th to 14th September 1973			
Purko Maasai	1S.S.	Narok Town	Narok
Luo	1P.S.	Homa Bay	South Nyanza
Gusii	2P.S.	Kisii Town	Kisii
Kipsigis	2P.S.	Kericho;Lumbwa	Kericho
September 15th to September 19th 1973: Car breakdown & hunt for spare parts.			
September 20th to October 18th 1973			
Tiriki	1P.S.	Tiriki	Kakamega
Maragoli	1P.S.	Vihiga	Kakamega
Bunyore	1P.S.	Kima	Kakamega
Idakho	1P.S.	Iregi	Kakamega
Butsotso	1P.S.	Butsotso	Kakamega
Wanga	1P.S.	Mumias	Kakamega
Marama	1P.S.	Butere	Kakamega
Nyala	1P.S.	Navakholo	Kakamega
Kabras	1P.S.	Malava	Kakamega
Kony	2P.S.	Kapkateny;Kapsakweny	Bungoma
Iteso	2P.S.	Malakisi;Igara	Bungoma;Busia
Bukhayo	1P.S.	Lwanya	Busia
Samia	1P.S.	Nangina	Busia

Table 2.2 (continued)

Population	Samples	Locality	District
Marach	1P.S.	Butula	Busia
Nandi	2P.S.	Kapsabet;Chemomi	Nandi
Keyo	1P.S.	Singore	Elgeyo Marakwet
Marakwet	1P.S.	Chebara	Elgeyo Marakwet
October 22nd to October 31st			
Luo	3P.S.	Eastleigh Racecourse,Punwani.	Nairobi
November 2nd 1973			
Keekonyokie Maasai	2P.S.	Kadjiado Town	Kadjiado
November 19th 1973			
Somali	3P.S.	Garissa Town	Garissa
Malakote	1S.S.		
Korokoro			
June 30th to July 10th 1975			
Embu	1P.S.	Nembure	Embu
Rendille	4P.S.	Marsabit;	
Gabbra		Laisamis	Marsabit
Boran			
Burji			
Konzo			
Samburu			

(Marsabit 3P.S.; Laisamis 1P.S.: All samples from Marsabit only except the Rendille from both locations, and the Samburu from Laisamis only).

July 16th to August 5th 1975			
Tugen	2P.S.;1P.S.	Kabarnet;Kampi Ya Samaki.	Baringo
Mukogodo	1P.S.	Dol Dol	Nanyuki
Ngwesi	1P.S.	Ajiju	Laikipia
Ndia	2P.S.	Kagumo;Keruguya	Kirinyaga
Embu	1P.S.	Embu Town	Embu
Mbere	1P.S.;1S.S.	Ishiara;Kanyuambora	Embu
Chuka	3P.S.	Kangondu;Kibumba; Mabukuro.	Meru
Muthambi	2P.S.	Kituntu,Muthambe	Meru
Mwimbi	1P.S.	Kituntu	Meru
Igoji	2P.S.	Igoji;Kinoro	Meru

Table 2.2 (continued)

Population	Samples	Locality	District
August 10th to September.5th 1975: (School holidays)			
September 9th to October 9th 1975			
Digo	3P.S.	Kwale,Ukunda;Waa	Kwale
Chonyi	2P.S.	Kilifi;Kikambala	Kilifi
Pokomo	2P.S.	Hola Town	Tana River
Giriama	1P.S.	Jilore	Kilifi

P.S. = Primary School S.S. = Secondary School

Table 3.1: Elementary sub-types of concordant variation

a) Clustered:

	Pop	Attribute 1	Attribute 2	Attribute 3
	1	1	50	21
clus1	2	2	53	22
	3	3	56	23
	4	14	80	31
clus2	5	15	87	32
	6	16	89	33
	7	20	99	41
clus3	8	22	106	42
	9	23	108	43

b) Clinal:

1	1	50	20
2	2	51	21
3	3	52	22
4	4	53	23
5	5	54	24
6	6	55	25
7	7	56	26
8	8	57	27
9	9	58	28

c) Homogeneous:

1	1.6	5.8	15.3
2	1.2	5.8	15.8
3	1.7	5.6	15.7
4	1.4	5.2	15.5
5	1.3	5.4	15.9
6	1.7	5.9	15.1
7	1.4	5.4	15.7
8	1.8	5.3	16.0
9	1.5	5.2	15.4

Table 4.1 The Analysis of Variance of the Minimal atd Angle by Age.

		MALES				FEMALES			
		RIGHT		LEFT		RIGHT		LEFT	
Category	Age	No.	Mean	No.	Mean	No.	Mean	No.	Mean
Cushites	6-7	43	39.40	43	39.05	83	41.33	81	41,25
	8-9	68	38.13	69	40.03	61	39.34	59	39.42
	10-12	197	37.07	196	37.21	103	38,19	108	38.42
	13-15	197	36.04	195	36.28	70	37,30	70	37.96
	16-30	71	36.39	72	36.75	5	36.80	4	36.75
Males:	MATDR - F=6.692; P=0.000 (B_F=0.442; P=0.985)								
	MATDL - F=9.834; P=0.000 (B_F=0,442; P=0.785)								
Females:	MATDR - F=9.315; P=0.000 (B_F=1.395; P=0.233)								
	MATDL - F=6.306; P=0.000 (B_F=2.493; P=0.041)								
Nilotes	6-7	87	40.66	85	40.91	102	41.27	104	41,62
	8-9	144	39.33	148	39.53	133	40,73	131	41.12
	10-12	249	38.27	250	38.33	268	39.18	271	39.26
	13-15	181	37.74	183	37,18	168	37.99	171	37.30
	16-30	132	36.60	134	36.63	59	39.80	59	40.14
Males:	MATDR - F=12.996; P=0.000 (B_F=0.925; P=0.512)								
	MATDL - F=14.548; P=0.000 (B_F=5.848; P=0.000)								
Females:	MATDR - F=8.541; P=0.000 (B_F=3.382; P=0.000)								
	MATDL - F=17.416; P=0.000 (B_F=1.944; P=0.089)								
Bantu	6-7	166	40.25	170	39.75	158	41.30	158	41.09
	8-9	245	39.61	255	39.27	400	40.78	405	40.71
	10.12	731	39.04	739	39.24	448	40.77	451	40.91
	13-15	473	38.37	474	38.58	380	39.55	386	40.23
	16-30	259	37.26	269	37.66	91	38,86	89	39.57
Males:	MATDR - F=12.77; P=0.000 (B_F=2.639; P=0.032)								
	MATDL - F=6.607; P=0.000 (B_F=4.597; P=0.001)								
Females:	MATDR - F=6.761; P=0.000 (B_F=3.187; P=0.013)								
	MATDL - F=2.074; P=0.087 (B_F=1.369; P=0.241)								

TABLE 5.1 : ANALYSIS OF VARIANCE OF MINIMAL POPULATION SAMPLES (MALES AND FEMALES) BY ALL MAJOR DERMATOGLYPHIC DIGITAL AND PALMAR ATTRIBUTES : AND CHI SQUARE RESULTS FOR NOMINAL FINGER PATTERN ATTRIBUTES.

N O N S U M M A R Y A T T R I B U T E S

VARIABLE	MALES F	MALES P	FEMALES F	FEMALES P	VARIABLE	MALES F	MALES P	FEMALES F	FEMALES P
RADIAL RIDGE COUNTS :									
RFR1	1.93	.000	1.57	.006	LFR1	2.90	.000	2.20	.000
RFR2	2.19	.000	1.27	.092	LFR2	2.55	.000	2.16	.000
RFR3	1.81	.000	1.25	.108	LFR3	2.46	.000	1.52	.011
RFR4	2.04	.000	1.66	.002	LFR4	2.09	.000	1.84	.000
RFR5	1.83	.000	1.90	.000	LFR5	2.07	.000	2.24	.000
ULNAR RIDGE COUNTS :									
RFU1	1.92	.000	2.18	.000	LFU1	2.14	.000	2.71	.000
RFU2	1.21	.140	1.74	.001	LFU2	1.10	.289	1.43	.025
RFU3	1.27	.090	1.53	.008	LFU3	1.16	.193	1.26	.103
RFU4	2.07	.000	1.70	.001	LFU4	1.71	.001	1.09	.303
RFU5	1.32	.058	1.25	.108	LFU5	1.46	.014	.80	.850
UNILATERAL RIDGE COUNTS :									
RF1	1.91	.000	1.55	.007	LF1	2.63	.000	2.13	.000
RF2	2.18	.000	1.73	.001	LF2	2.08	.000	1.54	.008
RF3	1.85	.000	1.32	.065	LF3	2.32	.000	1.43	.025
RF4	2.03	.000	1.70	.001	LF4	2.04	.000	1.74	.001
RF5	1.87	.000	1.90	.000	LF5	2.16	.000	2.25	.000
ABSOLUTE RIDGE COUNTS :									
RABS1	1.81	.000	1.81	.000	LABS1	2.21	.000	2.38	.000
RABS2	1.92	.000	1.86	.000	LABS2	1.94	.000	1.83	.000
RABS3	1.81	.000	1.65	.000	LABS3	1.94	.000	1.69	.002
RABS4	2.13	.000	1.81	.000	LABS4	1.94	.000	1.49	.000
RABS5	1.86	.000	1.86	.000	LABS5	2.16	.000	1.86	.000
FINGER PATTERN INTENSITY :									
RD1	1.36	.040	1.86	.000	LD1	1.83	.000	1.82	.000
RD2	1.18	.171	1.39	.036	LD2	1.16	.197	1.45	.020
RD3	1.51	.009	1.29	.080	LD3	1.31	.058	1.16	.203
RD4	1.52	.008	1.42	.028	LD4	1.50	.009	1.35	.048
RD5	1.05	.369	1.11	.271	LD5	1.51	.008	1.04	.392

FINGER PATTERNS(ARCHES, LOOPS AND WHORLS)- CHI SQUARE(DF = 112 MALES AND 104 FEMALES).

	MALES CHI	MALES P	FEMALES CHI	FEMALES P		MALES CHI	MALES P	FEMALES CHI	FEMALES P
RP1	159.9	.002	168.5	.000	LP1	187.1	.000	160.9	.000
RP2	130.1	.116	139.5	.012	LP2	127.9	.144	129.0	.049
RP3	146.4	.016	112.8	.261	LP3	131.6	.110	114.1	.234
RP4	149.2	.011	119.7	.139	LP4	149.3	.011	103.6	.493
RP5	116.3	.372	111.3	.295	LP5	146.6	.016	114.8	.220

(Table 5.1 continued)

PALMAR RIDGE COUNTS : (A. O. V.)

	F	P	F	P		F	P	F	P
RAB	2. 77	. 000	2. 55	. 000	LAB	2. 77	. 000	2. 24	. 000
RBC	2. 37	. 000	1. 86	. 000	LBC	2. 20	. 000	1. 81	. 000
RCD	2. 82	. 000	2. 09	. 000	LCD	2. 42	. 000	1. 56	. 007

THENAR PATTERNS AND TRIRADII(A. O. V)

PTR	1. 37	. 036	1. 36	. 046	PTL	1. 87	. 000	1. 49	. 014
RTR	1. 36	. 037	1. 49	. 014	RTL	2. 13	. 000	1. 70	. 001
TEFR	1. 42	. 022	1. 50	. 012	TEFL	2. 10	. 000	1. 67	. 002

INTERDIGITAL PATTERNS(A. O. V)

P2R	1. 30	. 066	1. 04	. 399	P2L	1. 30	. 066	. 75	. 910
P3R	1. 27	. 085	. 70	. 947	P3L	1. 44	. 019	. 99	. 501
P3TR	1. 14	. 229	1. 09	. 313	P3TL	1. 37	. 036	1. 22	. 140
P4R	1. 72	. 001	1. 16	. 204	P4L	. 89	. 696	1. 26	. 100

HYPOTHENAR AND AXIAL PATTERNS AND TRIRADII(A. O. V). :

PHR	1. 29	. 072	1. 17	. 190	PHL	1. 34	. 048	1. 31	. 071
CHR	1. 48	. 012	1. 13	. 251	CHL	1. 51	. 009	1. 30	. 074
TBR	1. 49	. 011	1. 11	. 278	TBL	1. 48	. 012	1. 27	. 091
TR	2. 49	. 000	2. 09	. 000	TL	1. 73	. 001	2. 17	. 000
T1R	2. 17	. 000	1. 83	. 000	T1L	1. 69	. 001	1. 77	. 001
T2R	. 84	. 789	1. 09	. 304	T2L	1. 26	. 091	1. 17	. 193

S U M M A R Y A T T R I B U T E S :

DIGITAL :

	MALES		FEMALES			MALES		FEMALES	
	F	P	F	P		F	P	F	P
RTRADFRC	2. 29	. 000	1. 55	. 008	LTRADFRC	3. 00	. 000	2. 12	. 000
RTULNRC	1. 96	. 000	2. 25	. 000	LTULNRC	1. 55	. 006	1. 53	. 009
RTRC	2. 31	. 000	1. 80	. 000	LTRC	2. 64	. 000	1. 89	. 000
RTABSRC	2. 34	. 000	2. 12	. 000	LTABSRC	2. 34	. 000	1. 96	. 000
RTFPI	1. 62	. 002	1. 65	. 002	LTFPI	1. 63	. 002	1. 51	. 011

PALMAR :

RTPRC	3. 62	. 000	2. 67	. 000	LTPRC	3. 09	. 000	2. 34	. 000
TDR	1. 95	. 000	1. 17	. 190	TDL	1. 52	. 008	. 86	. 752
RTPLMI	1. 96	. 000	1. 15	. 223	LTPLMI	1. 99	. 000	1. 48	. 015
RTOTHI	1. 62	. 002	. 90	. 681	LTOTHI	1. 48	. 012	1. 23	. 131

****

A. O. V = ANALYSIS OF VARIANCE :

F = F-RATIO ; P = F-PROBABILITY :

Table 5.2: Percentage of significant attributes for various attribute groupings - from information in Table 5.1.

Attributes	MALES No	MALES No Sig.	MALES %Sig.	FEMALES No	FEMALES No Sig.	FEMALES %Sig.
A: Digital non summary attributes:						
Radial Ridge Counts	10	10	100.0	10	8	80.0
Ulnar Ridge Counts	10	5	50.0	10	6	60.0
Unilateral Ridge Counts	10	10	100.0	10	9	90.0
Absolute Ridge Counts	10	10	100.0	10	10	100.0
Finger Pattern Intensity	10	6	60.0	10	6	60.0
Finger Patterns	10	6	60.0	10	4	40.0
Total Digital	60	47	78.3	60	43	71.7
B: Palmar non summary attributes:						
Palmar Ridge Counts	6	6	100.0	6	6	100.0
Thenar Patterns & Triradii	6	6	100.0	6	6	100.0
Interdigital Patterns	8	3	37.5	8	0	0.0
Hypothenar Patterns & Triradii & Axial Triradii	12	9	75.0	12	4	33.3
Total Palmar	32	24	75.0	32	16	50.0
Total Digital & Palmar	92	71	77.2	92	59	64.1
C: Summary attributes:						
Digital	10	10	100.0	10	10	100.0
Palmar	8	8	100.0	8	3	37.5
Total	18	18	100.0	18	13	72.2
ALL ATTRIBUTES	110	89	80.9	110	72	65.5

Table 5.3: Range of variation of minimal sample unit attribute means and frequencies.

	MALES						FEMALES					
	Right Hand			Left Hand			Right Hand			Left Hand		
	Min.	Max.	Range	Min.	Max.	Range	Min.	Max.	Range	Min.	Max.	Range
FR1	11.0	17.9	7.0	9.6	16.0	6.4	10.1	15.8	5.7	8.3	14.5	6.2
FR2	6.7	11.5	4.8	5.9	10.5	4.6	7.1	11.0	3.9	5.4	9.9	4.5
FR3	8.0	12.4	4.4	7.5	12.6	5.1	7.9	12.0	4.0	6.7	11.2	4.4
FR4	10.7	16.2	5.5	10.1	15.0	5.0	9.9	15.5	5.6	9.5	14.3	4.8
FR5	8.9	13.4	4.5	8.8	13.1	4.3	8.7	13.4	4.6	7.8	12.8	4.9
FU1	2.4	9.5	7.2	2.2	9.4	7.2	2.1	9.6	7.4	1.2	9.9	8.6
FU2	2.9	7.8	4.9	2.1	6.8	4.8	1.3	7.6	6.3	2.1	8.1	6.0
FU3	0.1	4.0	4.0	0.7	4.4	3.8	0.0	3.9	3.9	0.0	4.8	4.8
FU4	2.2	7.3	5.1	1.7	7.0	5.3	1.2	5.9	4.7	0.3	6.1	5.8
FU5	0.2	2.4	2.2	0.4	3.0	2.7	0.0	1.6	1.6	0.1	2.7	2.6
D1	1.081	1.538	.457	1.051	1.531	.480	1.000	1.600	.600	1.000	1.560	.560
D2	1.081	1.600	.519	1.074	1.429	.354	1.038	1.500	.462	.956	1.500	.544
D3	.955	1.320	.366	.892	1.313	.421	.909	1.260	.351	.850	1.310	.460
D4	1.227	1.680	.453	1.167	1.579	.412	1.137	1.530	.393	1.000	1.508	.508
D5	1.017	1.250	.233	.966	1.266	.299	.972	1.206	.234	.961	1.269	.308
ARCH1	0.0	12.9	12.9	0.0	16.2	16.2	0.0	15.4	15.4	0.0	17.17	17.7
ARCH2	0.0	15.4	15.4	0.0	13.0	13.0	0.0	15.2	15.2	0.0	19.2	19.2
ARCH3	0.0	12.5	12.5	0.0	21.6	21.6	0.0	15.4	15.4	0.0	19.2	19.2
ARCH4	0.0	8.0	8.0	0.0	6.8	6.8	0.0	8.0	8.0	0.0	10.3	10.3
ARCH5	0.0	5.4	5.4	0.0	10.0	10.0	0.0	8.0	8.0	0.0	10.5	10.5
ULOOP1	26.9	70.3	43.3	25.0	80.0	55.0	26.0	73.1	47.1	22.0	73.9	51.9
ULOOP2	32.0	65.4	33.4	35.7	75.0	39.3	37.0	78.3	41.2	34.0	69.6	35.6
ULOOP3	60.0	96.0	36.0	60.0	88.0	28.0	61.5	95.8	34.3	56.0	87.0	31.0
ULOOP4	31.8	71.3	39.5	40.0	83.3	43.3	44.0	80.0	36.0	45.0	90.0	45.0
ULOOP5	73.4	96.4	22.9	68.4	93.3	24.9	86.3	100.0	23.7	68.4	96.1	27.7
CWHORL1	4.4	38.5	34.0	0.0	36.0	36.0	0.0	30.1	30.1	3.0	28.9	25.9
CWHORL2	10.0	34.2	24.2	0.0	40.0	40.0	3.7	27.0	33.3	0.0	40.0	40.0
CWHORL3	0.0	28.0	28.0	0.0	25.0	25.0	0.0	22.0	22.0	0.0	26.0	26.0
CWHORL4	8.3	56.0	47.7	8.3	48.0	39.7	0.0	38.6	38.6	0.0	39.1	39.1
CWHORL5	0.0	17.2	17.2	0.0	18.8	18.8	0.0	12.0	12.0	0.0	24.0	24.0
DLOOP1	8.1	34.7	26.6	8.0	50.0	42.0	7.4	38.5	31.1	4.4	43.0	38.7
DLOOP2	0.0	23.1	23.1	0.0	22.9	22.9	0.0	22.2	22.2	0.0	23.1	23.1
DLOOP3	0.0	10.0	10.0	0.0	12.7	12.7	0.0	23.1	23.1	0.0	15.6	15.6
DLOOP4	0.0	16.7	16.7	0.0	15.6	15.6	0.0	12.1	12.1	0.0	18.5	18.5
DLOOP5	0.0	12.5	12.5	0.0	12.0	12.0	0.0	5.0	5.0	0.0	15.4	15.4

(Table 5.3 continued)

	MALES						FEMALES					
	Right Hand			Left Hand			Right Hand			Left Hand		
	Min.	Max.	Range	Min.	Max.	Range	Min.	Max	Range	Min.	Max.	Range
AB	32.7	39.1	6.5	34.3	40.0	5.8	32.0	39.1	7.1	33.9	39.9	6.1
BC	23.7	29.4	5.7	24.4	29.7	5.3	23.7	29.5	5.8	23.7	31.1	7.4
CD	33.2	39.9	6.7	33.2	40.2	7.0	31.7	39.2	7.5	34.1	39.2	5.1
P2	.9	25.0	24.1	0.0	16.0	16.0	0.0	15.7	15.7	0.0	13.3	13.3
P3	29.2	64.4	35.2	8.7	42.3	33.6	23.8	53.9	30.0	4.2	34.8	30.6
P3T	0.0	16.4	16.4	1.6	24.0	22.4	0.0	15.4	15.4	0.0	23.1	23.1
P4	44.7	85.9	41.2	73.1	104.3	31.3	56.9	92.5	35.6	74.4	113.8	39.4
PH	0.0	20.0	20.0	0.0	17.4	17.4	0.0	20.0	20.0	0.0	19.6	19.6
CH	5.3	40.4	35.1	4.0	40.0	36.0	7.7	44.4	36.8	0.0	40.0	40.0
TEF	0.0	43.9	4.39	4.3	76.0	71.6	0.0	46.7	46.7	4.3	64.3	59.9
TD3	0.0	12.5	12.5	0.0	15.4	15.4	0.0	13.3	13.3	0.0	15.4	15.4
TD4	50.0	88.0	38.0	48.0	88.9	40.9	46.7	93.5	46.8	46.7	85.0	38.3
TD5	8.3	38.0	29.6	7.4	36.0	28.6	4.3	33.3	29.0	13.1	34.6	21.5
TD6	0.0	15.6	15.6	0.0	13.1	13.1	0.0	14.3	14.3	0.0	7.1	7.1
c) Summary attributes												
TRADRC	45.3	67.5	22.2	42.0	64.0	22.0	43.6	64.7	21.1	38.7	59.6	20.9
TULNRC	10.5	27.2	16.7	11.0	27.4	16.4	7.1	28.0	20.9	8.9	29.5	20.6
TRC	46.0	70.2	24.2	43.9	67.9	24.0	45.3	67.8	22.5	41.5	63.0	21.6
TABSRC	55.3	94.2	38.9	53.0	91.4	38.4	50.7	92.8	42.1	49.4	88.7	39.3
TFPI	5.545	7.320	1.775	5.405	7.047	1.642	5.308	7.000	1.692	5.000	6.970	1.970
TARCH	0.0	9.6	9.6	0.0	11.9	11.9	0.3	10.0	9.7	1.9	12.3	10.4
TULOOP	48.6	74.4	24.8	52.8	74.4	21.6	51.4	79.3	27.9	48.8	77.4	28.6
TCWHORL	8.8	29.6	20.8	6.7	26.4	19.7	2.3	25.2	22.9	5.1	26.4	21.3
TDLOOP	2.7	16.2	13.5	4.8	18.5	13.7	2.1	15.4	13.3	0.9	17.8	16.9
TPRC	89.4	106.1	16.7	90.0	107.2	17.3	86.1	103.9	17.9	90.5	105.1	14.7
TD	4.093	4.582	.489	4.077	4.531	.454	4.083	4.467	.384	4.074	4.400	.326
TPLMI	5.370	6.231	.861	5.528	6.480	.952	5.412	6.267	.855	5.480	6.200	.720
TOTHI	1.067	1.615	.548	1.080	1.500	.420	1.167	1.489	.322	1.040	1.467	.427

TABLE 5: 4 : PEARSON'S CORRELATION MATRIX FOR MALE AND FEMALE SUMMARY TAXONOMIC ATTRIBUTES :

	RTRA DRCM	LTRA DRCM	RTUL NRCM	RTUL NRCM	RTRC M	LTRC M	RTAB SRCM	LTAB SRCM	RTFP IM	LTFP IM	RTPR CM	LTPR CM	TDRM	TDLM	RTPL MIM
LTRADRCM	0.88														
RTULNRCM	0.66	0.66													
RTULNRCM	0.55	0.53	0.80												
RTRCM	0.99	0.86	0.72	0.57											
LTRCM	0.89	0.99	0.68	0.59	0.88										
RTABSRCM	0.92	0.84	0.90	0.73	0.95	0.85									
LTABSRCM	0.84	0.93	0.79	0.81	0.84	0.94	0.89								
RTFPIM	0.77	0.71	0.86	0.67	0.78	0.72	0.89	0.77							
LTFPIM	0.67	0.62	0.74	0.86	0.67	0.64	0.77	0.80	0.80						
RTPRCM	0.05	0.16	0.02	-0.05	0.08	0.16	0.03	0.09	-0.09	-0.15					
LTPRCM	-0.05	0.08	0.04	0.04	-0.02	0.09	-0.02	0.08	-0.08	-0.12	0.91				
TDRM	0.22	0.16	0.23	0.19	0.25	0.19	0.25	0.18	0.20	0.04	0.04	0.03			
TDLM	0.24	0.17	0.33	0.26	0.30	0.20	0.32	0.21	0.29	0.19	0.05	0.05	0.61		
RTPLMIM	-0.03	0.01	-0.02	0.04	-0.03	0.03	-0.02	0.03	-0.11	-0.15	0.12	0.14	0.78	0.38	
LTPLMIM	-0.02	-0.04	0.06	0.05	0.03	-0.01	0.02	-0.02	-0.07	-0.12	0.24	0.19	0.64	0.66	0.66
RTOTHIM	-0.11	0.05	-0.23	-0.17	-0.13	0.04	-0.17	-0.03	-0.36	-0.28	0.18	0.15	0.10	-0.01	0.56
LTOTHIM	0.14	0.11	-0.14	-0.14	0.12	0.11	0.02	0.01	-0.15	-0.20	0.09	0.08	0.25	0.09	0.50
RARCHM	-0.62	-0.43	-0.18	-0.15	-0.59	-0.43	-0.45	-0.35	-0.54	-0.48	0.11	0.21	-0.11	-0.12	0.11
RULOOPM	-0.41	-0.47	-0.88	-0.68	-0.47	-0.48	-0.69	-0.61	-0.75	-0.58	0.00	-0.09	-0.18	-0.32	0.04
RCWHORLM	0.53	0.61	0.83	0.71	0.55	0.59	0.74	0.73	0.79	0.73	-0.06	0.00	0.05	0.18	-0.06
RDLOOPM	0.26	0.18	0.42	0.32	0.29	0.23	0.36	0.26	0.44	0.30	-0.05	0.02	0.08	0.14	-0.17
LARCHM	-0.59	-0.49	-0.25	-0.18	-0.59	-0.49	-0.47	-0.40	-0.52	-0.55	0.03	0.08	0.04	-0.01	0.21
LULOOPM	-0.17	-0.16	-0.59	-0.83	-0.19	-0.19	-0.40	-0.47	-0.40	-0.62	0.12	0.01	-0.04	-0.20	0.02
LCWHORLM	0.46	0.56	0.56	0.71	0.44	0.53	0.55	0.71	0.59	0.77	-0.03	0.00	-0.02	0.11	-0.09
LDLOOPM	0.15	0.01	0.39	0.48	0.18	0.07	0.29	0.19	0.26	0.35	-0.20	-0.13	0.15	0.12	0.01
RTRADRCF	0.40	0.47	0.37	0.33	0.41	0.47	0.43	0.47	0.31	0.32	0.10	0.08	-0.09	-0.05	-0.12
LTRADRCF	0.37	0.50	0.39	0.36	0.37	0.50	0.42	0.50	0.34	0.33	0.07	0.06	-0.13	-0.07	-0.15
RTULNRCF	0.41	0.38	0.43	0.45	0.43	0.40	0.46	0.45	0.33	0.38	0.05	0.06	0.13	0.14	0.02
RTULNRCF	0.32	0.29	0.29	0.37	0.31	0.31	0.34	0.36	0.28	0.31	-0.01	0.05	0.09	0.07	0.08
RTRCF	0.39	0.45	0.40	0.35	0.42	0.46	0.44	0.46	0.31	0.31	0.13	0.10	-0.04	0.00	-0.09
LTRCF	0.35	0.45	0.40	0.38	0.36	0.46	0.42	0.48	0.32	0.33	0.07	0.08	-0.09	-0.04	-0.10
RTABSRCF	0.43	0.45	0.42	0.41	0.44	0.47	0.47	0.49	0.33	0.36	0.09	0.08	0.02	0.05	-0.06
LTABSRCF	0.38	0.44	0.37	0.41	0.37	0.46	0.42	0.49	0.34	0.36	0.03	0.05	-0.05	-0.02	-0.06
RTFPIF	0.25	0.25	0.20	0.28	0.22	0.26	0.25	0.30	0.23	0.31	-0.16	-0.13	0.06	-0.05	-0.02
LTFPIF	0.19	0.22	0.08	0.23	0.15	0.24	0.15	0.26	0.19	0.25	-0.12	-0.09	-0.05	-0.22	-0.04
RTPRCF	0.17	0.20	0.12	0.04	0.22	0.20	0.16	0.15	-0.02	0.02	0.61	0.47	0.00	-0.02	-0.03
LTPRCF	0.12	0.14	0.09	-0.06	0.18	0.14	0.12	0.06	-0.03	-0.09	0.66	0.58	0.11	0.04	0.05
TDRF	-0.08	-0.17	-0.06	-0.13	-0.07	-0.19	-0.07	-0.19	-0.13	-0.16	0.04	0.04	0.21	0.28	0.26
TDLF	-0.06	-0.07	0.00	-0.02	-0.04	-0.06	-0.02	-0.06	-0.05	-0.09	0.03	0.05	0.30	0.21	0.33
RTPLMIF	-0.09	-0.08	-0.19	-0.20	-0.10	-0.07	-0.15	-0.15	-0.13	-0.22	-0.15	-0.15	0.28	0.19	0.26
LTPLMIF	-0.17	-0.17	-0.09	-0.08	-0.16	-0.15	-0.14	-0.17	-0.09	-0.15	-0.06	-0.01	0.32	0.26	0.34
RTOTHIF	-0.13	0.04	-0.06	-0.02	-0.16	0.03	-0.11	0.03	0.02	-0.04	-0.13	-0.05	0.08	0.03	0.14
LTOTHIF	0.10	0.10	0.08	0.11	0.06	0.07	0.10	0.13	0.17	0.18	-0.23	-0.19	0.08	-0.01	0.09
RARCHF	0.05	-0.10	0.19	0.16	0.09	-0.08	0.13	-0.02	0.06	0.05	0.08	0.14	0.09	0.21	0.05
RULOOPF	-0.31	-0.18	-0.40	-0.43	-0.32	-0.21	-0.39	-0.31	-0.31	-0.38	0.10	0.00	-0.16	-0.14	-0.04
RCWHORLF	0.23	0.26	0.18	0.22	0.21	0.26	0.23	0.29	0.20	0.25	-0.07	-0.03	0.02	-0.01	-0.08
RDLOOPF	0.27	0.13	0.32	0.35	0.29	0.18	0.32	0.23	0.24	0.30	-0.11	-0.06	0.24	0.10	0.12
LARCHF	0.12	-0.04	0.13	0.08	0.14	-0.04	0.14	0.00	0.09	0.07	0.00	0.05	0.11	0.28	0.03
LULOOPF	-0.33	-0.21	-0.23	-0.34	-0.30	-0.24	-0.31	-0.29	-0.29	-0.35	0.08	0.01	-0.03	0.03	0.02
LCWHORLF	0.19	0.24	0.06	0.20	0.12	0.23	0.14	0.26	0.18	0.21	-0.05	-0.02	-0.07	-0.19	0.03
LDLOOPLF	0.35	0.23	0.33	0.36	0.39	0.29	0.37	0.31	0.31	0.40	-0.11	-0.08	0.14	0.01	-0.06

(Table 5.4 continued).

	LTPL MIM	RTOT HIM	LTOT HIM	RARC HM	RULO OPM	RCWH ORLM	RDLO OPM	LARC HM	LULO OPM	LCWH ORLM	LDLO OPM	RTRA DRCF	LTRA DRCF	RTUL NRCF	RTUL NRCF
RTOTHIM	0.25														
LTOTHIM	0.35	0.66													
RARCHM	0.14	0.23	-0.09												
RULOOPM	-0.09	0.27	0.26	-0.14											
RCWHORLM	-0.15	-0.16	-0.24	-0.20	-0.77										
RDLOOPM	0.05	-0.42	-0.11	0.00	-0.51	0.05									
LARCHM	0.19	0.20	0.01	0.84	-0.01	-0.27	-0.05								
LULOOPM	-0.02	0.18	0.23	-0.21	0.64	-0.56	-0.31	-0.27							
LCWHORLM	-0.15	-0.10	-0.25	-0.23	-0.51	0.76	-0.06	-0.26	-0.59						
LDLOOPM	0.11	-0.26	-0.06	0.04	-0.34	0.11	0.59	0.06	-0.49	-0.16					
RTRADRCF	-0.01	0.07	0.16	0.01	-0.36	0.27	0.36	-0.09	-0.21	0.28	0.09				
LTRADRCF	-0.03	0.03	0.06	0.02	-0.37	0.30	0.32	-0.08	-0.23	0.32	0.07	0.89			
RTULNRCF	0.15	0.06	0.12	-0.03	-0.37	0.31	0.31	-0.11	-0.28	0.28	0.17	0.75	0.76		
RTULNRCF	0.07	0.16	0.18	-0.04	-0.27	0.19	0.35	-0.11	-0.21	0.22	0.17	0.66	0.66	0.81	
RTRCF	0.06	0.09	0.20	0.03	-0.38	0.27	0.34	-0.07	-0.22	0.27	0.11	0.99	0.88	0.79	0.67
LTRCF	0.02	0.08	0.11	0.05	-0.37	0.28	0.36	-0.05	-0.25	0.29	0.12	0.91	0.98	0.80	0.74
RTABSRCF	0.07	0.08	0.15	-0.01	-0.38	0.30	0.34	-0.10	-0.25	0.30	0.13	0.94	0.88	0.93	0.77
LTABSRCF	0.01	0.09	0.11	0.00	-0.35	0.28	0.36	-0.09	-0.25	0.31	0.13	0.87	0.94	0.86	0.87
RTFPIF	-0.05	0.02	0.05	-0.07	-0.18	0.17	0.26	-0.15	-0.14	0.20	0.12	0.64	0.68	0.85	0.75
LTFPIF	-0.13	0.08	0.10	-0.10	-0.09	0.09	0.19	-0.16	-0.10	0.20	0.06	0.59	0.62	0.64	0.80
RTPRCF	0.01	-0.07	-0.13	0.02	-0.03	0.01	0.06	-0.06	0.03	0.02	-0.01	0.23	0.16	0.23	0.07
LTPRCF	0.09	-0.11	-0.06	0.03	-0.05	-0.04	0.13	-0.06	0.14	-0.10	-0.01	0.20	0.08	0.13	0.01
TDRF	0.32	0.25	0.23	0.01	0.13	-0.08	-0.15	0.09	0.14	-0.13	0.00	-0.02	-0.09	0.10	0.06
TDLF	0.24	0.26	0.27	0.00	0.05	-0.06	-0.06	0.04	0.07	-0.12	0.06	0.05	0.01	0.03	0.05
RTPLMIF	0.34	0.19	0.16	-0.06	0.22	-0.23	-0.14	0.06	0.26	-0.20	0.00	-0.05	0.01	0.02	-0.01
LTPLMIF	0.22	0.16	0.14	0.00	0.09	-0.16	0.03	0.16	0.03	-0.17	0.15	-0.08	-0.13	-0.03	-0.07
RTOTHIF	0.05	0.23	0.04	0.01	0.02	0.08	-0.16	0.03	0.09	0.06	-0.05	-0.06	0.13	0.12	0.24
LTOTHIF	-0.05	0.09	0.08	-0.17	-0.06	0.23	-0.07	-0.14	-0.05	0.21	0.05	0.01	-0.07	0.16	0.14
RARCHF	0.20	-0.16	-0.08	0.04	-0.13	0.05	0.12	0.09	-0.19	-0.01	0.18	-0.33	-0.27	-0.21	-0.18
RULOOPF	-0.15	0.09	-0.05	0.05	0.32	-0.24	-0.38	0.09	0.31	-0.19	-0.28	-0.47	-0.56	-0.82	-0.71
RCWHORLF	-0.02	0.03	0.00	-0.05	-0.19	0.19	0.15	-0.15	-0.08	0.26	-0.06	0.54	0.62	0.82	0.69
RDLOOPF	0.06	-0.14	0.03	-0.08	-0.21	0.08	0.47	-0.09	-0.26	-0.01	0.51	0.34	0.31	0.40	0.42
LARCHF	0.10	-0.16	-0.14	-0.03	-0.11	0.06	0.15	0.00	-0.09	0.01	0.09	-0.38	-0.34	-0.19	-0.15
LULOOPF	0.08	0.01	-0.01	0.15	0.19	-0.14	-0.39	0.22	0.18	-0.20	-0.17	-0.45	-0.49	-0.63	-0.87
LCWHORLF	-0.14	0.22	0.18	-0.09	-0.07	0.18	0.05	-0.08	-0.10	0.29	-0.12	0.54	0.56	0.64	0.78
LDLOOPLF	0.02	-0.26	-0.07	-0.18	-0.25	0.05	0.55	-0.30	-0.17	0.02	0.51	0.35	0.38	0.47	0.53

	RTRC F	LTRC F	RTAB SRCF	LTAB SRCF	RTFP IF	LTFP IF	RTPR CF	LTPR CF	TDRF	TDLF	RTPL MIF	LTPL MIF	RTOT HIF	LTOT HIF	RARC HF
LTRCF	0.91														
RTABSRCF	0.96	0.92													
LTABSRCF	0.86	0.97	0.92												
RTFPIF	0.65	0.70	0.79	0.78											
LTFPIF	0.57	0.65	0.65	0.76	0.82										
RTPRCF	0.24	0.16	0.25	0.14	0.00	-0.01									
LTPRCF	0.22	0.08	0.19	0.05	-0.09	-0.11	0.90								
TDRF	0.03	-0.03	0.04	-0.03	-0.06	-0.20	0.02	0.02							
TDLF	0.08	0.03	0.04	0.03	-0.06	-0.07	-0.08	-0.03	0.62						
RTPLMIF	-0.02	0.00	-0.02	0.00	-0.04	-0.07	-0.14	-0.12	0.61	0.54					
LTPLMIF	-0.06	-0.13	-0.07	-0.11	-0.07	-0.16	-0.02	0.02	0.59	0.62	0.70				
RTOTHIF	-0.05	0.12	0.02	0.20	0.22	0.26	-0.28	-0.23	0.12	0.20	0.50	0.26			
LTOTHIF	0.02	-0.06	0.08	0.03	0.22	0.13	-0.20	-0.16	0.26	0.18	0.22	0.32	0.54		
RARCHF	-0.32	-0.24	-0.30	-0.26	-0.56	-0.55	0.14	0.15	0.20	0.04	0.04	0.02	-0.21	-0.21	
RULOOPF	-0.50	-0.63	-0.67	-0.69	-0.69	-0.45	-0.10	-0.03	-0.15	-0.02	-0.01	0.03	-0.08	-0.07	-0.21
RCWHORLF	0.55	0.63	0.71	0.71	0.88	0.70	0.00	-0.07	-0.10	-0.12	-0.03	-0.15	0.36	0.29	-0.40
RDLOOPF	0.33	0.36	0.39	0.39	0.34	0.28	0.26	0.20	0.17	0.11	-0.02	0.12	-0.30	-0.24	0.14
LARCHF	-0.38	-0.32	-0.31	-0.29	-0.43	-0.59	0.09	0.11	0.12	-0.07	-0.08	-0.04	-0.20	-0.08	0.80
LULOOPF	-0.42	-0.56	-0.56	-0.71	-0.61	-0.69	-0.13	-0.04	0.05	0.07	0.12	0.18	-0.11	-0.03	-0.06
LCWHORLF	0.52	0.59	0.62	0.72	0.75	0.86	-0.08	-0.21	-0.04	-0.03	-0.07	-0.14	0.26	0.23	-0.43
LDLOOPLF	0.35	0.41	0.42	0.48	0.43	0.45	0.31	0.29	-0.15	-0.10	-0.07	-0.04	-0.03	-0.10	0.02

	RULO OPF	RCWH ORLF	RDLO OPF	LARC HF	LULO OPF	LCWH ORLF	LDLO OPLF
RCWHORLF	-0.68						
RDLOOPF	-0.52	0.02					
LARCHF	-0.17	-0.29	0.09				
LULOOPF	0.72	-0.54	-0.52	-0.14			
LCWHORLF	-0.49	0.69	0.15	-0.38	-0.68		
LDLOOPLF	-0.49	0.29	0.69	0.01	-0.59	0.12	

TABLE 5.5 : EIGENVALUES FOR PRINCIPAL COMPONENTS ANALYSIS: BASED ON 26 MALE AND 26 FEMALE SUMMARY TRAITS.

COMPONENT	EIGENVALUE	PCT OF VAR	CUM PCT
1	15.63276	30.1	30.1
2	6.93327	13.3	43.4
3	4.69126	9.0	52.4
4	3.94892	7.6	60.0
5	3.59092	6.9	66.9
6	2.80317	5.4	72.3
7	1.98592	3.8	76.1
8	1.82284	3.5	79.6
9	1.53968	3.0	82.6
10	1.31523	2.5	85.1
11	1.10482	2.1	87.2
12	0.88707	1.7	89.0
13	0.87866	1.7	90.6
14	0.72673	1.4	92.0
15	0.54634	1.1	93.1
16	0.49972	1.0	94.1
17	0.43762	0.8	94.9
18	0.40175	0.8	95.7
19	0.35979	0.7	96.4
20	0.31801	0.6	97.0
21	0.26262	0.5	97.5
22	0.22835	0.4	97.9
23	0.18448	0.4	98.3
24	0.14158	0.3	98.5
25	0.13476	0.3	98.8
26	0.12072	0.2	99.0
27	0.09468	0.2	99.2
28	0.07162	0.1	99.4
29	0.05877	0.1	99.5
30	0.05024	0.1	99.6
31	0.04485	0.1	99.6
32	0.03427	0.1	99.7
33	0.02803	0.1	99.8
34	0.02665	0.1	99.8
35	0.02042	0.0	99.9
36	0.01858	0.0	99.9
37	0.01784	0.0	99.9
38	0.01250	0.0	100.0
39	0.00739	0.0	100.0
40	0.00670	0.0	100.0
41	0.00346	0.0	100.0
42	0.00274	0.0	100.0
43	0.00138	0.0	100.0
44	0.00108	0.0	100.0
45	0.00072	0.0	100.0
46	0.00052	0.0	100.0
47	0.00042	0.0	100.0
48	0.00018	0.0	100.0
49	0.00008	0.0	100.0
50	0.00006	0.0	100.0
51	-0.00001	0.0	100.0
52	-0.00012	0.0	100.0

TABLE **5.6** : PRINCIPAL COMPONENTS ANALYSIS (UNROTATED COMPONENTS)- ANALYSIS BASED ON 26 MALE AND 26 FEMALE TRAITS.

TRAIT	COM1	COM2	COM3	COM4	COM5	COM6	COM7	COM8	COM9	COM10	COM11	COMMUNALITY
RTRADRCM	0.73	-0.43	0.06	-0.12	0.30	-0.28	-0.07	-0.07	-0.10	-0.03	0.05	0.94
LTRADRCM	0.73	-0.35	0.03	-0.15	0.45	-0.01	0.00	-0.11	-0.03	-0.02	0.16	0.93
RTULNRCM	0.74	-0.52	0.10	0.03	-0.13	0.20	0.08	-0.05	0.01	-0.05	0.05	0.91
LTULNRCM	0.73	-0.41	0.05	-0.03	-0.26	0.27	-0.06	0.01	0.04	0.25	-0.06	0.91
RTRCM	0.74	-0.47	0.10	-0.05	0.28	-0.26	-0.04	-0.09	-0.09	-0.07	0.03	0.95
LTRCM	0.75	-0.36	0.05	-0.12	0.41	-0.03	-0.01	-0.14	-0.01	0.00	0.17	0.93
RTABSRCM	0.81	-0.51	0.10	-0.06	0.11	-0.06	0.01	-0.07	-0.07	-0.04	0.04	0.96
LTABSRCM	0.82	-0.41	0.03	-0.13	0.21	0.14	-0.03	-0.06	0.00	0.11	0.09	0.95
RTFPIM	0.73	-0.54	-0.03	-0.20	-0.04	-0.06	0.08	0.00	0.09	-0.10	0.05	0.89
LTFPIM	0.74	-0.47	-0.14	-0.19	-0.13	0.00	0.02	0.07	0.03	0.19	-0.14	0.90
RTPRCM	0.01	-0.02	0.20	0.57	0.61	0.23	0.03	0.21	0.17	0.07	0.10	0.87
LTPRCM	0.02	0.00	0.21	0.55	0.44	0.31	0.01	0.28	0.17	0.13	0.17	0.79
TDRM	0.12	-0.17	0.73	-0.08	-0.05	-0.07	-0.31	-0.10	0.36	-0.11	-0.16	0.86
TDLM	0.16	-0.33	0.61	-0.04	-0.10	0.06	-0.16	0.00	0.12	-0.41	-0.20	0.77
RTPLMIM	-0.06	0.05	0.75	-0.11	0.08	0.14	-0.44	-0.11	0.19	0.19	-0.07	0.89
LTPLMIM	-0.01	0.01	0.76	0.11	-0.02	0.12	-0.28	-0.11	0.14	-0.31	-0.07	0.81
RTOTHIM	-0.10	0.37	0.41	-0.20	0.37	0.25	-0.30	-0.10	-0.25	0.32	0.16	0.85
LTOTHIM	0.02	0.27	0.48	-0.15	0.32	-0.10	-0.33	-0.32	-0.26	0.18	0.19	0.78
RARCHM	-0.28	0.35	0.06	0.38	-0.29	0.63	-0.01	-0.09	-0.03	-0.02	0.15	0.87
RULOOPM	-0.63	0.40	-0.04	-0.11	0.27	-0.42	-0.09	0.06	-0.10	0.16	-0.10	0.88
RCWHORLM	0.62	-0.48	-0.10	-0.22	-0.01	0.38	0.08	0.14	-0.01	0.05	-0.09	0.86
RDLOOPM	0.45	-0.09	0.02	0.36	-0.43	-0.22	0.11	-0.21	0.14	-0.15	0.33	0.78
LARCHM	-0.36	0.31	0.18	0.27	-0.35	0.58	-0.05	-0.13	-0.06	-0.02	0.07	0.82
LULOOPM	-0.45	0.30	0.03	-0.08	0.51	-0.52	0.04	0.04	0.00	-0.25	0.11	0.91
LCWHORLM	0.57	-0.34	-0.19	-0.27	0.07	0.40	-0.01	0.25	-0.06	0.14	-0.28	0.88
LDLOOPM	0.28	-0.19	0.16	0.19	-0.61	-0.15	0.11	-0.28	0.19	0.24	0.26	0.92
RTRADRCF	0.76	0.40	-0.02	0.17	0.14	0.10	0.21	-0.23	-0.16	-0.07	-0.06	0.94
LTRADRCF	0.78	0.41	-0.07	0.11	0.08	0.12	0.17	-0.12	-0.17	-0.14	0.07	0.91
RTULNRCF	0.82	0.41	0.15	0.08	-0.06	0.01	-0.02	0.14	0.00	-0.12	-0.12	0.92
LTULNRCF	0.74	0.49	0.11	0.02	-0.13	-0.09	-0.19	0.18	-0.02	0.09	0.09	0.91
RTRCF	0.77	0.40	0.05	0.18	0.14	0.12	0.21	-0.22	-0.14	-0.10	-0.07	0.95
LTRCF	0.80	0.44	-0.01	0.14	0.03	0.11	0.12	-0.10	-0.19	-0.11	0.07	0.95
RTABSRCF	0.84	0.43	0.07	0.14	0.06	0.07	0.11	-0.06	-0.09	-0.11	-0.10	0.97
LTABSRCF	0.84	0.49	0.00	0.08	-0.02	0.05	0.03	0.01	-0.12	-0.04	0.07	0.97
RTFPIF	0.69	0.57	-0.09	-0.14	-0.11	-0.08	-0.07	0.03	0.20	-0.06	-0.15	0.93
LTFPIF	0.61	0.61	-0.20	-0.16	-0.03	-0.10	-0.14	-0.02	0.22	0.17	-0.02	0.92
RTPRCF	0.18	-0.05	0.08	0.68	0.38	-0.10	0.21	0.23	0.18	0.16	-0.16	0.84
LTPRCF	0.09	-0.07	0.17	0.71	0.40	-0.11	0.22	0.19	0.27	0.06	-0.05	0.89
TDRF	-0.11	0.13	0.66	-0.12	-0.06	-0.07	0.36	0.23	-0.31	0.05	-0.21	0.82
TDLF	-0.05	0.12	0.63	-0.20	-0.02	-0.01	0.40	-0.03	-0.16	0.20	-0.07	0.68
RTPLMIF	-0.14	0.20	0.59	-0.35	-0.05	-0.16	0.43	0.06	-0.07	-0.12	0.09	0.78
LTPLMIF	-0.16	0.09	0.64	-0.20	-0.16	-0.06	0.50	0.02	0.10	0.16	-0.03	0.80
RTOTHIF	0.05	0.29	0.18	-0.54	-0.04	0.14	0.14	0.35	0.27	-0.04	0.47	0.86
LTOTHIF	0.12	0.06	0.14	-0.58	-0.05	0.06	0.22	0.33	0.24	0.11	0.17	0.64
RARCHF	-0.14	-0.50	0.27	0.36	-0.27	-0.07	-0.11	0.35	-0.43	-0.02	0.16	0.90
RULOOPF	-0.67	-0.26	-0.18	-0.15	0.35	0.14	0.15	-0.34	0.16	0.11	0.06	0.89
RCWHORLF	0.62	0.51	-0.11	-0.17	-0.01	0.03	-0.11	0.29	0.18	-0.27	-0.02	0.89
RDLOOPF	0.45	0.03	0.22	0.37	-0.37	-0.39	-0.01	-0.18	-0.06	0.32	-0.20	0.85
LARCHF	-0.13	-0.52	0.18	0.26	-0.24	-0.16	-0.23	0.44	-0.36	-0.13	0.15	0.89
LULOOPF	-0.64	-0.31	0.03	-0.12	0.23	0.30	0.29	-0.35	0.09	-0.16	-0.08	0.91
LCWHORLF	0.56	0.58	-0.14	-0.25	0.05	0.05	-0.22	0.18	-0.01	0.16	-0.05	0.85
LDLOOPF	0.55	0.05	0.01	0.31	-0.28	-0.49	-0.01	-0.06	0.24	0.16	0.10	0.82

TABLE **5.7** : PRINCIPAL COMPONENTS ANALYSIS(VARIMAX ROTATED SOLUTION)- ANALYSIS BASED ON 26 MALEAND 26 FEMALE SUMMARY TRAITS.

TRAIT	COM1	COM2	COM3	COM4	COM5	COM6	COM7	COM8	COM9	COM10	COM11
RTRADRCM	0.22	0.73	0.04	0.09	0.53	-0.05	0.07	0.08	0.13	-0.09	0.14
LTRADRCM	0.23	0.78	0.16	-0.04	0.35	-0.08	0.01	-0.09	0.21	0.03	0.23
RTULNRCM	0.17	0.88	0.04	0.21	-0.06	0.00	0.13	0.11	-0.14	-0.03	0.08
LTULNRCM	0.22	0.83	-0.05	0.24	-0.16	-0.03	0.07	0.07	-0.04	0.00	-0.28
RTRCM	0.21	0.75	0.09	0.11	0.50	-0.04	0.12	0.09	0.09	-0.14	0.17
LTRCM	0.23	0.79	0.16	0.03	0.34	-0.09	0.04	-0.09	0.22	0.02	0.21
RTABSRCM	0.22	0.88	0.04	0.15	0.27	-0.02	0.11	0.10	0.01	-0.08	0.12
LTABSRCM	0.25	0.90	0.09	0.06	0.16	-0.09	0.02	-0.04	0.14	0.04	0.02
RTFPIM	0.14	0.84	-0.09	0.17	0.27	-0.04	0.08	0.04	-0.19	0.09	0.08
LTFPIM	0.19	0.83	-0.13	0.16	0.19	-0.05	-0.06	0.03	-0.16	-0.01	-0.27
RTPRCM	-0.01	0.02	0.89	-0.17	-0.07	-0.07	0.08	0.01	0.15	-0.01	0.09
LTPRCM	0.01	0.03	0.84	-0.09	-0.21	-0.06	0.05	0.09	0.14	0.09	0.01
TDRM	-0.05	0.14	0.04	0.16	0.10	0.17	0.86	-0.03	0.13	0.05	-0.11
TDLM	-0.04	0.28	-0.02	-0.03	0.00	0.19	0.77	0.17	-0.12	-0.05	0.10
RTPLMIM	-0.06	-0.02	0.08	0.02	-0.10	0.18	0.70	-0.05	0.52	0.09	-0.25
LTPLMIM	0.04	-0.05	0.11	0.01	-0.15	0.18	0.83	0.10	0.17	-0.04	0.14
RTOTHIM	0.11	-0.13	0.05	-0.28	-0.15	0.16	0.10	-0.06	0.82	0.10	-0.07
LTOTHIM	0.13	-0.11	-0.04	-0.02	0.12	0.15	0.22	-0.04	0.80	-0.07	0.12
RARCHM	0.05	-0.30	0.12	0.01	-0.86	-0.06	0.01	0.01	0.04	-0.02	0.08
RULOOPM	-0.18	-0.75	-0.02	-0.20	0.35	0.08	-0.15	-0.06	0.25	-0.04	-0.14
RCWHORLM	0.11	0.88	-0.04	-0.14	-0.08	-0.03	-0.04	0.02	-0.16	0.09	-0.13
RDLOOPM	0.26	0.20	0.01	0.71	-0.06	-0.10	0.06	0.13	-0.21	-0.04	0.30
LARCHM	-0.04	-0.33	-0.01	0.00	-0.83	0.04	0.12	0.03	0.08	-0.04	0.04
LULOOPM	-0.11	-0.61	0.13	-0.23	0.56	0.05	-0.01	-0.08	0.14	0.08	0.32
LCWHORLM	0.18	0.77	-0.04	-0.33	-0.04	-0.06	-0.10	-0.01	-0.13	0.05	-0.34
LDLOOPM	0.00	0.23	-0.12	0.84	-0.18	0.09	0.05	0.04	-0.06	0.00	-0.02
RTRADRCF	0.80	0.30	0.13	0.05	-0.05	0.10	-0.13	-0.23	0.06	-0.24	0.23
LTRADRCF	0.83	0.30	0.07	0.04	-0.08	0.03	-0.15	-0.13	0.04	-0.09	0.27
RTULNRCF	0.90	0.25	0.09	0.06	0.02	0.07	0.16	0.01	-0.06	0.01	-0.04
LTULNRCF	0.87	0.13	0.00	0.20	0.05	-0.02	0.05	0.10	0.16	0.16	-0.15
RTRCF	0.80	0.30	0.15	0.04	-0.07	0.12	-0.06	-0.23	0.06	-0.24	0.23
LTRCF	0.87	0.28	0.07	0.08	-0.11	0.04	-0.11	-0.08	0.08	-0.10	0.22
RTABSRCF	0.90	0.29	0.13	0.05	-0.02	0.09	0.01	-0.13	0.01	-0.14	0.11
LTABSRCF	0.93	0.25	0.05	0.11	-0.04	0.02	-0.08	-0.04	0.09	0.01	0.09
RTFPIF	0.87	0.06	-0.13	0.09	0.10	-0.07	0.08	-0.27	-0.10	0.13	-0.15
LTFPIF	0.78	0.01	-0.10	0.16	0.12	-0.18	-0.09	-0.35	0.10	0.18	-0.23
RTPRCF	0.12	0.04	0.84	0.10	0.13	0.04	-0.05	0.03	-0.14	-0.23	-0.10
LTPRCF	0.03	-0.02	0.90	0.15	0.12	0.04	0.06	0.01	-0.14	-0.16	0.03
TDRF	0.05	-0.12	0.02	-0.13	0.01	0.83	0.16	0.23	0.06	-0.03	-0.07
TDLF	0.00	-0.01	0.00	0.03	-0.04	0.79	0.12	-0.04	0.20	0.04	-0.02
RTPLMIF	0.02	-0.18	-0.13	-0.01	0.10	0.75	0.18	0.00	0.06	0.27	0.21
LTPLMIF	-0.12	-0.10	0.02	0.17	-0.05	0.81	0.18	-0.11	0.01	0.19	-0.04
RTOTHIF	0.17	-0.04	-0.12	-0.07	-0.04	0.21	0.02	-0.06	0.07	0.87	0.07
LTOTHIF	0.06	0.17	-0.16	-0.08	0.10	0.31	-0.02	-0.11	-0.04	0.66	-0.15
RARCHF	-0.30	0.12	0.11	0.13	-0.10	0.10	0.05	0.85	-0.02	-0.14	0.01
RULOOPF	-0.76	-0.15	0.05	-0.20	-0.02	-0.06	-0.17	-0.42	0.12	-0.01	0.14
RCWHORLF	0.83	0.06	-0.06	-0.13	0.09	-0.16	0.10	-0.09	-0.16	0.32	-0.03
RDLOOPF	0.35	0.12	0.04	0.63	0.10	0.18	0.08	0.12	0.02	-0.42	-0.27
LARCHF	-0.29	0.10	0.04	0.06	0.05	-0.03	0.11	0.87	-0.08	-0.05	-0.01
LULOOPF	-0.73	-0.07	0.01	-0.29	-0.19	0.15	0.05	-0.36	-0.07	-0.10	0.28
LCWHORLF	0.78	0.05	-0.12	-0.13	0.06	-0.12	-0.10	-0.13	0.20	0.22	-0.28
LDLOOPF	0.41	0.12	0.12	0.72	0.26	-0.08	0.03	0.03	-0.11	-0.06	-0.10

TABLE 5.8 : Eigenvalues for principal components analyses (males and females): based on summary traits.

Component	MALES Eigen Value	MALES Pcnt Var.	MALES Cum Pcnt	FEMALES Eigen Value	FEMALES Pcnt Var.	FEMALES Cum Pcnt
1	10.9	41.9	41.9	11.1	42.7	42.7
2	3.5	13.3	55.2	3.4	13.2	55.9
3	2.9	11.1	66.3	3.0	11.6	67.5
4	2.2	8.5	74.8	2.1	8.0	75.5
5	1.7	6.4	81.2	1.3	5.1	80.6
6	1.3	4.8	86.1	1.2	4.7	85.3
7	0.9	3.4	89.4	0.8	3.2	88.6
8	0.6	2.3	91.7	0.7	2.7	91.3
9	0.5	1.9	93.7	0.6	2.2	93.5
10	0.4	1.5	95.2	0.4	1.5	94.9
11	0.3	1.3	96.5	0.3	1.2	96.2
12	0.3	1.1	97.6	0.2	0.9	97.1
13	0.2	0.6	98.2	0.2	0.8	97.9
14	0.1	0.5	98.7	0.2	0.6	98.5
15	0.1	0.4	99.1	0.1	0.5	99.0
16	0.1	0.2	99.4	0.1	0.4	99.4
17	0.1	0.2	99.6	0.1	0.2	99.6
18	0.1	0.2	99.7	0.0	0.1	99.7
19	0.0	0.1	99.8	0.0	0.1	99.8
20	0.0	0.1	99.9	0.0	0.1	99.9
21	0.0	0.0	100.0	0.0	0.1	100.0
22	0.0	0.0	100.0	0.0	0.0	100.0
23	0.0	0.0	100.0	0.0	0.0	100.0
24	0.0	0.0	100.0	0.0	0.0	100.0
25	0.0	0.0	100.0	0.0	0.0	100.0
26	0.0	0.0	100.0	0.0	0.0	100.0

TABLE 5:9 · PRINCIPAL COMPONENTS ANALYSIS(UNROTATED SOLUTION)-ANALYSIS BASED ON 26 SUMMARY TRAITS

	MALES							FEMALES						
TRAIT	COM1	COM2	COM3	COM4	COM5	COM6	CO/TY	COM1	COM2	COM3	COM4	COM5	COM6	CO/TY
RTRADRC	0.88	0.14	-0.35	-0.07	0.07	0.10	0.93	0.86	-0.09	0.04	0.37	-0.18	0.14	0.94
LTRADRC	0.86	0.15	-0.31	0.19	0.01	0.13	0.91	0.88	-0.05	0.00	0.21	-0.21	0.17	0.89
RTULNRC	0.90	0.00	0.27	0.02	0.06	0.04	0.90	0.92	0.00	0.15	-0.05	0.07	0.15	0.90
LTULNRC	0.84	-0.07	0.34	0.11	-0.18	0.03	0.87	0.89	0.04	0.09	-0.27	0.05	-0.07	0.88
RTRC	0.89	0.17	-0.30	-0.07	0.11	0.07	0.93	0.86	-0.07	0.08	0.38	-0.17	0.17	0.95
LTRC	0.87	0.17	-0.27	0.17	0.02	0.15	0.91	0.91	-0.06	0.05	0.16	-0.22	0.16	0.94
RTABSRC	0.97	0.09	-0.06	-0.04	0.06	0.08	0.96	0.94	-0.06	0.10	0.20	-0.07	0.16	0.97
LTABSRC	0.94	0.07	-0.06	0.20	-0.09	0.11	0.95	0.97	-0.01	0.04	0.02	-0.11	0.08	0.96
RTFPI	0.92	-0.06	-0.02	-0.16	0.11	-0.08	0.89	0.89	0.17	-0.17	-0.09	0.11	-0.12	0.88
LTFPI	0.89	-0.19	0.02	-0.05	-0.14	-0.08	0.86	0.83	0.15	-0.30	-0.07	0.10	-0.33	0.93
RTPRC	-0.02	0.36	-0.02	0.67	0.58	-0.10	0.93	0.16	-0.55	0.36	0.40	0.53	0.06	0.90
LTPRC	-0.02	0.31	0.11	0.69	0.55	-0.09	0.90	0.08	-0.52	0.38	0.44	0.55	0.08	0.94
TDR	0.14	0.74	0.20	-0.35	-0.02	-0.27	0.80	-0.04	0.44	0.72	0.05	-0.09	0.07	0.72
TDL	0.31	0.56	0.28	-0.27	0.04	-0.44	0.75	0.00	0.51	0.59	0.20	-0.19	-0.12	0.70
RTPLMI	-0.04	0.85	0.14	-0.09	-0.26	-0.02	0.82	-0.04	0.66	0.53	0.09	-0.03	-0.05	0.73
LTPLMI	0.01	0.78	0.29	-0.15	0.03	-0.23	0.77	-0.11	0.56	0.62	0.18	0.08	-0.20	0.79
RTOTHI	-0.23	0.58	-0.14	0.32	-0.38	0.41	0.82	0.16	0.70	-0.03	-0.22	0.34	0.12	0.69
LTOTHI	-0.04	0.65	-0.26	0.02	-0.21	0.48	0.77	0.10	0.62	0.02	-0.16	0.46	0.21	0.67
RARCH	-0.48	-0.01	0.68	0.35	-0.05	0.22	0.86	-0.35	-0.39	0.56	-0.43	-0.15	0.31	0.89
RULOOP	-0.73	0.06	-0.52	-0.07	-0.11	-0.01	0.83	-0.73	0.11	-0.32	0.44	0.04	-0.15	0.87
RCWHORL	0.82	-0.16	0.15	0.21	-0.21	-0.12	0.83	0.80	0.19	-0.21	-0.18	0.24	0.21	0.86
RDLOOP	0.37	-0.07	0.34	-0.39	0.55	0.34	0.82	0.43	-0.36	0.48	-0.12	-0.16	-0.54	0.88
LARCH	-0.50	0.06	0.68	0.23	-0.17	0.18	0.82	-0.35	-0.39	0.44	-0.56	-0.02	0.34	0.90
LULOOP	-0.54	0.20	-0.66	-0.14	0.26	-0.03	0.86	-0.73	0.18	-0.13	0.51	-0.08	0.14	0.88
LCWHORL	0.69	-0.23	0.05	0.39	-0.40	-0.28	0.92	0.77	0.24	-0.27	-0.19	0.03	-0.04	0.76
LDLOOP	0.32	-0.01	0.47	-0.49	0.23	0.39	0.77	0.52	-0.37	0.25	-0.17	0.21	-0.48	0.77

TABLE 5:10: PRINCIPAL COMPONENTS ANALYSIS(VARIMAX ROTATED SOLUTION)-ANALYSIS BASED ON 26 SUMMARY TRAITS.

	MALES						FEMALES					
TRAIT	COM1	COM2	COM3	COM4	COM5	COM6	COM1	COM2	COM3	COM4	COM5	COM6
RTRADRC	0.76	0.55	0.05	0.16	0.16	0.03	0.92	0.03	0.20	-0.14	0.03	0.16
LTRADRC	0.63	0.64	-0.03	0.04	0.25	0.17	0.93	-0.01	0.13	-0.07	0.07	0.03
RTULNRC	0.26	0.84	0.13	0.33	-0.08	0.06	0.86	0.02	-0.03	0.22	0.30	0.11
LTULNRC	0.09	0.91	0.08	0.16	-0.03	-0.05	0.73	-0.02	0.00	0.26	0.52	-0.07
RTRC	0.74	0.56	0.10	0.19	0.12	0.06	0.93	0.06	0.19	-0.13	0.02	0.18
LTRC	0.62	0.66	0.00	0.08	0.24	0.17	0.95	0.00	0.09	-0.07	0.13	0.01
RTABSRC	0.57	0.74	0.10	0.26	0.06	0.04	0.96	0.02	0.10	0.03	0.16	0.15
LTABSRC	0.45	0.84	0.00	0.08	0.16	0.10	0.93	-0.01	0.09	0.08	0.28	-0.01
RTFPI	0.55	0.69	0.10	0.26	-0.19	-0.05	0.71	-0.09	0.31	0.32	0.40	-0.09
LTFPI	0.41	0.80	-0.01	0.09	-0.16	-0.17	0.59	-0.17	0.47	0.26	0.48	-0.15
RTPRC	0.01	-0.03	0.07	-0.07	0.06	0.96	0.13	-0.06	-0.07	-0.10	0.12	0.92
LTPRC	-0.11	0.03	0.06	-0.04	0.03	0.94	0.06	-0.01	-0.07	-0.10	0.06	0.96
TDR	0.09	0.01	0.88	0.10	0.12	-0.03	0.04	0.81	-0.23	0.08	-0.03	0.02
TDL	0.11	0.20	0.82	0.06	-0.13	0.03	0.05	0.83	0.03	-0.03	-0.02	-0.07
RTPLMI	-0.09	-0.03	0.74	-0.07	0.51	0.00	-0.02	0.82	0.02	0.22	-0.05	-0.09
LTPLMI	-0.08	-0.03	0.84	0.06	0.17	0.15	-0.14	0.86	0.08	0.14	0.06	0.08
RTOTHI	-0.16	-0.09	0.11	-0.24	0.84	0.09	0.06	0.26	0.13	0.75	-0.02	-0.19
LTOTHI	0.15	-0.13	0.21	0.03	0.83	0.01	0.02	0.24	0.06	0.77	-0.09	-0.02
RARCH	-0.89	-0.04	-0.06	0.10	0.11	0.20	-0.21	0.09	-0.89	-0.20	0.05	0.08
RULOOP	0.03	-0.79	-0.13	-0.38	0.19	-0.12	-0.67	-0.03	0.42	-0.19	-0.46	0.05
RCWHORL	0.20	0.88	-0.02	-0.06	-0.11	-0.02	0.70	-0.19	0.11	0.54	0.17	-0.05
RDLOOP	0.12	0.16	0.02	0.87	-0.16	0.06	0.26	0.20	-0.09	-0.41	0.76	0.12
LARCH	-0.89	-0.06	0.06	0.06	0.14	0.06	-0.26	-0.05	-0.90	-0.04	0.08	0.06
LULOOP	0.36	-0.82	-0.03	-0.17	0.13	0.11	-0.53	0.16	0.22	-0.20	-0.69	0.07
LCWHORL	0.13	0.85	-0.09	-0.39	-0.13	-0.03	0.63	-0.14	0.25	0.36	0.29	-0.26
LDLOOP	-0.05	0.22	0.13	0.81	-0.03	-0.21	0.26	-0.05	0.02	-0.08	0.79	0.27

TABLE **5.11** : EIGENVALUES FOR PRINCIPAL COMPONENTS ANALYSES :- BASED ON 80 DIGITAL TRAITS.

	MALES				FEMALES		
COMP	EIGNV.	PCT.	CUM. PCT	COMP	EIGNV.	PCT.	CUM. PCT
1	22.1	27.7	27.7	1	21.2	26.5	26.5
2	8.0	10.0	37.7	2	7.6	9.5	36.0
3	7.4	9.2	46.9	3	6.3	7.9	43.9
4	4.5	5.7	52.6	4	4.5	5.6	49.5
5	3.8	4.7	57.3	5	4.2	5.3	54.8
6	3.2	4.0	61.3	6	3.4	4.2	59.0
7	3.2	3.9	65.3	7	3.1	3.9	62.9
8	2.7	3.3	68.6	8	2.7	3.3	66.2
9	2.3	2.8	71.4	9	2.3	2.9	69.1
10	2.0	2.5	73.9	10	2.2	2.7	71.8
11	1.7	2.1	76.0	11	2.0	2.5	74.3
12	1.7	2.1	78.1	12	1.9	2.4	76.7
13	1.6	2.0	80.1	13	1.8	2.2	78.9
14	1.4	1.7	81.8	14	1.6	2.1	80.9
15	1.3	1.6	83.4	15	1.5	1.9	82.8
16	1.2	1.5	84.9	16	1.3	1.7	84.5
17	1.1	1.4	86.3	17	1.3	1.6	86.1
18	1.0	1.3	87.6	18	1.1	1.4	87.5
19	1.0	1.2	88.9	19	1.0	1.2	88.7
20	0.9	1.2	90.0	20	1.0	1.2	89.9
21	0.8	1.0	91.1	21	0.8	1.1	91.0
22	0.8	1.0	92.0	22	0.8	1.0	92.0
23	0.7	0.9	92.9	23	0.6	0.8	92.7
24	0.6	0.8	93.7	24	0.6	0.7	93.5
25	0.5	0.7	94.3	25	0.5	0.7	94.1
26	0.5	0.6	95.0	26	0.5	0.6	94.8
27	0.4	0.5	95.5	27	0.5	0.6	95.3
28	0.4	0.5	96.0	28	0.4	0.5	95.9
29	0.4	0.5	96.4	29	0.4	0.5	96.3
30	0.3	0.4	96.9	30	0.3	0.4	96.8
31	0.3	0.4	97.3	31	0.3	0.4	97.2
32	0.3	0.3	97.6	32	0.3	0.4	97.5
33	0.3	0.3	97.9	33	0.3	0.3	97.8
34	0.2	0.3	98.2	34	0.2	0.3	98.2
35	0.2	0.3	98.5	35	0.2	0.3	98.4
36	0.2	0.2	98.7	36	0.2	0.2	98.6
37	0.1	0.2	98.9	37	0.2	0.2	98.8
38	0.1	0.2	99.0	38	0.1	0.2	99.0
39	0.1	0.1	99.2	39	0.1	0.2	99.2
40	0.1	0.1	99.3	40	0.1	0.1	99.3
41	0.1	0.1	99.4	41	0.1	0.1	99.4
42	0.1	0.1	99.5	42	0.1	0.1	99.5
43	0.1	0.1	99.6	43	0.1	0.1	99.6
44	0.1	0.1	99.7	44	0.1	0.1	99.7
45	0.0	0.1	99.7	45	0.1	0.1	99.8
46	0.0	0.1	99.8	46	0.0	0.1	99.8
47	0.0	0.0	99.8	47	0.0	0.0	99.9
48	0.0	0.0	99.9	48	0.0	0.0	99.9
49	0.0	0.0	99.9	49	0.0	0.0	99.9
50	0.0	0.0	99.9	50	0.0	0.0	100.0
51	0.0	0.0	99.9	51	0.0	0.0	100.0
52	0.0	0.0	100.0	52	0.0	0.0	100.0
53	0.0	0.0	100.0	53	0.0	0.0	100.0
54	0.0	0.0	100.0	54	0.0	0.0	100.0
55	0.0	0.0	100.0	55	0.0	0.0	100.0
56	0.0	0.0	100.0	56	0.0	0.0	100.0
57	0.0	0.0	100.0	57	0.0	0.0	100.0
58	0.0	0.0	100.0	58	0.0	0.0	100.0
59	0.0	0.0	100.0	59	0.0	0.0	100.0
60	0.0	0.0	100.0	60	0.0	0.0	100.0
61	0.0	0.0	100.0	61	0.0	0.0	100.0
62	0.0	0.0	100.0	62	0.0	0.0	100.0
63	0.0	0.0	100.0	63	0.0	0.0	100.0
64	0.0	0.0	100.0	64	0.0	0.0	100.0
65	0.0	0.0	100.0	65	0.0	0.0	100.0
66	0.0	0.0	100.0	66	0.0	0.0	100.0
67	0.0	0.0	100.0	67	0.0	0.0	100.0
68	0.0	0.0	100.0	68	0.0	0.0	100.0
69	0.0	0.0	100.0	69	0.0	0.0	100.0
70	0.0	0.0	100.0	70	0.0	0.0	100.0
71	0.0	0.0	100.0	71	0.0	0.0	100.0
72	0.0	0.0	100.0	72	0.0	0.0	100.0
73	0.0	0.0	100.0	73	0.0	0.0	100.0
74	0.0	0.0	100.0	74	0.0	0.0	100.0
75	0.0	0.0	100.0	75	0.0	0.0	100.0
76	0.0	0.0	100.0	76	0.0	0.0	100.0
77	0.0	0.0	100.0	77	0.0	0.0	100.0
78	0.0	0.0	100.0	78	0.0	0.0	100.0
79	0.0	0.0	100.0	79	0.0	0.0	100.0
80	0.0	0.0	100.0	80	0.0	0.0	100.0

COMP = COMPONENT, EIGV. = EIGENVALUE, PCT. = PERCENT, CUM. PCT = CUMULATIVE PERCENT.

TABLE 5.12 : PRINCIPAL COMPONENTS ANALYSIS(UNROTATED SOLUTION)- BASED ON 80 DIGITAL TRAITS - (MALES).

TRAIT	COM1	COM2	COM3	COM4	COM5	COM6	COM7	COM8	COM9	COM10	COMMUNALITY
RFR1	0.67	-0.10	-0.24	0.27	0.06	-0.05	0.41	-0.06	-0.09	-0.08	0.88
RFU1	0.46	0.73	0.08	0.28	-0.19	-0.06	-0.14	0.02	0.08	0.02	0.94
RFR2	0.64	-0.35	-0.18	-0.13	-0.03	0.00	0.11	-0.20	0.22	0.06	0.89
RFU2	0.70	0.31	0.01	-0.29	-0.27	0.00	0.18	0.28	-0.04	-0.07	0.93
RFR3	0.76	-0.09	-0.33	-0.13	-0.05	-0.01	0.04	0.20	0.09	0.28	0.88
RFU3	0.75	0.17	0.17	-0.31	0.14	0.12	-0.10	-0.01	-0.08	0.08	0.89
RFR4	0.66	0.26	-0.42	-0.06	-0.17	-0.12	0.06	0.30	0.01	0.21	0.90
RFU4	0.86	-0.14	0.16	-0.03	-0.07	-0.01	-0.18	0.20	-0.05	-0.11	0.90
RFR5	0.75	0.20	-0.30	-0.12	-0.03	-0.22	0.03	0.13	0.02	0.16	0.86
RFU5	0.62	-0.23	0.30	0.16	0.24	-0.35	-0.16	-0.05	0.04	0.01	0.91
LFR1	0.70	-0.18	-0.10	0.22	0.01	-0.22	0.36	-0.12	0.00	-0.03	0.88
LFU1	0.32	0.74	0.19	0.39	-0.10	0.08	0.07	-0.17	0.07	-0.03	0.93
LFR2	0.74	-0.23	-0.09	-0.19	-0.23	-0.17	0.07	-0.10	0.29	0.09	0.87
LFU2	0.56	0.22	0.19	-0.27	-0.03	0.25	0.40	0.09	-0.11	0.04	0.93
LFR3	0.76	-0.08	-0.18	-0.24	-0.23	-0.10	0.07	0.10	0.22	0.23	0.92
LFU3	0.72	-0.09	0.14	-0.14	0.13	0.10	0.06	-0.43	-0.17	0.13	0.91
LFR4	0.75	0.10	-0.26	-0.25	-0.12	-0.23	0.01	0.21	0.04	0.17	0.90
LFU4	0.73	-0.27	0.19	0.09	0.12	0.29	-0.17	0.08	-0.01	0.20	0.94
LFR5	0.78	0.04	-0.20	-0.06	-0.07	-0.22	-0.13	0.11	-0.04	0.18	0.87
LFU5	0.55	-0.21	0.53	0.41	0.15	0.00	0.17	0.09	0.22	0.06	0.92
RD1	0.63	0.55	-0.10	0.33	-0.05	-0.11	-0.11	-0.13	0.00	-0.11	0.90
RD2	0.72	0.00	-0.22	-0.29	-0.20	0.19	0.10	0.10	0.03	-0.22	0.89
RD3	0.80	0.10	-0.22	-0.22	0.17	0.16	-0.16	-0.05	-0.16	0.05	0.88
RD4	0.78	-0.13	-0.06	-0.16	-0.02	-0.09	-0.12	0.28	0.04	-0.21	0.93
RD5	0.69	-0.23	0.12	0.23	0.25	-0.18	-0.35	0.12	0.05	-0.08	0.95
LD1	0.45	0.61	0.09	0.46	-0.02	0.02	0.16	-0.15	0.07	-0.26	0.96
LD2	0.74	0.03	-0.06	0.01	-0.23	0.16	0.22	-0.11	-0.03	-0.02	0.91
LD3	0.78	-0.01	-0.15	-0.05	0.13	0.18	0.13	-0.41	-0.20	0.06	0.94
LD4	0.77	-0.33	0.01	0.12	0.14	0.29	-0.08	0.10	-0.02	0.06	0.91
LD5	0.60	-0.17	0.33	0.47	0.28	-0.14	-0.03	0.07	0.03	0.17	0.95
ARCHR1	-0.48	0.35	0.38	-0.26	-0.09	0.14	-0.22	0.11	0.15	0.09	0.77
ARCHR2	-0.38	0.27	0.53	-0.22	0.33	-0.35	-0.04	0.05	0.09	-0.06	0.90
ARCHR3	-0.35	0.22	0.66	-0.22	-0.16	-0.27	0.15	-0.01	0.06	-0.05	0.89
ARCHR4	-0.30	-0.06	0.62	-0.09	-0.34	0.03	-0.03	-0.08	-0.19	-0.09	0.88
ARCHR5	-0.31	0.03	0.53	-0.25	-0.17	-0.20	0.07	0.04	-0.35	0.08	0.83
ARCHL1	-0.40	0.28	0.27	-0.33	-0.07	0.23	-0.37	0.14	-0.05	0.49	0.91
ARCHL2	-0.33	0.26	0.54	-0.22	0.28	-0.19	0.07	0.00	0.31	-0.07	0.90
ARCHL3	-0.44	0.05	0.69	-0.18	-0.06	-0.25	-0.09	0.03	0.15	0.13	0.87
ARCHL4	-0.25	0.02	0.60	-0.37	0.20	0.17	-0.18	-0.19	-0.09	-0.14	0.83
ARCHL5	-0.36	-0.09	0.45	-0.29	-0.11	0.20	0.27	0.04	0.00	-0.02	0.88
ULOOPR1	-0.30	-0.79	-0.14	-0.17	0.11	-0.01	0.27	0.04	-0.11	0.04	0.93
ULOOPR2	-0.47	-0.39	-0.23	0.30	0.10	0.13	-0.16	-0.32	0.07	0.21	0.90
ULOOPR3	-0.57	-0.30	-0.37	0.40	-0.06	0.02	0.02	0.04	0.12	0.01	0.85
ULOOPR4	-0.69	0.16	-0.24	0.21	0.17	0.05	0.15	-0.26	0.07	0.32	0.91
ULOOPR5	-0.51	0.21	-0.44	-0.13	-0.11	0.33	0.30	-0.12	0.19	0.01	0.94
ULOOPL1	-0.20	-0.84	-0.25	-0.23	0.08	-0.20	0.09	0.10	-0.08	-0.05	0.95
ULOOPL2	-0.18	-0.43	-0.54	0.07	0.04	-0.24	-0.32	-0.08	0.08	-0.06	0.93
ULOOPL3	-0.41	-0.05	-0.56	0.16	-0.20	0.03	-0.06	0.36	0.23	-0.15	0.86
ULOOPL4	-0.60	0.34	-0.30	-0.01	-0.26	-0.41	0.15	-0.03	-0.01	-0.01	0.91
ULOOPL5	-0.35	0.26	-0.70	-0.31	-0.21	-0.02	-0.16	-0.14	-0.11	-0.18	0.93
RADLR1	0.02	0.39	-0.15	0.18	-0.07	0.35	-0.32	0.10	0.20	0.16	0.87
RADLR2	-0.11	0.27	0.04	0.43	-0.31	-0.04	0.15	0.31	-0.39	0.25	0.88
RADLR3	-0.27	-0.06	0.14	0.31	0.04	0.17	0.18	0.22	0.08	-0.15	0.77
RADLR4	0.02	0.02	0.04	0.10	0.19	0.23	0.01	-0.03	-0.14	-0.49	0.72
RADLR5	0.04	0.04	0.18	0.33	-0.39	-0.33	0.06	-0.17	-0.34	0.23	0.83
RADLL1	0.08	0.24	-0.19	-0.11	-0.14	0.28	-0.18	-0.40	0.31	-0.05	0.78
RADLL2	-0.42	0.19	0.19	0.17	-0.04	0.41	0.01	0.31	-0.44	0.23	0.87
RADLL3	-0.12	-0.09	-0.12	0.31	0.32	0.11	0.11	0.30	-0.47	-0.20	0.75
RADLL4	-0.33	-0.12	0.04	0.34	0.10	0.20	0.12	0.15	0.43	0.12	0.83
RADLL5	-0.24	-0.23	0.42	0.04	-0.09	0.14	0.07	0.25	0.47	0.11	0.81
WHORLR1	0.51	0.40	0.17	0.23	-0.43	0.15	0.12	0.01	0.05	-0.06	0.85
WHORLR2	0.44	-0.06	0.27	-0.25	-0.49	0.15	0.12	-0.01	0.20	-0.21	0.86
WHORLR3	0.74	0.04	0.12	-0.20	-0.03	-0.02	-0.27	0.02	-0.07	-0.07	0.88
WHORLR4	0.79	-0.20	0.25	0.01	-0.13	0.14	-0.28	0.04	0.07	-0.14	0.90
WHORLR5	0.56	-0.30	0.28	0.14	0.32	-0.12	0.08	-0.07	0.07	-0.10	0.90
WHORLL1	0.27	0.26	0.20	0.34	-0.35	-0.32	0.23	-0.40	-0.03	-0.01	0.83
WHORLL2	0.51	-0.30	0.40	-0.06	-0.24	0.18	0.30	-0.09	0.10	-0.10	0.93
WHORLL3	0.76	-0.07	0.18	-0.14	-0.04	0.07	-0.23	-0.29	-0.09	0.02	0.84
WHORLL4	0.61	-0.48	0.24	0.10	-0.04	0.22	-0.24	0.02	-0.12	0.07	0.93
WHORLL5	0.55	-0.34	0.44	0.39	0.10	0.12	0.09	0.09	0.00	0.02	0.85
DLOOPR1	0.14	0.50	-0.18	0.09	0.40	-0.22	-0.35	-0.09	-0.02	-0.03	0.86
DLOOPR2	0.34	0.26	-0.22	-0.36	0.39	-0.04	0.16	0.17	0.01	-0.22	0.80
DLOOPR3	0.24	0.35	-0.21	-0.29	0.33	0.11	0.19	-0.10	-0.13	0.15	0.86
DLOOPR4	0.02	0.33	-0.02	-0.24	0.35	-0.31	0.41	0.32	-0.01	-0.11	0.85
DLOOPR5	0.22	0.26	0.01	0.08	0.01	-0.34	-0.45	-0.04	0.04	-0.12	0.85
DLOOPL1	0.16	0.67	0.09	0.17	0.24	0.36	-0.12	0.19	0.06	-0.11	0.87
DLOOPL2	0.26	0.62	-0.16	-0.10	0.34	-0.12	0.04	0.00	-0.03	0.09	0.79
DLOOPL3	0.12	0.17	0.05	-0.25	0.49	0.07	0.37	-0.36	0.10	0.28	0.79
DLOOPL4	0.09	0.40	-0.22	-0.01	0.43	0.35	0.17	0.08	0.13	0.00	0.76
DLOOPL5	0.17	0.16	0.18	0.14	0.30	-0.26	0.27	0.21	0.13	0.21	0.76

TABLE 5.12 : (CONTINUED)

TRAIT	COM11	COM12	COM13	COM14	COM15	COM16	COM17	COM18
RFR1	-0.06	0.23	-0.01	-0.08	0.18	0.03	-0.03	0.01
RFU1	-0.11	0.02	-0.07	0.09	0.05	0.12	-0.01	-0.03
RFR2	0.15	0.10	0.11	0.10	0.35	0.08	-0.02	0.07
RFU2	0.17	-0.04	-0.12	-0.06	0.00	-0.14	0.06	-0.03
RFR3	-0.04	0.10	0.07	-0.12	0.12	-0.03	-0.01	-0.03
RFU3	0.16	-0.02	-0.19	0.06	0.12	0.11	0.13	0.07
RFR4	-0.16	0.04	0.07	-0.01	-0.03	0.06	-0.03	0.03
RFU4	-0.01	0.16	-0.08	0.01	-0.02	-0.03	-0.03	0.01
RFR5	-0.12	0.11	0.11	0.07	-0.12	0.03	-0.02	0.06
RFU5	0.28	-0.07	0.07	0.01	-0.01	0.07	-0.23	0.06
LFR1	-0.03	0.15	0.05	-0.06	0.25	0.06	-0.08	0.04
LFU1	-0.04	0.08	-0.10	0.00	0.11	0.00	0.01	0.03
LFR2	0.11	0.00	-0.02	-0.10	0.09	0.13	0.00	0.04
LFU2	0.10	-0.06	0.43	0.05	-0.04	-0.05	0.08	-0.04
LFR3	-0.13	-0.09	0.05	-0.03	0.14	0.09	0.03	0.07
LFU3	0.08	0.10	-0.20	-0.14	-0.03	0.01	0.05	-0.04
LFR4	-0.19	0.02	-0.01	0.04	0.03	0.07	0.06	0.10
LFU4	-0.27	0.14	0.07	-0.05	0.14	0.02	0.00	0.03
LFR5	-0.11	0.07	0.14	0.16	0.02	0.15	-0.07	0.07
LFU5	0.01	-0.03	-0.06	0.06	-0.01	0.00	-0.02	-0.09
RD1	-0.13	-0.05	0.04	0.04	0.00	0.09	-0.04	0.00
RD2	0.15	-0.18	-0.16	0.04	0.06	-0.04	-0.07	-0.08
RD3	0.10	-0.10	-0.03	0.00	-0.03	-0.02	-0.01	0.04
RD4	-0.12	0.18	-0.06	0.09	-0.18	-0.12	-0.02	-0.13
RD5	0.06	-0.19	0.13	-0.07	-0.03	-0.24	-0.03	0.01
LD1	-0.05	0.03	0.03	-0.16	0.02	0.02	-0.10	0.01
LD2	0.20	-0.12	0.30	0.10	-0.20	0.03	-0.13	-0.07
LD3	-0.02	0.04	-0.02	-0.10	-0.11	-0.02	0.06	-0.01
LD4	-0.27	0.03	-0.06	-0.02	-0.03	-0.05	0.02	-0.04
LD5	0.08	-0.10	-0.07	0.15	-0.07	-0.04	0.20	-0.04
ARCHR1	-0.01	0.08	0.06	-0.10	-0.07	0.08	-0.09	-0.20
ARCHR2	-0.15	0.14	-0.04	-0.14	-0.20	0.04	0.03	0.05
ARCHR3	-0.15	-0.15	0.01	0.01	0.06	0.13	0.16	0.13
ARCHR4	0.09	-0.02	0.03	0.03	0.31	0.23	0.12	0.24
ARCHR5	0.06	0.09	0.16	0.09	0.16	0.06	-0.34	0.02
ARCHL1	-0.02	-0.06	-0.11	0.13	-0.05	0.01	-0.02	-0.02
ARCHL2	-0.18	0.16	0.12	0.03	-0.01	-0.03	0.29	0.02
ARCHL3	-0.03	-0.07	-0.17	0.11	0.04	-0.03	-0.06	-0.08
ARCHL4	0.00	0.16	0.20	0.07	0.13	-0.03	-0.04	0.08
ARCHL5	-0.05	0.36	0.08	-0.22	0.18	0.01	-0.32	-0.04
ULOOPR1	0.10	-0.01	-0.07	-0.01	0.05	-0.14	0.09	0.13
ULOOPR2	-0.08	0.07	0.23	0.24	0.21	0.06	-0.03	-0.08
ULOOPR3	0.00	0.17	0.08	-0.07	-0.01	-0.13	-0.12	-0.19
ULOOPR4	0.12	-0.16	0.04	-0.14	0.02	0.02	-0.06	0.00
ULOOPR5	-0.10	0.17	-0.20	0.01	-0.08	0.21	0.20	0.01
ULOOPL1	0.04	-0.02	0.03	0.07	0.02	0.00	0.10	0.01
ULOOPL2	-0.13	0.05	-0.42	-0.14	0.08	0.07	-0.11	0.09
ULOOPL3	-0.04	-0.02	0.24	0.05	0.13	0.05	-0.01	0.09
ULOOPL4	0.26	-0.03	-0.07	0.01	-0.04	0.04	-0.02	-0.04
ULOOPL5	-0.04	-0.10	0.04	0.00	-0.05	0.07	0.04	0.04
RADLR1	0.42	0.17	-0.04	0.37	-0.06	-0.02	0.08	0.06
RADLR2	0.07	0.04	0.03	-0.27	-0.19	-0.07	0.16	0.19
RADLR3	0.02	0.38	-0.35	0.29	-0.02	0.24	-0.06	0.14
RADLR4	-0.27	-0.27	0.05	0.27	0.22	-0.11	0.18	0.19
RADLR5	0.02	-0.25	-0.21	0.05	0.18	-0.04	0.17	-0.23
RADLL1	0.21	0.32	0.14	0.10	0.01	-0.27	0.17	-0.06
RADLL2	0.10	-0.02	0.00	-0.05	0.22	-0.12	-0.04	-0.04
RADLL3	0.19	0.17	0.02	-0.12	-0.14	0.10	0.05	0.17
RADLL4	0.06	-0.38	0.21	-0.19	0.01	0.14	0.07	0.23
RADLL5	-0.05	-0.23	-0.15	-0.12	0.03	-0.24	-0.18	0.12
WHORLR1	-0.15	-0.02	-0.14	0.19	0.05	-0.14	-0.10	0.01
WHORLR2	0.17	0.05	-0.05	-0.25	-0.17	-0.03	-0.07	0.18
WHORLR3	0.20	-0.13	-0.06	-0.16	0.24	0.13	0.16	-0.09
WHORLR4	0.03	-0.01	-0.14	-0.06	-0.08	0.01	-0.01	0.10
WHORLR5	0.33	-0.06	-0.05	0.12	-0.21	0.21	-0.18	0.02
WHORLL1	-0.16	-0.02	-0.02	0.09	-0.08	-0.22	-0.07	0.09
WHORLL2	0.05	-0.15	0.24	0.03	-0.22	0.13	0.17	-0.16
WHORLL3	-0.03	-0.02	-0.10	-0.15	-0.04	0.06	0.08	-0.08
WHORLL4	-0.27	0.20	0.10	0.03	-0.09	-0.02	0.06	0.00
WHORLL5	-0.10	-0.15	0.02	0.05	0.03	0.03	-0.04	-0.12
DLOOPR1	-0.04	-0.01	0.26	-0.16	-0.03	0.33	-0.01	-0.06
DLOOPR2	0.12	-0.20	-0.19	0.14	0.15	-0.02	-0.14	-0.16
DLOOPR3	-0.22	-0.22	-0.01	0.19	-0.14	-0.08	-0.14	0.41
DLOOPR4	-0.14	0.08	0.09	0.06	0.09	-0.09	0.12	-0.33
DLOOPR5	0.14	0.17	0.16	-0.25	0.20	-0.40	0.10	0.20
DLOOPL1	0.00	-0.01	0.02	-0.22	0.08	0.19	-0.09	-0.06
DLOOPL2	0.16	0.00	0.05	0.19	0.06	-0.19	-0.23	0.12
DLOOPL3	-0.12	0.04	-0.15	-0.10	-0.12	-0.11	-0.06	0.09
DLOOPL4	0.02	-0.20	-0.16	-0.21	0.25	-0.07	0.05	-0.10
DLOOPL5	0.33	0.32	-0.06	0.06	0.07	-0.03	0.29	0.10

TABLE **5.13** : PRINCIPAL COMPONENTS ANALYSIS(UNROTATED SOLUTION):- BASED ON 80 DIGITAL TRAITS(FEMALES).

TRAIT	COMP1	COMP2	COMP3	COMP4	COMP5	COMP6	COMP7	COMP8	COMP9	COMP10	COMMUNALITY
RFR1	0.60	-0.09	-0.07	0.26	0.09	0.36	0.19	-0.13	-0.04	-0.17	0.82
RFU1	0.52	0.54	-0.39	0.26	-0.10	-0.12	0.08	0.22	0.12	0.05	0.91
RFR2	0.69	-0.25	0.06	0.25	-0.01	0.11	0.20	0.15	-0.11	-0.11	0.78
RFU2	0.76	0.32	0.09	-0.24	0.02	0.22	-0.06	0.23	-0.18	-0.09	0.95
RFR3	0.72	0.07	0.01	-0.18	0.05	0.41	0.08	0.00	-0.15	-0.13	0.86
RFU3	0.64	0.17	0.22	-0.01	-0.49	-0.02	0.09	-0.08	0.30	0.10	0.94
RFR4	0.60	0.33	-0.12	-0.34	-0.10	0.32	-0.05	0.11	0.16	0.14	0.87
RFU4	0.83	-0.26	0.22	0.05	-0.14	-0.10	0.01	0.06	0.06	0.14	0.95
RFR5	0.65	0.12	0.01	-0.16	-0.07	0.50	-0.01	0.04	0.25	0.28	0.93
RFU5	0.63	-0.24	0.23	0.19	-0.18	-0.01	-0.49	0.07	-0.11	0.02	0.87
LFR1	0.56	-0.12	-0.19	0.38	0.15	0.33	0.23	-0.23	-0.06	-0.07	0.89
LFU1	0.51	0.58	-0.42	0.19	-0.02	-0.16	0.08	-0.02	0.04	-0.03	0.93
LFR2	0.74	-0.15	0.10	0.24	-0.03	0.21	0.17	0.18	-0.20	0.11	0.88
LFU2	0.69	0.30	0.24	-0.33	-0.03	-0.04	-0.12	-0.02	-0.27	-0.13	0.89
LFR3	0.81	0.02	0.24	-0.02	-0.07	0.29	0.19	-0.05	0.10	-0.04	0.88
LFU3	0.74	-0.03	0.38	-0.25	-0.15	-0.10	0.02	0.02	0.00	0.11	0.88
LFR4	0.72	0.18	0.07	-0.30	-0.03	0.25	0.02	0.09	0.18	0.17	0.89
LFU4	0.61	-0.37	0.06	-0.11	0.31	-0.24	0.30	0.16	0.12	-0.22	0.94
LFR5	0.71	0.04	0.04	-0.04	-0.02	0.39	0.06	0.08	0.14	0.26	0.88
LFU5	0.59	-0.32	0.24	0.08	0.40	0.01	-0.32	-0.10	0.15	0.00	0.89
RD1	0.57	0.36	-0.48	0.33	-0.10	-0.08	0.06	-0.18	0.06	0.02	0.92
RD2	0.74	0.03	-0.10	-0.18	0.14	0.04	-0.05	0.09	-0.30	-0.08	0.93
RD3	0.68	-0.06	0.08	-0.14	-0.44	0.01	0.08	-0.20	0.17	-0.14	0.90
RD4	0.77	-0.28	-0.03	0.01	-0.07	-0.19	0.03	0.03	0.04	0.11	0.91
RD5	0.55	-0.27	-0.04	0.21	-0.11	-0.06	-0.58	0.10	0.03	0.07	0.90
LD1	0.54	0.32	-0.57	0.34	-0.02	-0.13	0.08	-0.21	-0.03	-0.06	0.94
LD2	0.80	-0.06	-0.14	-0.23	0.10	-0.08	-0.05	-0.07	-0.32	0.05	0.91
LD3	0.72	-0.31	0.11	-0.27	-0.18	-0.16	0.17	-0.09	0.03	-0.11	0.88
LD4	0.57	-0.43	-0.19	-0.15	0.37	-0.27	0.25	0.17	0.08	-0.19	0.96
LD5	0.54	-0.30	-0.09	0.00	0.49	0.06	-0.39	-0.09	0.24	-0.07	0.92
ARCHR1	-0.41	0.29	0.28	-0.28	0.02	-0.25	-0.01	0.23	-0.16	-0.03	0.89
ARCHR2	-0.25	0.47	0.32	0.25	0.28	-0.05	-0.12	0.18	0.23	-0.24	0.87
ARCHR3	-0.33	0.47	0.40	0.05	0.25	-0.15	0.05	0.29	0.13	0.18	0.84
ARCHR4	-0.26	0.26	0.69	0.16	-0.11	0.11	0.13	-0.16	0.05	-0.14	0.87
ARCHR5	-0.01	0.19	0.59	0.16	-0.11	-0.06	0.17	-0.18	-0.36	0.02	0.78
ARCHL1	-0.30	0.17	0.51	-0.26	-0.11	-0.47	-0.12	0.16	0.11	0.08	0.91
ARCHL2	-0.34	0.44	0.46	0.22	0.22	-0.12	-0.04	0.11	0.13	-0.05	0.85
ARCHL3	-0.27	0.57	0.26	0.34	0.23	-0.11	-0.14	0.19	0.00	0.09	0.88
ARCHL4	-0.19	0.19	0.50	0.27	-0.17	0.27	0.14	-0.20	-0.31	0.20	0.91
ARCHL5	-0.14	0.10	0.62	0.24	-0.12	-0.14	0.20	-0.13	-0.21	0.25	0.79
ULOOPR1	-0.35	-0.67	0.32	-0.12	0.11	0.36	-0.08	-0.03	0.05	-0.07	0.91
ULOOPR2	-0.46	-0.61	-0.16	0.12	-0.20	-0.11	0.13	-0.25	0.11	0.30	0.94
ULOOPR3	-0.40	-0.42	-0.49	0.04	0.30	0.10	-0.13	-0.08	-0.37	0.04	0.94
ULOOPR4	-0.67	0.21	-0.40	-0.14	0.12	0.17	-0.14	0.03	-0.08	-0.02	0.91
ULOOPR5	-0.49	0.11	-0.40	-0.34	0.17	0.11	0.40	0.03	0.25	-0.08	0.93
ULOOPL1	-0.42	-0.61	0.27	-0.10	0.06	0.48	0.04	0.02	-0.03	0.00	0.92
ULOOPL2	-0.49	-0.46	-0.24	0.30	-0.21	0.17	0.10	0.21	0.16	0.17	0.91
ULOOPL3	-0.47	-0.29	-0.37	0.10	0.01	0.22	0.01	0.00	0.10	0.09	0.91
ULOOPL4	-0.55	0.39	-0.16	-0.07	-0.34	0.12	-0.43	-0.08	0.06	0.17	0.92
ULOOPL5	-0.42	0.25	-0.49	-0.30	-0.40	0.04	0.24	0.16	-0.07	-0.11	0.91
RADLR1	-0.01	-0.11	0.16	-0.27	-0.03	-0.28	0.10	0.33	0.10	0.41	0.68
RADLR2	-0.18	0.38	-0.10	-0.24	-0.41	0.29	0.06	0.22	0.01	-0.01	0.76
RADLR3	-0.10	0.12	0.14	0.35	-0.31	0.23	-0.03	0.03	0.30	-0.29	0.81
RADLR4	-0.20	-0.30	0.20	0.21	0.14	-0.11	0.29	0.15	-0.10	-0.20	0.69
RADLR5	0.01	0.01	0.14	0.41	0.05	-0.09	0.02	0.10	-0.09	-0.01	0.77
RADLL1	0.07	0.33	0.00	-0.37	0.21	0.25	-0.11	0.40	-0.07	0.01	0.87
RADLL2	-0.39	0.12	-0.01	-0.39	-0.29	0.12	-0.05	-0.26	0.20	-0.38	0.84
RADLL3	-0.14	0.13	0.11	-0.41	-0.21	0.20	-0.23	-0.21	-0.37	-0.14	0.79
RADLL4	-0.04	0.01	0.36	0.39	0.08	0.15	0.24	-0.02	0.14	-0.35	0.85
RADLL5	-0.14	-0.10	0.35	0.50	-0.14	0.07	0.00	0.17	-0.03	-0.10	0.83
WHORLR1	0.54	0.17	-0.40	0.40	-0.20	-0.16	-0.10	0.19	-0.01	0.04	0.90
WHORLR2	0.57	0.12	0.04	0.01	-0.02	-0.05	-0.11	0.16	-0.44	-0.33	0.92
WHORLR3	0.65	0.09	0.17	0.03	-0.44	0.00	0.07	0.24	0.12	-0.07	0.88
WHORLR4	0.72	-0.30	-0.07	0.04	-0.27	-0.25	0.02	-0.14	0.04	0.23	0.91
WHORLR5	0.54	-0.23	0.07	0.32	-0.09	0.13	-0.54	0.03	0.07	-0.04	0.85
WHORLL1	0.50	-0.03	-0.30	0.26	-0.18	-0.27	-0.01	-0.16	0.01	0.06	0.85
WHORLL2	0.75	0.16	-0.06	-0.11	0.00	-0.03	0.03	0.31	-0.19	-0.03	0.85
WHORLL3	0.70	-0.16	0.17	-0.13	-0.27	-0.26	0.08	-0.07	-0.06	-0.16	0.87
WHORLL4	0.44	-0.52	-0.07	-0.24	0.09	-0.36	0.35	0.13	-0.01	-0.01	0.91
WHORLL5	0.44	-0.26	0.09	-0.09	0.18	-0.19	-0.50	-0.12	0.30	-0.25	0.90
DLOOPR1	0.12	0.60	-0.25	-0.05	0.11	-0.12	0.20	-0.37	0.00	-0.01	0.86
DLOOPR2	0.28	0.30	0.00	-0.21	0.44	0.03	-0.05	0.06	0.14	0.16	0.81
DLOOPR3	0.20	0.34	0.38	-0.26	-0.07	-0.10	0.04	-0.61	0.19	-0.06	0.88
DLOOPR4	0.33	0.17	0.28	0.11	0.37	0.18	0.38	-0.01	0.15	0.03	0.87
DLOOPR5	0.29	0.26	-0.06	0.37	-0.18	0.22	-0.09	0.21	-0.02	0.04	0.72
DLOOPL1	0.26	0.57	-0.34	0.20	0.08	-0.20	-0.05	-0.18	-0.01	-0.12	0.82
DLOOPL2	0.43	0.22	0.21	-0.12	0.36	-0.05	-0.18	-0.50	-0.11	0.23	0.87
DLOOPL3	0.46	0.19	0.21	-0.13	0.37	0.00	0.07	-0.10	0.25	0.12	0.83
DLOOPL4	0.37	0.37	-0.11	0.07	0.60	0.16	-0.01	-0.03	0.04	-0.11	0.86
DLOOPL5	0.28	0.10	-0.01	0.14	0.38	0.11	0.18	-0.15	-0.17	0.53	0.92

TABLE 5.13 : (CONTINUED)

TRAIT	COM11	COM12	COM13	COM14	COM15	COM16	COM17	COM18
RFR1	-0.06	-0.09	-0.12	-0.21	0.17	0.23	0.02	0.06
RFU1	0.01	0.11	-0.04	-0.02	0.09	0.11	0.03	0.01
RFR2	0.01	-0.09	-0.13	-0.20	0.01	-0.06	0.06	0.06
RFU2	0.14	0.02	-0.06	0.11	-0.10	0.12	-0.02	0.02
RFR3	-0.19	0.03	0.10	0.02	-0.12	-0.17	0.06	0.03
RFU3	0.08	-0.08	0.08	0.00	-0.22	0.15	0.13	-0.04
RFR4	0.02	0.10	-0.11	0.00	-0.02	-0.07	0.14	0.23
RFU4	-0.17	0.12	0.01	0.14	-0.11	-0.05	0.06	-0.06
RFR5	0.05	0.15	-0.17	-0.03	0.04	0.08	0.03	0.03
RFU5	0.04	-0.01	0.18	-0.02	0.10	0.02	0.05	-0.01
LFR1	-0.23	-0.03	-0.16	-0.03	0.18	0.17	0.01	0.00
LFU1	0.07	0.11	0.11	0.08	0.11	0.08	0.00	0.15
LFR2	-0.12	-0.06	-0.22	0.01	0.00	-0.04	0.07	0.04
LFU2	0.17	0.01	0.07	0.04	-0.05	0.05	0.08	0.00
LFR3	-0.14	0.08	0.02	0.03	-0.04	0.03	0.00	0.05
LFU3	0.04	-0.08	-0.17	-0.13	0.12	-0.04	-0.10	0.06
LFR4	-0.21	0.12	-0.17	0.06	0.13	0.02	-0.01	0.00
LFU4	0.10	0.12	0.06	-0.12	0.13	0.04	0.12	-0.05
LFR5	0.03	0.08	-0.23	-0.04	0.15	0.12	0.16	-0.03
LFU5	-0.01	0.20	-0.08	-0.16	-0.08	0.01	-0.04	0.06
RD1	0.02	0.02	0.05	-0.22	-0.10	-0.06	-0.14	-0.05
RD2	0.31	-0.25	-0.03	0.15	-0.04	0.09	-0.13	-0.02
RD3	0.04	-0.12	0.17	0.16	-0.13	0.08	-0.07	-0.15
RD4	-0.27	0.16	0.19	0.06	-0.08	-0.11	0.13	-0.11
RD5	-0.08	-0.12	0.20	0.04	0.10	0.16	-0.06	-0.09
LD1	-0.01	-0.05	0.07	0.04	0.05	-0.07	-0.02	0.11
LD2	0.07	0.00	-0.02	0.09	-0.09	-0.10	-0.05	0.19
LD3	0.06	-0.10	-0.11	-0.01	0.03	-0.18	-0.10	0.02
LD4	-0.07	0.03	0.12	-0.01	0.13	0.06	0.04	-0.01
LD5	0.11	0.11	-0.07	-0.06	-0.04	-0.11	0.09	-0.10
ARCHR1	-0.15	0.20	-0.21	0.33	0.26	0.13	0.19	-0.01
ARCHR2	-0.20	0.32	-0.07	-0.08	-0.14	0.02	-0.05	-0.03
ARCHR3	-0.18	-0.13	-0.10	-0.23	-0.08	-0.01	-0.03	0.09
ARCHR4	0.13	-0.01	-0.12	0.10	0.05	-0.03	-0.26	0.18
ARCHR5	-0.07	0.14	-0.03	-0.05	0.19	-0.15	0.27	0.00
ARCHL1	0.10	0.18	-0.26	0.08	-0.02	0.02	0.22	-0.03
ARCHL2	0.03	0.03	0.02	-0.32	0.08	0.13	0.04	-0.21
ARCHL3	-0.10	-0.31	-0.06	-0.20	0.03	-0.05	-0.03	-0.10
ARCHL4	0.27	0.14	0.04	-0.18	-0.03	0.10	-0.27	0.01
ARCHL5	0.00	0.16	0.15	0.02	0.07	0.13	-0.16	0.16
ULOOPR1	0.07	-0.19	0.09	-0.04	-0.12	-0.05	0.04	0.06
ULOOPR2	0.00	-0.04	0.07	-0.10	0.05	-0.10	0.20	0.08
ULOOPR3	0.06	0.20	-0.13	0.04	0.18	-0.08	0.07	0.05
ULOOPR4	0.27	-0.17	-0.13	-0.16	0.08	0.11	0.02	0.03
ULOOPR5	0.15	0.04	-0.16	-0.02	-0.23	-0.06	-0.16	0.06
ULOOPL1	-0.04	-0.11	0.00	-0.08	-0.06	0.05	-0.14	-0.12
ULOOPL2	-0.16	-0.09	-0.14	0.20	-0.11	-0.10	-0.04	0.03
ULOOPL3	0.14	0.38	0.17	0.25	-0.05	0.34	0.06	0.09
ULOOPL4	-0.13	-0.09	-0.15	0.11	-0.13	-0.11	0.02	0.02
ULOOPL5	-0.15	-0.25	-0.06	0.00	0.00	0.06	0.02	-0.07
RADLR1	0.22	0.01	0.21	0.17	0.16	0.08	-0.16	0.12
RADLR2	-0.33	0.04	-0.02	0.02	0.30	-0.01	-0.05	-0.10
RADLR3	0.41	0.24	0.10	0.12	0.24	0.01	0.10	0.09
RADLR4	-0.32	-0.04	-0.08	0.26	-0.12	0.29	-0.11	-0.07
RADLR5	-0.24	-0.50	0.12	0.23	-0.03	0.26	0.25	0.23
RADLL1	-0.11	0.07	0.53	-0.14	0.05	0.06	-0.07	0.06
RADLL2	0.11	-0.01	0.22	0.06	0.26	0.14	0.05	-0.10
RADLL3	-0.25	0.06	0.22	-0.12	0.15	-0.17	0.22	-0.03
RADLL4	0.29	-0.17	-0.07	0.07	0.04	-0.07	0.44	-0.11
RADLL5	0.17	0.18	0.14	0.24	-0.06	-0.39	-0.04	0.27
WHORLR1	0.08	-0.14	-0.09	0.09	0.12	-0.10	-0.14	-0.25
WHORLR2	0.14	0.19	-0.17	0.16	-0.20	0.16	-0.18	-0.17
WHORLR3	0.10	-0.10	0.08	-0.09	-0.30	0.14	0.04	0.04
WHORLR4	-0.06	0.20	-0.05	0.04	-0.07	-0.03	0.01	-0.18
WHORLR5	-0.01	-0.10	-0.07	0.06	-0.02	0.19	-0.02	0.12
WHORLL1	0.08	0.01	-0.13	0.00	0.49	0.01	-0.20	0.07
WHORLL2	0.21	-0.03	-0.05	-0.08	-0.06	-0.22	0.02	0.08
WHORLL3	-0.06	-0.14	-0.15	-0.24	0.03	-0.04	-0.02	0.11
WHORLL4	0.05	-0.01	0.24	-0.18	0.03	0.10	0.04	0.00
WHORLL5	-0.18	0.09	-0.05	-0.14	0.04	0.06	-0.15	0.22
DLOOPR1	-0.15	0.23	0.09	-0.26	-0.18	0.08	0.06	0.16
DLOOPR2	0.21	-0.44	0.16	0.06	0.16	0.01	0.11	0.22
DLOOPR3	0.01	-0.17	0.02	0.14	0.01	0.03	-0.10	-0.15
DLOOPR4	-0.27	-0.01	0.33	0.21	0.13	-0.16	-0.20	0.07
DLOOPR5	0.00	-0.01	0.40	-0.13	0.03	-0.22	-0.02	-0.25
DLOOPL1	-0.03	-0.01	0.05	0.15	-0.27	-0.07	0.22	0.14
DLOOPL2	-0.18	-0.14	0.02	0.18	-0.04	0.14	0.02	0.03
DLOOPL3	0.15	-0.22	-0.09	0.27	0.15	-0.27	-0.06	-0.20
DLOOPL4	-0.07	0.09	-0.01	0.33	0.01	-0.11	-0.08	-0.18
DLOOPL5	0.33	0.07	0.11	-0.03	-0.13	0.17	0.19	-0.27

TABLE **5.14** : PRINCIPAL COMPONENTS ANALYSIS(VARIMAX ROTATED SOLUTION)- BASED ON 80 DIGITAL TRAITS- (MALES)

TRAIT	COM1	COM2	COM3	COM4	COM5	COM6	COM7	COM8	COM9	COM10
RFR1	0.31	0.14	0.37	0.26	0.70	0.11	0.10	-0.08	0.01	0.10
RFU1	0.07	0.89	0.31	-0.04	-0.05	0.01	0.07	0.01	0.06	0.09
RFR2	0.32	-0.16	0.45	0.32	0.39	0.01	-0.06	0.45	0.09	0.21
RFU2	0.11	0.25	0.53	0.08	0.04	0.26	0.17	-0.07	-0.12	0.09
RFR3	0.30	-0.01	0.76	0.27	0.15	0.15	0.00	0.05	0.02	0.04
RFU3	0.42	0.19	0.40	0.07	-0.11	0.22	0.13	0.13	0.26	0.23
RFR4	0.03	0.27	0.85	0.17	0.08	0.09	0.07	-0.12	0.00	-0.03
RFU4	0.65	0.13	0.45	0.10	0.10	0.00	0.26	0.00	0.00	0.05
RFR5	0.14	0.23	0.79	0.06	0.14	0.02	0.18	-0.01	0.06	0.02
RFU5	0.61	0.03	0.16	-0.01	0.20	-0.01	-0.02	0.09	0.13	0.09
LFR1	0.37	0.09	0.42	0.16	0.69	0.03	0.02	0.06	0.01	0.08
LFU1	0.05	0.91	0.01	-0.02	0.11	0.02	0.00	-0.02	-0.03	0.17
LFR2	0.29	-0.05	0.59	0.13	0.29	-0.08	-0.09	0.36	0.05	0.05
LFU2	0.20	0.15	0.34	0.02	0.07	0.16	0.01	-0.05	0.03	0.03
LFR3	0.26	0.02	0.82	0.12	0.12	0.01	-0.12	0.24	0.00	-0.04
LFU3	0.50	0.08	0.16	0.17	0.19	-0.02	0.23	0.17	0.24	0.03
LFR4	0.17	0.10	0.88	0.02	0.09	0.06	0.10	0.04	0.05	0.00
LFU4	0.82	0.07	0.38	0.16	0.02	-0.04	0.00	0.03	0.06	-0.02
LFR5	0.31	0.17	0.79	0.14	0.08	-0.06	0.16	0.06	0.16	0.02
LFU5	0.80	0.18	0.01	-0.13	0.22	0.03	-0.16	0.03	-0.20	0.17
RD1	0.16	0.77	0.34	0.09	0.20	0.01	0.10	0.02	0.16	-0.06
RD2	0.17	0.07	0.44	0.38	0.11	0.28	0.13	0.20	-0.06	-0.06
RD3	0.34	0.13	0.46	0.36	-0.03	0.20	0.18	0.06	0.26	-0.01
RD4	0.47	0.03	0.53	0.02	0.11	0.10	0.41	0.05	-0.08	-0.05
RD5	0.70	0.04	0.22	0.08	0.10	0.07	-0.02	0.01	0.04	-0.06
LD1	0.12	0.86	0.02	0.01	0.39	0.07	-0.03	-0.08	0.00	-0.02
LD2	0.26	0.22	0.36	0.38	0.22	-0.09	0.05	0.10	0.02	-0.07
LD3	0.39	0.15	0.28	0.33	0.30	-0.01	0.22	0.09	0.25	-0.06
LD4	0.78	0.01	0.35	0.26	0.10	0.04	0.07	-0.01	-0.02	-0.10
LD5	0.77	0.14	0.10	-0.07	0.13	0.01	-0.07	-0.09	0.02	0.28
ARCHR1	-0.22	0.18	-0.28	-0.35	-0.54	0.04	-0.02	0.07	0.00	-0.09
ARCHR2	-0.08	0.06	-0.26	-0.83	-0.17	0.03	0.06	-0.09	0.05	-0.02
ARCHR3	-0.15	0.08	-0.17	-0.72	-0.15	-0.14	-0.15	0.04	-0.04	-0.04
ARCHR4	0.00	-0.04	-0.30	-0.23	-0.13	-0.30	-0.13	0.00	0.11	0.09
ARCHR5	-0.10	-0.09	-0.14	-0.27	-0.18	-0.09	0.18	-0.11	-0.08	-0.09
ARCHL1	-0.15	0.03	-0.06	-0.13	-0.88	-0.03	-0.01	-0.01	-0.02	0.05
ARCHL2	-0.05	0.07	-0.23	-0.84	-0.12	0.04	-0.05	0.14	0.00	0.17
ARCHL3	0.00	-0.05	-0.31	-0.59	-0.39	-0.05	-0.03	0.16	-0.22	0.02
ARCHL4	0.12	-0.07	-0.40	-0.35	-0.26	-0.05	0.14	0.18	0.13	0.01
ARCHL5	-0.05	-0.13	-0.27	-0.23	0.01	0.01	0.03	0.01	-0.23	-0.09
ULOOPR1	-0.01	-0.89	-0.15	0.10	0.19	-0.03	-0.08	-0.07	-0.15	0.06
ULOOPR2	-0.06	-0.28	-0.30	0.28	0.00	-0.23	-0.13	0.26	0.08	0.04
ULOOPR3	-0.26	-0.23	-0.33	0.24	0.16	-0.09	-0.08	-0.08	-0.22	-0.04
ULOOPR4	-0.52	-0.02	-0.40	0.09	-0.07	0.03	-0.37	-0.05	0.03	0.02
ULOOPR5	-0.64	-0.01	-0.13	0.07	-0.01	-0.01	-0.09	0.06	0.01	0.12
ULOOPL1	0.00	-0.92	0.03	0.05	0.19	-0.03	0.02	0.04	0.01	-0.04
ULOOPL2	-0.14	-0.36	0.04	0.23	0.14	-0.07	0.02	0.10	0.05	-0.13
ULOOPL3	-0.48	-0.12	0.11	0.21	0.04	0.00	-0.27	-0.07	-0.11	-0.01
ULOOPL4	-0.84	0.04	-0.13	-0.10	0.02	-0.01	0.01	-0.07	-0.04	0.09
ULOOPL5	-0.79	-0.04	0.11	0.24	-0.10	-0.02	0.13	0.08	0.22	-0.22
RADLR1	-0.10	0.39	-0.02	0.35	-0.41	-0.04	0.01	0.07	0.00	0.57
RADLR2	-0.13	0.24	0.03	0.04	-0.03	-0.23	-0.12	-0.77	-0.09	0.09
RADLR3	0.03	0.07	-0.26	-0.06	0.08	-0.07	0.05	-0.18	-0.20	0.41
RADLR4	0.11	0.07	-0.19	0.01	0.12	0.13	0.00	0.01	0.00	-0.10
RADLR5	0.04	0.15	-0.03	0.04	0.04	-0.12	0.08	-0.08	-0.02	-0.03
RADLL1	-0.17	0.23	-0.08	0.23	-0.04	-0.15	0.18	0.47	0.00	0.28
RADLL2	-0.06	0.08	-0.32	0.19	-0.39	0.18	-0.06	-0.50	-0.10	0.08
RADLL3	0.05	-0.12	-0.23	0.14	0.19	0.09	0.07	-0.69	0.20	0.16
RADLL4	-0.02	-0.06	-0.22	-0.03	-0.02	-0.04	-0.83	-0.06	-0.07	0.02
RADLL5	0.19	-0.14	-0.21	-0.20	-0.21	0.01	-0.48	0.09	-0.58	-0.05
WHORLR1	0.19	0.66	0.25	0.13	0.05	-0.08	0.11	0.06	-0.36	0.02
WHORLR2	0.16	0.09	0.16	0.04	0.12	-0.25	-0.06	0.13	-0.20	-0.06
WHORLR3	0.43	0.14	0.36	0.12	-0.01	0.20	0.05	0.16	0.38	0.03
WHORLR4	0.69	0.14	0.27	0.16	0.01	-0.14	0.07	0.11	0.02	-0.03
WHORLR5	0.59	-0.04	0.01	0.03	0.26	0.03	0.00	0.08	0.13	0.16
WHORLL1	0.03	0.47	0.05	-0.09	0.35	-0.36	0.13	0.07	-0.29	-0.08
WHORLL2	0.49	-0.07	0.08	-0.04	0.19	-0.19	-0.08	0.19	0.02	-0.10
WHORLL3	0.55	0.15	0.25	0.13	0.03	-0.09	0.19	0.22	0.28	-0.14
WHORLL4	0.81	-0.11	0.24	0.14	0.02	-0.30	0.19	0.00	0.04	-0.10
WHORLL5	0.84	0.06	0.02	0.04	0.18	0.02	-0.12	-0.04	-0.10	-0.05
DLOOPR1	-0.08	0.44	0.13	-0.14	-0.01	0.14	-0.01	-0.04	0.61	-0.10
DLOOPR2	-0.06	0.06	0.25	0.03	0.05	0.71	0.16	0.12	0.06	0.03
DLOOPR3	-0.13	0.15	0.33	0.03	-0.10	0.12	0.00	-0.09	-0.03	-0.07
DLOOPR4	-0.17	0.03	0.21	-0.49	0.18	0.61	0.22	-0.10	-0.03	0.04
DLOOPR5	0.03	0.26	0.11	-0.09	0.06	-0.07	0.09	0.01	0.06	0.13
DLOOPL1	0.08	0.71	-0.05	0.00	-0.15	0.37	-0.16	-0.18	0.21	0.00
DLOOPL2	-0.18	0.42	0.25	0.03	-0.04	0.35	0.14	-0.02	-0.02	0.21
DLOOPL3	0.03	0.03	0.01	-0.18	0.10	0.19	-0.03	0.11	-0.03	0.04
DLOOPL4	-0.05	0.27	-0.03	0.13	0.00	0.66	-0.25	-0.02	0.06	0.06
DLOOPL5	0.13	0.07	0.12	-0.31	0.18	0.16	-0.05	-0.18	0.01	0.69

TABLE 5.14 : (CONTINUED

TRAIT	COM11	COM12	COM13	COM14	COM15	COM16	COM17	COM18
RFR1	0.03	0.04	0.01	-0.01	-0.07	-0.07	0.12	-0.02
RFU1	0.14	0.00	0.07	-0.06	0.01	0.03	-0.06	0.03
RFR2	-0.02	0.07	0.10	0.12	0.06	0.02	0.08	0.00
RFU2	0.08	0.27	0.60	-0.01	0.08	0.00	0.02	-0.02
RFR3	-0.06	0.06	0.10	-0.08	0.12	-0.12	0.07	-0.18
RFU3	0.05	0.07	0.44	0.08	0.04	0.05	0.29	0.10
RFR4	-0.03	0.06	0.06	-0.17	0.01	-0.02	0.01	-0.06
RFU4	-0.07	0.00	0.37	-0.02	0.11	0.08	-0.08	0.02
RFR5	-0.08	0.11	0.07	-0.19	0.08	0.11	0.13	-0.05
RFU5	0.06	-0.03	0.10	0.04	0.24	0.59	0.04	-0.13
LFR1	0.12	0.03	0.03	0.08	0.01	0.07	0.10	-0.04
LFU1	0.14	0.05	0.06	0.03	0.03	-0.08	0.12	0.03
LFR2	0.08	0.03	0.37	-0.02	0.05	0.07	0.04	-0.18
LFU2	-0.07	0.77	0.22	0.16	0.00	-0.04	0.19	0.07
LFR3	0.07	0.08	0.23	-0.02	0.02	-0.05	0.06	-0.04
LFU3	0.14	0.06	0.32	0.02	0.03	-0.05	0.52	-0.14
LFR4	0.03	0.00	0.19	-0.11	0.04	0.02	0.08	0.03
LFU4	-0.12	0.01	0.00	0.09	0.03	-0.20	0.11	0.05
LFR5	0.01	0.04	0.02	-0.05	0.07	0.19	0.02	0.01
LFU5	0.13	0.12	0.05	-0.03	-0.12	0.17	-0.02	-0.09
RD1	0.08	0.02	0.03	-0.19	0.10	0.13	0.04	0.11
RD2	-0.02	0.15	0.55	-0.08	-0.04	0.05	0.00	0.11
RD3	-0.09	0.10	0.28	-0.15	0.16	0.10	0.32	0.10
RD4	-0.20	0.04	0.31	-0.23	0.06	0.07	-0.13	0.02
RD5	-0.01	-0.01	0.07	-0.27	0.46	0.31	-0.08	0.07
LD1	0.00	0.10	0.11	-0.07	0.06	0.04	0.06	0.02
LD2	-0.01	0.56	0.26	-0.08	-0.05	0.22	0.08	-0.05
LD3	0.02	0.19	0.21	-0.16	0.03	-0.08	0.51	-0.01
LD4	-0.11	0.00	0.08	-0.17	-0.06	-0.15	0.11	0.09
LD5	0.27	0.05	-0.06	-0.28	0.04	0.24	0.04	0.01
ARCHR1	-0.14	0.07	0.01	0.25	-0.03	-0.12	-0.14	-0.24
ARCHR2	-0.13	-0.10	-0.01	0.11	0.07	0.11	0.14	-0.11
ARCHR3	0.26	0.11	0.16	0.34	-0.07	0.02	-0.03	0.14
ARCHR4	0.26	0.05	0.22	0.62	-0.05	-0.06	-0.17	0.22
ARCHR5	0.15	0.14	-0.05	0.72	0.01	0.23	-0.04	-0.07
ARCHL1	0.05	-0.03	-0.07	0.22	-0.05	-0.10	0.11	-0.09
ARCHL2	-0.12	0.12	-0.08	0.08	0.06	-0.12	0.06	0.06
ARCHL3	0.25	-0.08	0.01	0.31	-0.03	0.13	-0.06	-0.10
ARCHL4	-0.22	0.16	0.02	0.49	0.14	-0.02	0.13	0.17
ARCHL5	-0.24	0.10	0.06	0.69	-0.13	-0.22	0.01	-0.25
ULOOPR1	0.03	-0.07	-0.04	0.05	-0.07	-0.06	0.06	0.05
ULOOPR2	0.00	-0.12	-0.69	0.02	-0.06	-0.10	-0.09	0.03
ULOOPR3	-0.10	-0.18	-0.46	-0.16	-0.03	-0.14	-0.32	-0.25
ULOOPR4	0.09	-0.07	-0.44	-0.05	-0.03	-0.05	0.23	-0.21
ULOOPR5	-0.18	-0.07	-0.04	-0.15	-0.46	-0.44	0.11	-0.02
ULOOPL1	0.00	-0.10	-0.07	-0.06	-0.06	0.06	-0.14	0.05
ULOOPL2	-0.02	-0.78	-0.08	-0.22	0.02	0.00	-0.09	-0.05
ULOOPL3	-0.26	-0.11	-0.26	-0.13	-0.01	-0.09	-0.52	0.13
ULOOPL4	0.24	-0.08	-0.06	-0.04	0.01	0.16	-0.16	-0.19
ULOOPL5	-0.11	-0.11	0.01	-0.18	0.05	-0.10	-0.03	0.17
RADLR1	-0.18	0.06	-0.03	-0.17	0.01	0.04	-0.12	-0.01
RADLR2	0.26	0.10	0.01	-0.01	0.06	-0.13	-0.08	-0.15
RADLR3	-0.19	-0.27	-0.06	0.11	-0.52	0.02	-0.17	0.07
RADLR4	-0.05	0.04	-0.02	-0.04	0.00	-0.07	-0.02	0.78
RADLR5	0.87	-0.02	-0.03	0.04	0.01	0.00	-0.10	-0.05
RADLL1	-0.23	0.20	0.06	-0.15	0.27	-0.29	0.07	-0.07
RADLL2	0.12	0.10	-0.18	0.38	-0.02	-0.24	-0.07	0.04
RADLL3	-0.21	-0.04	-0.06	-0.03	-0.06	0.08	-0.05	0.09
RADLL4	-0.11	0.05	-0.15	-0.12	-0.07	0.01	-0.11	0.02
RADLL5	-0.04	-0.09	0.12	0.11	-0.03	-0.02	-0.08	-0.09
WHORLR1	0.18	0.15	0.23	0.04	-0.11	-0.06	-0.03	0.15
WHORLR2	-0.12	0.21	0.75	0.13	0.02	-0.03	-0.02	-0.13
WHORLR3	0.16	0.03	0.48	0.05	0.24	0.03	-0.04	0.03
WHORLR4	-0.07	-0.04	0.50	-0.06	0.09	0.08	-0.04	0.06
WHORLR5	-0.05	0.08	0.20	-0.08	-0.12	0.58	0.12	-0.11
WHORLL1	0.41	0.12	0.01	-0.02	0.10	0.12	0.16	0.03
WHORLL2	0.09	0.59	0.36	-0.04	-0.23	0.01	-0.06	-0.03
WHORLL3	0.11	0.04	0.39	-0.04	0.12	-0.04	0.23	-0.05
WHORLL4	-0.09	0.06	0.04	0.00	0.00	-0.15	-0.03	0.06
WHORLL5	0.16	0.14	0.01	0.01	-0.13	0.11	-0.06	0.04
DLOOPR1	-0.19	-0.09	-0.23	-0.15	0.22	0.20	0.05	-0.06
DLOOPR2	-0.11	0.02	0.19	-0.08	-0.04	0.24	0.18	0.17
DLOOPR3	-0.17	0.09	-0.04	-0.06	-0.05	0.16	0.68	0.36
DLOOPR4	0.00	0.24	-0.15	-0.05	-0.04	-0.03	0.01	0.00
DLOOPR5	-0.04	-0.16	0.08	-0.02	0.82	0.01	-0.09	0.01
DLOOPL1	-0.29	0.02	0.06	0.04	-0.02	-0.09	0.01	0.00
DLOOPL2	-0.12	0.09	-0.11	0.00	0.24	0.32	0.36	0.07
DLOOPL3	-0.09	0.06	-0.06	-0.04	-0.07	-0.06	0.81	-0.13
DLOOPL4	-0.12	-0.03	0.02	-0.13	0.01	-0.23	0.27	0.07
DLOOPL5	0.06	0.08	-0.02	-0.03	0.08	0.06	0.10	-0.18

TABLE 5.15 : PRINCIPAL COMPONENTS ANALYSIS(VARIMAX ROTATED SOLUTION): - BASED ON 80 DIGITAL TRAITS (FEMALES).

TRAIT	COMP1	COMP2	COMP3	COMP4	COMP5	COMP6	COMP7	COMP8	COMP9	COMP10
RFR1	0.14	0.02	0.45	0.32	0.61	0.18	0.07	0.15	0.09	-0.13
RFU1	0.83	0.12	0.31	0.06	0.06	0.01	-0.11	0.14	0.07	0.04
RFR2	0.07	0.19	0.34	0.47	0.38	0.23	0.03	0.22	0.08	0.29
RFU2	0.21	0.25	0.50	0.10	0.02	0.13	-0.03	0.72	0.00	0.03
RFR3	0.07	0.24	0.47	0.17	0.34	0.09	-0.10	0.38	-0.06	0.17
RFU3	0.23	0.83	0.34	0.05	-0.01	0.16	0.06	0.07	0.10	-0.05
RFR4	0.28	0.22	0.71	-0.06	-0.03	0.02	-0.17	0.23	-0.01	0.06
RFU4	0.10	0.48	0.37	0.38	-0.04	0.47	0.01	0.12	-0.09	0.26
RFR5	0.09	0.23	0.85	0.00	0.13	0.16	-0.03	0.13	0.02	-0.02
RFU5	0.03	0.25	0.14	0.12	0.05	0.79	0.05	0.21	0.08	0.10
LFR1	0.23	-0.08	0.42	0.26	0.62	0.17	0.05	0.02	-0.01	-0.06
LFU1	0.90	0.06	0.17	0.05	0.09	0.01	-0.01	0.17	0.08	-0.05
LFR2	0.10	0.17	0.53	0.30	0.27	0.23	0.08	0.26	-0.04	0.37
LFU2	0.21	0.34	0.24	0.15	-0.11	0.20	0.07	0.65	-0.05	-0.10
LFR3	0.10	0.44	0.57	0.29	0.25	0.20	0.12	0.23	0.05	0.06
LFU3	0.03	0.44	0.44	0.35	-0.09	0.28	0.19	0.29	-0.19	0.03
LFR4	0.16	0.26	0.77	0.14	-0.03	0.14	-0.08	0.19	-0.16	-0.03
LFU4	0.02	0.10	0.15	0.90	0.01	0.16	-0.15	0.14	0.08	0.00
LFR5	0.11	0.17	0.82	0.16	0.13	0.21	-0.03	0.13	0.04	0.00
LFU5	-0.10	0.02	0.25	0.36	0.14	0.69	-0.04	0.12	-0.07	0.09
RD1	0.77	0.22	0.09	0.04	0.45	0.09	-0.07	0.06	-0.09	0.07
RD2	0.17	0.14	0.19	0.25	0.14	0.18	-0.08	0.71	-0.12	0.00
RD3	0.12	0.75	0.17	0.15	0.13	0.17	-0.02	0.20	0.05	-0.16
RD4	0.22	0.38	0.23	0.47	0.02	0.41	-0.16	-0.01	-0.17	0.25
RD5	0.10	0.17	0.05	0.05	0.10	0.82	-0.16	0.09	-0.08	-0.02
LD1	0.83	0.04	0.04	0.07	0.38	0.08	-0.10	0.07	-0.02	0.06
LD2	0.27	0.12	0.25	0.31	0.07	0.26	-0.03	0.49	-0.29	0.18
LD3	0.00	0.45	0.23	0.50	0.05	0.17	-0.02	0.23	-0.12	0.07
LD4	0.08	-0.01	0.08	0.86	0.06	0.15	-0.29	0.10	-0.11	0.00
LD5	-0.03	-0.10	0.18	0.30	0.17	0.60	-0.41	0.12	0.03	0.04
ARCHR1	-0.05	-0.26	0.01	-0.12	-0.72	-0.23	0.10	0.11	0.01	-0.17
ARCHR2	0.10	-0.10	-0.06	-0.16	-0.12	0.02	0.06	0.03	0.20	0.03
ARCHR3	-0.03	-0.01	0.00	-0.13	-0.23	-0.19	0.16	-0.10	-0.15	0.14
ARCHR4	-0.23	0.15	-0.05	-0.24	-0.07	-0.12	0.63	0.06	0.30	-0.05
ARCHR5	-0.03	0.04	0.05	0.04	-0.14	-0.01	0.53	0.02	0.14	0.09
ARCHL1	-0.14	0.12	-0.07	-0.06	-0.81	-0.03	0.10	0.01	0.05	-0.04
ARCHL2	-0.02	-0.03	-0.15	-0.08	-0.12	-0.03	0.22	-0.06	0.15	-0.17
ARCHL3	0.15	-0.07	-0.16	-0.30	-0.01	-0.02	0.11	-0.01	-0.04	0.09
ARCHL4	-0.17	0.05	-0.01	-0.26	0.16	-0.07	0.80	0.10	0.12	0.01
ARCHL5	-0.08	0.10	-0.09	0.01	-0.19	0.04	0.81	-0.10	0.01	0.04
ULOOPR1	-0.88	-0.06	-0.12	0.02	0.13	0.09	-0.03	-0.15	0.12	0.05
ULOOPR2	-0.28	-0.10	-0.25	0.04	0.01	-0.05	0.01	-0.72	-0.02	0.08
ULOOPR3	-0.14	-0.81	-0.18	-0.02	0.09	-0.02	-0.16	-0.11	-0.07	0.07
ULOOPR4	-0.07	-0.50	-0.20	-0.41	0.03	-0.38	-0.20	-0.02	0.02	-0.25
ULOOPR5	-0.07	-0.19	-0.07	-0.08	0.01	-0.74	-0.25	-0.09	-0.03	-0.06
ULOOPL1	-0.89	-0.14	-0.02	-0.04	0.22	-0.05	0.06	-0.14	0.00	-0.02
ULOOPL2	-0.31	-0.16	-0.09	-0.22	0.07	-0.16	-0.16	-0.47	0.08	0.34
ULOOPL3	-0.12	-0.41	-0.08	-0.15	-0.05	-0.10	-0.05	-0.29	0.24	-0.14
ULOOPL4	0.04	-0.04	-0.08	-0.87	-0.19	-0.12	-0.14	-0.17	-0.08	-0.03
ULOOPL5	0.11	0.02	-0.08	-0.29	-0.01	-0.67	-0.29	-0.04	-0.14	-0.17
RADLR1	-0.09	0.08	0.02	0.22	-0.54	-0.02	0.19	-0.08	-0.11	0.04
RADLR2	0.08	0.03	0.32	-0.34	-0.09	-0.35	-0.03	-0.06	-0.02	-0.18
RADLR3	0.09	0.05	0.05	-0.14	-0.01	0.06	0.17	-0.08	0.83	-0.12
RADLR4	-0.28	-0.07	-0.20	0.22	0.00	-0.10	0.10	0.02	-0.05	0.02
RADLR5	0.04	0.07	-0.12	-0.02	0.07	0.13	0.05	-0.06	0.04	0.09
RADLL1	-0.01	-0.06	0.14	0.02	-0.04	-0.06	-0.08	0.21	-0.10	-0.07
RADLL2	-0.15	0.09	-0.17	-0.22	-0.10	-0.25	-0.08	-0.09	0.29	-0.65
RADLL3	-0.16	-0.03	-0.01	-0.24	-0.02	-0.03	0.02	0.08	-0.11	-0.19
RADLL4	-0.15	0.10	-0.04	0.13	0.13	-0.08	0.01	0.02	0.69	0.04
RADLL5	-0.10	-0.01	-0.18	-0.10	-0.05	0.14	0.36	-0.06	0.54	0.54
WHORLR1	0.60	0.14	0.06	0.02	0.18	0.24	-0.19	0.18	0.03	0.18
WHORLR2	0.21	0.10	0.07	0.14	0.04	0.20	0.04	0.83	-0.01	0.05
WHORLR3	0.18	0.72	0.27	0.15	0.06	0.16	0.00	0.30	0.11	0.13
WHORLR4	0.26	0.41	0.23	0.33	-0.02	0.39	-0.02	-0.01	-0.19	0.13
WHORLR5	0.03	0.14	0.23	-0.06	0.20	0.78	-0.07	0.18	0.09	0.04
WHORLL1	0.57	-0.03	0.13	0.25	0.12	0.30	0.14	-0.05	-0.02	-0.11
WHORLL2	0.32	0.21	0.32	0.30	0.03	0.11	-0.10	0.53	-0.01	0.33
WHORLL3	0.13	0.48	0.20	0.44	0.09	0.25	0.06	0.23	-0.18	0.03
WHORLL4	-0.04	0.20	-0.03	0.85	-0.02	0.05	-0.09	0.00	-0.19	0.01
WHORLL5	0.01	0.07	0.08	0.25	0.03	0.69	-0.20	0.05	-0.13	-0.15
DLOOPR1	0.61	0.05	0.05	-0.03	0.16	-0.26	0.09	-0.02	-0.20	-0.16
DLOOPR2	0.14	-0.02	0.18	0.09	-0.04	0.02	-0.14	0.13	-0.05	-0.10
DLOOPR3	0.06	0.49	-0.01	-0.13	-0.05	-0.01	0.22	0.08	-0.08	-0.46
DLOOPR4	0.06	0.11	0.20	0.28	0.18	-0.05	0.26	-0.05	0.03	0.12
DLOOPR5	0.28	0.22	0.03	-0.11	0.31	0.17	0.00	0.03	0.22	0.24
DLOOPL1	0.72	0.09	-0.09	-0.18	0.07	-0.04	-0.19	0.16	0.04	0.10
DLOOPL2	0.15	0.09	0.15	-0.05	0.02	0.32	0.15	0.16	-0.39	-0.21
DLOOPL3	0.06	0.17	0.24	0.16	-0.07	0.07	-0.08	0.16	0.01	0.00
DLOOPL4	0.30	-0.21	0.17	0.04	0.13	0.06	-0.18	0.33	0.03	0.02
DLOOPL5	0.13	-0.06	0.18	0.12	0.09	0.03	0.16	0.08	-0.10	0.04

TABLE **5.15** : (CONTINUED).

TRAIT	COM11	COM12	COM13	COM14	COM15	COM16	COM17	COM18
RFR1	0.03	-0.12	-0.01	0.03	0.00	0.01	0.17	0.01
RFU1	-0.12	0.10	-0.03	0.15	-0.05	-0.14	0.04	0.04
RFR2	0.04	-0.15	0.02	0.12	-0.09	0.04	0.11	-0.02
RFU2	0.04	0.17	0.10	-0.02	0.10	0.02	0.02	0.05
RFR3	0.19	0.21	-0.02	-0.12	0.24	0.28	-0.01	-0.03
RFU3	0.07	-0.04	0.03	-0.03	-0.06	-0.02	0.04	0.12
RFR4	0.12	0.16	0.24	-0.16	0.05	0.05	-0.13	-0.06
RFU4	0.21	-0.06	-0.19	0.05	0.15	0.05	0.05	0.06
RFR5	0.10	0.08	0.08	-0.02	0.09	-0.10	-0.17	0.13
RFU5	0.14	0.09	0.06	0.18	-0.09	0.14	0.04	0.02
LFR1	0.13	-0.19	-0.18	0.05	0.16	0.01	0.23	0.04
LFU1	0.04	0.14	0.08	-0.02	0.08	-0.07	0.04	0.01
LFR2	0.09	-0.15	-0.07	0.17	0.03	0.06	0.22	0.06
LFU2	0.06	0.09	0.19	-0.09	0.10	0.28	-0.05	0.08
LFR3	0.11	0.06	-0.09	-0.08	0.23	0.08	0.04	-0.03
LFU3	0.02	-0.15	0.22	0.12	0.07	0.10	-0.12	-0.13
LFR4	0.04	0.09	-0.01	0.04	0.24	0.05	-0.09	-0.08
LFU4	0.04	-0.04	0.01	-0.03	0.10	-0.03	-0.05	0.03
LFR5	0.06	-0.04	0.06	0.10	0.06	-0.02	-0.01	0.19
LFU5	-0.09	-0.11	0.01	-0.27	0.19	-0.07	-0.18	0.05
RD1	0.02	-0.02	0.02	0.04	0.00	-0.09	-0.16	0.09
RD2	0.26	-0.01	0.28	0.13	0.13	-0.09	0.06	0.12
RD3	0.37	-0.01	-0.06	0.07	0.11	0.02	-0.02	-0.04
RD4	0.27	0.08	-0.21	0.03	0.13	0.15	0.00	0.08
RD5	0.15	0.14	0.01	0.26	-0.06	-0.07	0.12	0.01
LD1	0.21	-0.05	0.07	0.02	0.11	-0.02	0.07	0.00
LD2	0.40	-0.03	0.20	-0.11	0.12	0.10	-0.04	0.02
LD3	0.34	-0.24	0.13	0.09	0.11	0.07	-0.16	-0.20
LD4	0.18	0.05	-0.02	-0.01	0.15	-0.09	0.07	-0.05
LD5	0.02	-0.11	0.10	-0.18	0.27	-0.08	-0.24	0.15
ARCHR1	-0.21	-0.02	-0.20	0.04	0.04	0.21	0.19	-0.14
ARCHR2	-0.73	0.11	-0.31	-0.26	0.16	-0.05	-0.06	-0.13
ARCHR3	-0.77	0.09	0.14	-0.07	0.05	-0.06	0.12	-0.05
ARCHR4	-0.30	-0.16	0.03	-0.09	0.21	-0.04	0.02	-0.23
ARCHR5	-0.20	-0.17	-0.07	0.01	0.05	0.58	0.10	0.08
ARCHL1	-0.34	-0.23	-0.02	-0.09	-0.10	0.10	-0.07	-0.02
ARCHL2	-0.82	0.05	-0.01	0.02	0.01	0.06	-0.03	0.13
ARCHL3	-0.78	0.01	0.18	0.17	0.10	0.03	0.19	0.05
ARCHL4	-0.17	-0.01	-0.02	0.03	-0.10	0.02	-0.13	0.23
ARCHL5	-0.15	0.02	-0.09	-0.03	0.03	0.06	0.13	0.08
ULOOPR1	0.13	0.00	0.10	-0.12	-0.03	-0.02	0.05	0.00
ULOOPR2	0.36	-0.20	0.03	0.02	-0.27	0.01	0.01	0.12
ULOOPR3	0.35	-0.10	-0.06	0.00	-0.14	0.04	-0.08	0.10
ULOOPR4	-0.11	0.02	0.29	0.02	-0.28	-0.12	-0.07	0.06
ULOOPR5	0.01	0.00	0.04	-0.24	0.02	-0.36	-0.25	-0.07
ULOOPL1	0.07	0.04	-0.11	0.06	-0.06	-0.08	-0.01	0.02
ULOOPL2	0.21	-0.09	-0.25	0.19	-0.17	-0.32	0.20	-0.09
ULOOPL3	0.37	0.22	-0.29	-0.20	-0.21	-0.36	0.04	0.22
ULOOPL4	-0.05	0.00	0.02	0.00	-0.13	0.07	-0.04	-0.12
ULOOPL5	0.12	0.10	-0.03	0.22	-0.31	0.04	0.11	-0.20
RADLR1	0.12	0.26	0.23	0.19	0.00	-0.30	-0.01	0.06
RADLR2	-0.05	0.30	-0.16	0.33	-0.09	0.21	-0.01	-0.31
RADLR3	0.00	0.04	-0.03	0.04	-0.09	-0.09	-0.08	-0.10
RADLR4	-0.08	-0.09	-0.48	0.01	0.08	-0.19	0.45	-0.09
RADLR5	-0.12	-0.02	0.08	0.01	0.02	-0.01	0.83	0.01
RADLL1	-0.19	0.84	0.15	-0.04	0.05	0.10	-0.05	-0.01
RADLL2	0.14	0.15	0.04	-0.02	-0.03	0.18	-0.13	-0.21
RADLL3	0.12	0.24	0.02	-0.06	-0.07	0.74	-0.10	-0.12
RADLL4	-0.26	-0.31	0.05	-0.01	0.12	0.14	0.26	0.17
RADLL5	0.02	0.04	-0.06	-0.02	0.08	-0.03	0.05	-0.15
WHORLR1	0.07	-0.10	-0.03	0.52	0.00	-0.16	0.01	0.03
WHORLR2	0.08	-0.06	-0.29	0.04	-0.02	-0.01	-0.04	0.02
WHORLR3	0.02	0.09	0.01	0.01	-0.24	-0.09	0.09	-0.01
WHORLR4	0.38	-0.20	-0.21	0.12	0.00	0.02	-0.16	0.15
WHORLR5	0.09	-0.08	0.01	0.03	-0.08	-0.15	0.19	-0.07
WHORLL1	0.27	-0.24	0.10	0.36	-0.01	-0.09	-0.07	-0.17
WHORLL2	0.06	0.06	0.25	0.10	-0.01	0.08	-0.11	0.00
WHORLL3	0.11	-0.26	0.12	0.04	-0.14	0.18	-0.03	-0.26
WHORLL4	0.26	0.08	0.07	0.03	-0.13	-0.05	0.00	0.07
WHORLL5	-0.04	-0.06	0.05	-0.27	0.08	-0.08	-0.14	-0.39
DLOOPR1	-0.16	0.09	-0.01	-0.47	0.03	0.16	-0.13	0.08
DLOOPR2	-0.13	0.18	0.69	-0.05	0.33	-0.08	0.21	0.12
DLOOPR3	-0.03	-0.22	0.13	-0.14	0.47	0.18	-0.09	0.00
DLOOPR4	-0.12	0.32	-0.02	-0.03	0.69	-0.01	0.16	-0.06
DLOOPR5	-0.13	0.40	-0.03	0.34	0.03	0.14	-0.08	0.15
DLOOPL1	-0.04	-0.04	0.05	-0.32	0.15	0.09	0.15	0.09
DLOOPL2	0.01	-0.11	0.16	-0.27	0.50	0.17	0.17	0.22
DLOOPL3	-0.09	-0.16	0.30	0.15	0.71	-0.05	-0.09	0.12
DLOOPL4	-0.15	0.09	-0.08	-0.07	0.69	-0.05	0.00	0.14
DLOOPL5	-0.01	0.00	0.11	-0.02	0.16	-0.06	-0.02	0.87

TABLE **5.16** : EIGENVALUES FOR PRINCIPAL COMPONENTS ANALYSIS: BASED ON 32 PALMAR TRAITS

(MALES).				(FEMALES).			
COMPONENT	EIGENVALUE	PCT OF VAR	CUM PCT	COMPONENT	EIGENVALUE	PCT OF VAR	CUM PCT
1	7.08680	22.1	22.1	1	6.37309	19.9	19.9
2	4.12695	12.9	35.0	2	4.22526	13.2	33.1
3	3.65970	11.4	46.5	3	2.90363	9.1	42.2
4	2.21076	6.9	53.4	4	2.81819	8.8	51.0
5	2.15055	6.7	60.1	5	2.51972	7.9	58.9
6	1.74541	5.5	65.6	6	2.05790	6.4	65.3
7	1.66700	5.2	70.8	7	1.70795	5.3	70.6
8	1.45947	4.6	75.3	8	1.54740	4.8	75.5
9	1.30744	4.1	79.4	9	1.28520	4.0	79.5
10	1.06511	3.3	82.7	10	1.19581	3.7	83.2
11	0.97783	3.1	85.8	11	1.01858	3.2	86.4
12	0.85301	2.7	88.5	12	0.87443	2.7	89.1
13	0.68036	2.1	90.6	13	0.66738	2.1	91.2
14	0.52880	1.7	92.2	14	0.52787	1.6	92.9
15	0.47083	1.5	93.7	15	0.49342	1.5	94.4
16	0.41234	1.3	95.0	16	0.36769	1.1	95.6
17	0.37694	1.2	96.2	17	0.35978	1.1	96.7
18	0.33015	1.0	97.2	18	0.25629	0.8	97.5
19	0.24290	0.8	98.0	19	0.19483	0.6	98.1
20	0.17550	0.5	98.5	20	0.15807	0.5	98.6
21	0.12698	0.4	98.9	21	0.13742	0.4	99.0
22	0.10599	0.3	99.3	22	0.09399	0.3	99.3
23	0.07953	0.2	99.5	23	0.07367	0.2	99.6
24	0.07265	0.2	99.7	24	0.06014	0.2	99.7
25	0.04565	0.1	99.9	25	0.03679	0.1	99.9
26	0.01958	0.1	99.9	26	0.02232	0.1	99.9
27	0.00943	0.0	100.0	27	0.01379	0.0	100.0
28	0.00824	0.0	100.0	28	0.00631	0.0	100.0
29	0.00299	0.0	100.0	29	0.00207	0.0	100.0
30	0.00116	0.0	100.0	30	0.00093	0.0	100.0
31	0.00001	0.0	100.0	31	0.00010	0.0	100.0
32	-0.00002	0.0	100.0	32	0.00002	0.0	100.0

TABLE **5.17** : PRINCIPAL COMPONENTS ANALYSIS(UNROTATED SOLUTION) : - ANALYSIS BASED ON 32 PALMAR TRAITS(MALES).

TRAIT	COMP1	COMP2	COMP3	COMP4	COMP5	COMP6	COMP7	COMP8	COMP9	COMP10	COMMUNALITY.
RAB	0.10	0.80	0.26	-0.01	-0.13	-0.21	0.01	0.07	-0.08	0.08	0.79
LAB	0.11	0.76	0.33	0.04	-0.04	-0.24	0.04	-0.01	-0.01	-0.08	0.77
RBC	0.46	0.58	0.55	-0.02	0.05	-0.10	-0.12	0.08	-0.05	0.07	0.89
LBC	0.31	0.46	0.61	0.07	0.25	0.04	0.10	-0.01	-0.05	0.24	0.81
RCD	0.18	0.68	0.32	-0.34	-0.09	0.19	-0.17	0.01	0.20	-0.21	0.86
LCD	0.08	0.49	0.42	-0.16	-0.32	0.29	0.03	0.08	0.36	-0.14	0.79
P2R	0.76	-0.24	0.09	-0.10	-0.06	0.25	-0.01	-0.01	-0.23	0.11	0.79
P2L	0.69	-0.19	0.03	-0.20	0.28	0.20	-0.27	0.30	0.09	0.24	0.90
P3R	0.38	0.03	-0.31	-0.42	-0.52	-0.16	0.26	0.10	-0.19	0.05	0.83
P3L	0.26	-0.34	0.08	0.22	-0.47	-0.19	-0.06	0.54	0.14	-0.25	0.87
P3TR	-0.16	0.00	-0.40	-0.42	0.33	0.36	0.14	-0.28	0.05	-0.20	0.73
P3TL	0.27	0.29	-0.30	-0.64	0.13	-0.14	0.08	-0.17	-0.23	0.03	0.78
P4R	0.42	-0.19	0.36	0.62	0.24	-0.13	0.09	-0.04	0.20	0.09	0.86
P4L	0.31	-0.04	0.20	0.06	0.68	-0.08	-0.02	-0.40	0.13	-0.19	0.82
PHR	0.35	0.48	-0.64	0.10	0.02	-0.05	-0.02	0.06	-0.03	0.03	0.79
PHL	0.19	0.35	-0.62	0.36	0.10	0.02	0.03	-0.09	0.18	0.28	0.80
CHR	0.09	0.29	-0.11	0.12	0.00	0.68	0.28	0.05	0.11	-0.28	0.76
CHL	0.19	0.21	-0.02	0.35	0.21	0.48	0.27	0.35	-0.40	-0.22	0.89
TEFR	-0.05	-0.25	0.38	0.27	-0.23	0.18	0.30	-0.17	0.08	0.03	0.50
TEFL	0.37	-0.04	0.47	0.04	-0.28	0.17	0.01	-0.44	-0.16	0.17	0.72
TDR	0.87	-0.22	-0.03	0.00	-0.10	0.03	0.32	-0.04	-0.05	0.08	0.93
TDL	0.81	-0.21	0.07	-0.18	0.31	-0.15	-0.11	0.18	0.09	-0.18	0.94
AXR	0.42	0.56	-0.52	0.13	-0.04	-0.04	-0.02	0.11	-0.05	0.06	0.79
AXL	0.35	0.42	-0.57	0.37	0.12	0.00	-0.11	-0.03	0.15	0.16	0.84
TDR3	-0.09	0.02	0.17	0.10	-0.13	0.10	-0.77	-0.20	-0.36	-0.12	0.85
TDL3	0.00	0.04	-0.29	0.12	-0.52	0.37	-0.36	-0.30	0.29	0.14	0.82
TDR4	-0.86	0.19	-0.06	0.00	0.22	0.00	-0.04	0.22	0.12	-0.01	0.89
TDL4	-0.79	0.13	0.21	-0.03	0.13	0.01	0.31	0.13	-0.25	0.23	0.93
TDR5	0.65	-0.13	0.03	-0.13	-0.20	-0.17	0.44	-0.22	0.24	0.04	0.83
TDL5	0.68	-0.02	-0.18	0.18	-0.02	-0.34	-0.06	-0.17	-0.01	-0.50	0.93
TDR6	0.72	-0.18	-0.03	0.17	-0.02	0.24	-0.13	0.04	-0.41	0.04	0.83
TDL6	0.48	-0.33	0.13	-0.41	0.23	0.19	-0.20	0.32	0.33	0.24	0.93

TABLE **5.18** : PRINCIPAL COMPONENTS ANALYSIS(UNROTATED SOLUTION): - BASED ON 32 PALMAR TRAITS(FEMALES).

TRAIT	COMP1	COMP2	COMP3	COMP4	COMP5	COMP6	COMP7	COMP8	COMP9	COMP10	COMMUNALITY
RAB	-0.34	0.75	0.13	-0.11	0.03	0.34	-0.01	0.06	0.02	-0.13	0.88
LAB	-0.34	0.74	0.22	0.01	0.07	0.23	0.12	0.05	-0.06	-0.15	0.84
RBC	-0.10	0.68	0.48	0.20	-0.18	0.02	0.11	-0.05	0.00	0.15	0.85
LBC	0.08	0.73	0.30	0.24	-0.13	-0.03	0.06	-0.06	0.21	0.09	0.87
RCD	0.06	0.66	-0.08	0.04	0.15	-0.08	-0.26	-0.09	-0.27	-0.21	0.68
LCD	-0.08	0.78	-0.20	0.10	0.06	0.24	-0.28	0.01	-0.10	-0.11	0.83
P2R	0.53	0.26	0.01	-0.09	-0.40	-0.40	-0.16	0.14	0.33	0.01	0.85
P2L	0.58	0.20	-0.27	-0.33	0.00	-0.05	-0.11	-0.21	0.17	0.15	0.69
P3R	0.54	0.00	-0.16	-0.38	0.18	-0.24	-0.14	0.47	-0.27	-0.09	0.90
P3L	0.10	-0.25	-0.01	-0.37	-0.17	0.50	0.11	0.57	0.04	-0.29	0.92
P3TR	-0.03	0.47	-0.35	-0.05	-0.16	0.30	-0.19	0.04	0.01	0.43	0.73
P3TL	-0.04	0.37	-0.23	0.11	0.06	-0.43	0.33	0.12	-0.41	0.29	0.84
P4R	0.32	-0.13	0.55	0.46	-0.25	0.15	0.25	-0.23	0.16	-0.24	0.92
P4L	0.49	-0.19	0.50	0.22	0.22	0.02	-0.28	-0.43	-0.13	0.12	0.93
PHR	0.25	-0.01	0.04	0.10	0.81	0.13	-0.16	0.06	0.27	-0.17	0.89
PHL	0.26	-0.06	-0.23	0.71	0.25	0.09	0.22	0.31	0.10	0.22	0.91
CHR	0.22	-0.35	-0.32	0.10	-0.36	0.52	0.02	-0.23	-0.06	0.23	0.80
CHL	0.23	-0.25	-0.17	0.07	-0.50	0.60	-0.21	-0.03	-0.01	-0.07	0.81
TEFR	0.11	0.00	0.13	-0.54	0.17	0.23	0.55	-0.28	0.16	0.00	0.84
TEFL	0.22	0.20	0.37	-0.52	0.12	0.08	0.47	0.04	0.12	0.20	0.81
TDR	0.82	0.18	0.22	0.07	-0.29	-0.09	-0.06	0.26	0.09	-0.11	0.94
TDL	0.80	-0.08	0.34	-0.06	0.14	0.13	-0.09	0.01	-0.32	0.10	0.93
AXR	0.27	0.02	-0.04	-0.04	0.82	0.23	-0.09	0.02	0.23	-0.02	0.86
AXL	0.22	-0.05	-0.18	0.71	0.19	0.17	0.26	0.32	0.18	0.26	0.93
TDR3	0.18	0.08	-0.65	0.04	0.14	-0.25	0.18	-0.43	0.07	-0.26	0.89
TDL3	0.00	0.34	-0.65	-0.23	-0.12	0.05	0.18	-0.09	0.29	0.02	0.95
TDR4	-0.81	-0.18	0.27	-0.21	0.13	0.15	-0.11	0.09	-0.04	0.29	0.98
TDL4	-0.74	-0.20	0.26	0.24	-0.03	-0.17	-0.21	0.09	0.13	-0.09	0.96
TDR5	0.71	0.15	-0.20	0.40	-0.12	0.03	0.14	-0.03	-0.13	-0.31	0.89
TDL5	0.74	-0.01	0.11	-0.10	0.09	0.16	0.32	-0.03	-0.42	0.02	0.94
TDR6	0.66	0.09	0.26	-0.25	-0.22	-0.25	-0.11	0.15	0.31	0.10	0.83
TDL6	0.63	0.05	0.01	-0.16	0.13	0.11	-0.44	-0.12	0.09	0.27	0.76

TABLE 5.19 : PRINCIPAL COMPONENTS ANALYSIS(VARIMAX ROTATED SOLUTION) :- ANALYSIS BASED ON 32 PALMAR TRAITS(MALES).

TRAIT	COMP1	COMP2	COMP3	COMP4	COMP5	COMP6	COMP7	COMP8	COMP9	COMP10
RAB	-0.03	0.82	0.23	0.08	-0.10	-0.05	-0.18	-0.09	-0.07	-0.03
LAB	-0.06	0.82	0.15	0.00	0.03	-0.03	-0.21	-0.11	0.08	0.01
RBC	0.24	0.86	0.05	-0.11	0.04	-0.02	0.18	-0.14	0.05	-0.10
LBC	0.23	0.72	-0.03	-0.26	0.27	0.07	0.15	-0.21	-0.20	0.03
RCD	-0.09	0.79	-0.04	0.27	0.07	0.18	0.15	0.28	0.13	-0.05
LCD	-0.06	0.67	-0.18	0.01	-0.12	0.25	0.07	0.44	0.02	0.15
P2R	0.78	-0.01	0.00	0.04	-0.03	0.14	0.40	-0.03	0.07	-0.05
P2L	0.37	0.02	0.13	-0.01	0.02	0.03	0.86	-0.07	0.05	-0.06
P3R	0.43	0.01	0.13	0.56	-0.47	-0.10	-0.04	0.01	0.06	0.28
P3L	0.10	-0.09	-0.13	-0.30	-0.75	0.01	0.17	0.00	0.39	0.06
P3TR	-0.17	-0.29	0.02	0.53	0.47	0.29	0.03	0.14	0.01	0.13
P3TL	0.19	0.16	0.20	0.76	0.20	-0.13	0.09	-0.16	0.04	0.10
P4R	0.30	0.08	0.06	-0.80	0.16	-0.04	0.12	-0.17	0.19	0.13
P4L	0.12	0.08	-0.03	-0.19	0.75	-0.02	0.17	-0.20	0.36	0.03
PHR	0.06	0.09	0.82	0.26	-0.06	0.11	0.00	-0.02	0.14	0.03
PHL	-0.01	-0.07	0.86	-0.07	0.10	0.03	-0.05	0.13	-0.06	0.12
CHR	0.01	0.10	0.13	0.03	0.09	0.79	-0.03	0.28	0.00	0.15
CHL	0.15	0.07	0.18	-0.12	-0.06	0.82	-0.02	-0.34	-0.07	-0.10
TEFR	0.24	-0.04	-0.36	-0.40	-0.02	0.11	-0.23	0.18	-0.12	0.20
TEFL	0.67	0.27	-0.26	-0.15	0.14	-0.07	-0.10	0.24	-0.10	-0.09
TDR	0.82	-0.02	0.15	-0.03	-0.07	0.07	0.25	-0.08	0.22	0.34
TDL	0.40	0.07	0.04	0.00	0.07	-0.03	0.64	-0.27	0.53	0.09
AXR	0.12	0.24	0.80	0.20	-0.12	0.13	0.01	-0.02	0.12	0.01
AXL	0.04	0.04	0.89	-0.09	0.08	0.06	0.04	0.10	0.11	0.00
TDR3	0.05	0.07	-0.12	-0.01	0.02	-0.11	-0.07	0.17	0.06	-0.88
TDL3	0.09	-0.13	0.25	-0.01	-0.11	-0.02	-0.07	0.82	-0.06	-0.20
TDR4	-0.87	-0.05	-0.07	0.02	0.04	0.05	-0.18	-0.06	-0.31	-0.05
TDL4	-0.47	0.03	-0.28	0.01	0.03	0.05	-0.36	-0.29	-0.64	0.05
TDR5	0.60	0.08	0.03	0.02	0.01	-0.15	0.07	0.09	0.28	0.59
TDL5	0.40	0.03	0.26	-0.02	0.01	-0.04	-0.04	-0.12	0.83	0.00
TDR6	0.73	-0.07	0.19	-0.07	-0.08	0.23	0.27	-0.14	0.12	-0.29
TDL6	0.18	-0.03	-0.13	0.03	0.01	-0.07	0.92	0.07	0.00	0.14

TABLE 5.20 : PRINCIPAL COMPONENTS ANALYSIS(VARIMAX ROTATED SOLUTION) :- BASED ON 32 PALMAR TRAITS(FEMALES).

TRAIT	COMP1	COMP2	COMP3	COMP4	COMP5	COMP6	COMP7	COMP8	COMP9	COMP10
RAB	0.87	-0.09	-0.10	0.01	-0.03	0.19	-0.07	-0.21	-0.05	0.00
LAB	0.84	-0.15	-0.01	-0.06	-0.17	0.20	-0.05	-0.15	0.05	-0.06
RBC	0.64	0.11	0.08	-0.25	-0.19	0.09	-0.36	0.06	0.28	0.09
LBC	0.60	0.28	0.15	-0.08	-0.19	0.01	-0.23	0.06	0.30	0.33
RCD	0.70	0.04	-0.13	0.12	-0.06	-0.18	0.23	0.17	-0.14	-0.07
LCD	0.82	0.00	-0.01	0.11	0.05	-0.25	0.08	0.04	-0.17	0.20
P2R	0.01	0.89	-0.01	-0.16	-0.08	-0.06	0.11	0.00	0.01	0.10
P2L	0.01	0.53	-0.12	0.18	0.21	0.22	0.31	0.21	-0.28	0.15
P3R	-0.15	0.37	-0.11	0.16	-0.28	-0.15	0.02	0.58	-0.37	0.03
P3L	-0.08	0.04	-0.05	0.05	0.26	0.16	-0.20	0.11	0.02	-0.01
P3TR	0.46	0.13	0.16	-0.09	0.40	0.04	-0.04	-0.10	-0.52	0.14
P3TL	0.19	-0.04	0.33	-0.42	-0.41	0.10	0.27	0.15	-0.45	-0.13
P4R	-0.03	0.17	0.20	-0.08	0.16	0.11	0.00	0.08	0.85	-0.25
P4L	-0.15	0.16	-0.10	0.35	0.14	-0.08	-0.14	0.41	0.34	-0.35
PHR	0.02	-0.02	0.17	0.90	-0.19	-0.01	0.05	0.08	0.07	-0.02
PHL	-0.08	-0.01	0.91	0.16	0.02	-0.16	0.08	0.09	0.03	0.00
CHR	-0.22	-0.07	0.15	-0.14	0.82	0.05	0.10	0.13	-0.03	0.04
CHL	-0.04	0.08	-0.01	-0.10	0.32	-0.17	-0.01	0.09	0.14	0.01
TEFR	-0.04	-0.07	-0.19	0.11	0.04	0.86	0.13	0.10	0.06	0.05
TEFL	0.09	0.21	-0.07	0.03	-0.16	0.81	-0.17	0.19	-0.03	-0.04
TDR	0.06	0.80	0.16	-0.03	0.03	-0.06	0.02	0.41	0.25	-0.09
TDL	-0.07	0.37	0.03	0.23	0.15	0.12	-0.05	0.70	0.06	-0.45
AXR	0.04	-0.03	0.17	0.87	-0.07	0.17	0.07	0.12	-0.10	-0.03
AXL	-0.04	0.00	0.94	0.13	0.09	-0.08	0.02	0.01	0.07	0.00
TDR3	-0.07	-0.01	0.02	0.07	-0.02	0.03	0.88	-0.03	-0.11	0.24
TDL3	0.13	0.02	-0.02	-0.04	0.08	0.04	0.22	0.02	-0.21	0.91
TDR4	-0.04	-0.56	-0.23	-0.02	-0.08	0.07	-0.64	-0.39	-0.19	-0.04
TDL4	-0.02	-0.27	-0.04	-0.12	-0.18	-0.19	-0.16	-0.77	0.09	-0.42
TDR5	0.12	0.33	0.35	-0.02	0.15	-0.17	0.54	0.47	0.28	-0.05
TDL5	-0.08	0.12	0.09	0.04	0.07	0.22	0.06	0.91	0.12	-0.03
TDR6	-0.11	0.87	-0.06	0.04	-0.03	0.17	-0.08	0.16	0.05	-0.05
TDL6	-0.01	0.53	-0.06	0.41	0.32	0.02	0.00	0.26	-0.23	-0.15

TABLE 5.21 : STATISTICAL (SPEARMAN) CORRELATIONS (SC) COMPARED TO TAXONOMIC (PEARSON) CORRELATIONS (TC) : SUMMARY ATTRIBUTES (EXCLUDING NOMINAL DIGITAL ATTRIBUTES) - MALES LOWER MATRIX, FEMALES UPPER MATRIX).

	FEMALES																	
ATTRIBUTE	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC
RTRADRC			.89	.89	.60	.75	.60	.66	.98	.99	.89	.91	.93	.94	.86	.87	.61	.65
LTRADRC	.87	.88			.65	.76	.58	.66	.90	.88	.95	.98	.88	.88	.92	.94	.63	.68
RTULNRC	.62	.66	.66	.66			.72	.81	.68	.79	.71	.80	.84	.93	.76	.86	.87	.85
LTULNRC	.58	.55	.56	.53	.74	.90			.64	.67	.71	.74	.72	.78	.83	.87	.66	.75
RTRC	.97	.99	.88	.87	.71	.72	.62	.57			.92	.91	.96	.96	.89	.94	.68	.69
LTRC	.88	.89	.96	.99	.72	.68	.68	.59	.90	.88			.91	.92	.96	.97	.64	.70
RTABSRC	.91	.92	.86	.84	.88	.90	.73	.73	.94	.95	.90	.85			.92	.92	.81	.79
LTABSRC	.84	.84	.90	.93	.79	.79	.85	.81	.87	.84	.95	.94	.92	.89			.72	.70
RTFPI	.60	.72	.61	.71	.86	.86	.65	.67	.65	.78	.64	.72	.80	.89	.71	.77		
LTFPI	.58	.62	.57	.62	.68	.74	.88	.86	.60	.67	.65	.64	.70	.77	.90	.90	.67	.80
RTPRC	.09	.05	.10	.16	.03	.02	.07	-.05	.09	.09	.11	.16	.07	.03	.09	.09	.01	-.09
LTPRC	.13	-.05	.13	.08	.06	.04	.07	.04	.13	-.02	.13	.10	.11	-.02	.11	.08	.04	-.08
TDR	.02	.22	.04	.16	.07	.23	.08	.19	.03	.25	.03	.19	.04	.25	.04	.19	.10	.29
TDL	.02	.24	.04	.17	.04	.33	.06	.26	.03	.30	.04	.20	.04	.32	.05	.22	.07	.29
RTPLMI	-.01	-.03	.02	.01	-.00	-.02	.04	.04	-.01	-.01	.02	.03	-.01	-.02	.03	.03	.03	-.11
LTPLMI	.03	-.03	.05	-.03	.04	.06	.04	.05	.03	.03	.05	-.01	.03	.02	.05	-.02	.03	-.07

	RTRADRC		LTRADRC		RTULNRC		LTULNRC		RTRC		LTRC		RTABSRC		LTABSRC		RTFPI	
ATTRIBUTE	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC				
RTRADRC	.60	.59	.11	.23	.09	.20	.02	-.02	.01	.05	.05	-.05	.01	-.08				
LTRADRC	.58	.62	.09	.16	.07	.08	.02	-.09	.01	.01	.05	.01	.01	-.13				
RTULNRC	.68	.65	-.00	.23	-.01	.13	.03	.10	.04	.03	.03	.02	.01	-.03				
LTULNRC	.87	.80	.02	.07	.03	.01	.03	.06	.03	.05	.04	-.01	.02	-.07				
RTRC	.61	.57	.11	.24	.09	.22	.01	.03	.01	.08	.04	-.02	.01	-.06				
LTRC	.62	.65	.09	.16	.08	.08	.02	-.03	.01	.03	.04	-.00	.01	-.13				
RTABSRC	.71	.65	.07	.25	.06	.19	.02	.04	.02	.04	.04	-.02	.00	-.07				
LTABSRC	.80	.76	.07	.14	.05	-.05	.03	-.02	.03	.03	.05	-.00	.01	-.11				
RTFPI	.69	.82	.01	.00	.03	-.09	.10	-.06	.07	-.07	.04	-.04	.02	-.09				
LTFPI			.04	-.01	.05	-.12	.09	-.20	.04	-.07	.05	-.07	.04	-.16				
RTPRC	.04	-.05			.87	.90	-.03	.02	-.00	-.08	.03	-.14	-.00	-.02				
LTPRC	.05	-.12	.85	.91			-.05	.02	-.02	-.07	.09	-.12	-.00	.02				
TDR	.09	.04	-.08	.04	-.12	.03			.50	.62	.61	.61	.30	.59				
TDL	.06	.19	-.07	.05	-.09	.05	.54	.61			.32	.54	.52	.62				
RTPLMI	.05	-.15	-.03	.12	-.04	.14	.62	.79	.30	.38			.48	.71				
LTPLMI	.03	-.12	-.06	.24	-.05	.19	.57	.68	.62	.64	.50	.54						

	LTFPI		RTPRC		LTPRC		TDR		TDL		RTPLMI		LTPLMI	

MALES

TABLE 5.22 : STATISTICAL (SPEARMAN) CORRELATIONS (SC) COMPARED TO TAXONOMIC (PEARSON) CORRELATIONS (TC) : DIGITAL RADIAL AND ULNAR RIDGE COUNTS (MALES LOWER MATRIX /FEMALES UPPER MATRIX).

FEMALES

	RFR1		RFU1		RFR2		RFU2		RFR3		RFU3		RFR4		RFU4		RFR5		RFU5	
	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC
RFR1			.36	.34	.43	.69	.31	.41	.40	.53	.22	.38	.41	.26	.29	.39	.39	.46	.20	.27
RFU1	.40	.23			.23	.31	.39	.48	.35	.27	.29	.41	.34	.47	.36	.26	.36	.40	.18	.15
RFR2	.46	.59	.29	.00			.23	.44	.60	.58	.25	.42	.45	.26	.34	.61	.37	.37	.24	.47
RFU2	.28	.41	.35	.46	.11	.31			.43	.69	.45	.50	.50	.71	.49	.53	.44	.64	.19	.42
RFR3	.49	.53	.30	.20	.64	.63	.34	.50			.35	.38	.63	.66	.47	.56	.49	.60	.25	.37
RFU3	.23	.33	.25	.38	.28	.43	.49	.64	.29	.40			.38	.48	.48	.63	.33	.54	.24	.45
RFR4	.46	.51	.40	.49	.53	.37	.38	.66	.64	.76	.34	.43			.46	.42	.62	.78	.10	.10
RFU4	.39	.40	.33	.33	.40	.40	.40	.60	.54	.64	.46	.60	.54	.51			.43	.52	.30	.62
RFR5	.45	.55	.40	.45	.49	.46	.36	.63	.56	.72	.32	.50	.66	.86	.40	.56			.19	.33
RFU5	.20	.35	.23	.17	.32	.45	.17	.25	.27	.34	.30	.42	.20	.10	.40	.50	.31	.37		
LFR1	.75	.85	.45	.20	.50	.67	.27	.40	.50	.56	.24	.30	.45	.44	.37	.53	.44	.50	.23	.40
LFU1	.37	.23	.65	.83	.31	.04	.26	.32	.25	.04	.27	.30	.33	.26	.30	.20	.39	.22	.24	.04
LFR2	.41	.45	.31	.10	.69	.73	.23	.53	.59	.73	.31	.56	.51	.49	.53	.63	.51	.54	.33	.46
LFU2	.29	.33	.29	.23	.22	.30	.50	.64	.33	.40	.41	.53	.38	.40	.31	.40	.35	.47	.16	.19
LFR3	.48	.45	.34	.29	.61	.63	.39	.61	.76	.84	.30	.56	.67	.74	.50	.61	.50	.60	.30	.35
LFU3	.21	.50	.20	.10	.32	.51	.42	.44	.37	.46	.56	.66	.33	.27	.42	.50	.31	.45	.30	.50
LFR4	.49	.44	.35	.30	.54	.50	.41	.67	.65	.80	.36	.50	.70	.04	.55	.63	.65	.05	.27	.31
LFU4	.33	.40	.27	.21	.40	.52	.33	.20	.50	.60	.40	.55	.45	.33	.60	.74	.41	.40	.45	.47
LFR5	.41	.51	.39	.43	.43	.53	.32	.56	.50	.72	.30	.54	.61	.76	.45	.64	.70	.06	.29	.49
LFU5	.20	.37	.16	.22	.31	.32	.07	.23	.25	.27	.17	.33	.20	.07	.36	.53	.26	.17	.50	.61
	RFR1		LFU1		RFR2		RFU2		RFR3		RFU3		RFR4		RFU4		RFR5		RFU5	

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	LFR1		LFU1		LFR2		LFU2		LFR3		LFU3		LFR4		LFU4		LFR5		LFU5	
	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC
RFR1	.77	.85	.29	.27	.39	.59	.39	.31	.43	.56	.23	.36	.42	.39	.20	.41	.41	.56	.20	.40
RFU1	.35	.33	.60	.81	.32	.34	.38	.30	.37	.33	.24	.10	.35	.41	.26	.17	.35	.40	.15	.04
RFR2	.47	.57	.24	.19	.61	.70	.39	.38	.52	.64	.29	.47	.45	.36	.38	.55	.43	.48	.29	.47
RFU2	.31	.28	.29	.47	.39	.55	.61	.79	.40	.64	.42	.60	.49	.70	.32	.33	.46	.65	.10	.32
RFR3	.47	.40	.29	.29	.62	.61	.47	.60	.75	.77	.41	.45	.61	.59	.43	.36	.51	.54	.29	.39
RFU3	.26	.21	.26	.33	.32	.42	.46	.52	.39	.63	.57	.59	.30	.53	.39	.22	.35	.49	.16	.20
RFR4	.37	.10	.27	.47	.51	.36	.47	.55	.65	.54	.41	.44	.70	.77	.35	.15	.60	.66	.20	.21
RFU4	.29	.39	.20	.21	.45	.69	.44	.49	.52	.72	.41	.69	.49	.60	.54	.56	.44	.50	.29	.57
RFR5	.39	.43	.29	.31	.50	.54	.39	.43	.53	.60	.30	.55	.64	.70	.20	.23	.02	.00	.21	.41
RFU5	.26	.25	.19	.12	.27	.54	.22	.43	.21	.45	.27	.54	.19	.32	.30	.29	.24	.30	.50	.56
LFR1			.33	.31	.46	.63	.37	.12	.40	.55	.29	.26	.44	.36	.35	.34	.44	.53	.24	.33
LFU1	.30	.21			.25	.24	.36	.37	.26	.31	.22	.10	.25	.36	.31	.14	.30	.31	.11	.02
LFR2	.47	.63	.31	.03			.27	.30	.60	.73	.31	.59	.57	.57	.34	.44	.51	.62	.25	.42
LFU2	.27	.32	.31	.24	.12	.34			.44	.54	.40	.64	.46	.53	.42	.31	.42	.41	.20	.33
LFR3	.51	.58	.31	.09	.69	.82	.31	.44			.30	.61	.70	.72	.42	.45	.55	.67	.23	.45
LFU3	.24	.50	.33	.21	.26	.53	.40	.42	.32	.44			.42	.64	.46	.47	.33	.59	.20	.47
LFR4	.50	.51	.31	.15	.57	.67	.37	.42	.71	.85	.37	.43			.37	.35	.67	.76	.10	.39
LFU4	.33	.52	.34	.12	.46	.49	.33	.36	.52	.56	.49	.57	.46	.45			.34	.36	.44	.55
LFR5	.45	.57	.37	.14	.49	.60	.31	.40	.55	.72	.30	.46	.64	.86	.40	.54			.20	.43
LFU5	.17	.51	.20	.27	.32	.37	.13	.29	.25	.20	.25	.42	.22	.19	.43	.57	.27	.20		
	LFR1		LFU1		LFR2		LFU2		LFR3		LFU3		LFR4		LFU4		LFR5		LFU5	

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TABLE 5.23 : STATISTICAL SPEARMAN CORRELATIONS (SC) COMPARED TO TAXONOMICAL (PEARSON) CORRELATIONS (TC): PALMAR RIDGE COUNTS (MALES LOWER MATRIX /FEMALES UPPER MATRIX).

	FEMALES											
	RAB		RBC		RCD		LAB		LBC		LCD	
	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC
RAB			.19	.48	.29	.50	.69	.88	.25	.42	.31	.60
RBC	.24	.61			.16	.31	.21	.55	.69	.83	.27	.41
RCD	.33	.57	.21	.61			.28	.39	.19	.27	.69	.73
LAB	.73	.86	.26	.61	.32	.58			.21	.50	.32	.52
LBC	.27	.44	.73	.80	.21	.40	.23	.48			.19	.43
LCD	.34	.40	.29	.48	.70	.68	.35	.36	.22	.38		
	RAB		RBC		RCD		LAB		LBC		LCD	

MALES

TABLE 5.24 : Statistical (Spearman) Correlations (SC) Compared to taxonomic (Pearson) (TC) : Palmar patterns and triradii (Males lower Matrix/females upper matrix).

FEMALES

	P2R		P3R		P4R		PHR		CHR		TEFR		TDR		P2L		P3L		P4L		PHL		CHL		TEFL		TDL	
	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC
P2R			.20	.29	.02	.08	-.04	-.09	-.04	-.04	.06	-.14	.49	.71	.49	.41	.21	-.06	-.01	.06	-.04	-.05	-.02	.03	.07	.15	.29	.26
P3R	.25	.26			-.53	-.39	.02	.17	.00	-.13	.09	.00	.46	.45	.18	.29	.49	.30	-.22	.06	.03	.02	-.02	-.12	.12	.16	.36	.43
P4R	-.03	.23	-.51	-.42			-.03	-.01	-.04	.09	-.01	.07	.32	.44	.01	-.07	-.24	.03	.39	.44	-.01	.19	.00	.24	-.01	.04	.07	.31
PHR	-.04	.08	-.03	.28	.00	-.15			.00	-.20	-.02	.03	-.01	.06	-.01	.04	.01	-.02	.00	.30	.46	.25	-.01	-.18	-.04	.05	.02	.24
CHR	-.01	.06	-.05	-.02	.04	-.02	.01	.17			-.06	.07	-.03	.02	-.04	.08	-.04	.20	-.01	.11	.07	.15	.52	.61	-.08	-.12	.00	.14
TEFR	.05	.05	.08	-.07	.02	.14	.02	-.29	-.08	-.04			.07	-.06	.02	.16	.16	.20	-.02	.01	.01	-.23	.01	-.13	.50	.65	.12	.10
TDR	.61	.75	.41	.49	.33	.44	-.01	.16	-.01	.08	.09	.05			.29	.36	.31	.15	.13	.32	.02	.16	.00	.19	.08	.19	.51	.62
P2L	.51	.68	.16	.10	.01	.21	.03	.13	.00	-.02	.07	-.08	.35	.50			.20	-.02	-.03	.08	-.04	-.04	-.01	.06	.09	.21	.34	.39
P3L	.23	.12	.47	.21	-.18	.21	-.01	-.06	-.02	-.10	.10	.18	.32	.26	.17	.13			-.41	-.37	.02	-.06	.01	.41	.12	.18	.45	.16
P4L	.01	.16	-.22	-.26	.34	.37	.02	.00	.00	-.01	-.04	.03	-.15	.20	.01	.21	-.41	-.39			-.02	.07	.00	.02	-.07	.04	.42	.64
PHL	.02	-.09	.03	.07	-.04	.05	.44	.57	.03	.21	.03	-.16	.02	.11	.04	.05	.03	-.10	.01	-.04			-.01	-.03	-.02	-.18	.02	.11
CHL	-.01	.21	-.04	-.08	.02	.15	.01	.20	.56	.48	-.04	.06	-.03	.17	-.02	.14	.01	.00	-.02	.00	.03	.12			-.03	-.18	.02	.16
TEFL	.09	.37	.13	.07	.00	.24	.02	-.14	-.06	.05	.48	.42	.14	.32	.06	.10	.11	.08	-.03	.11	.06	-.14	-.05	-.05			.06	.28
TDL	.37	.55	.33	.20	.11	.33	.02	.16	.01	-.07	.06	-.06	.56	.62	.46	.74	.37	.34	.46	.47	.08	.00	.00	.07	.12	.19		

MALES

Table 5.25: Analytical comparison of statistical and taxonomic correlations through pairwise t-tests, for 4 major groups of attributes.

$\bar{SC}$	$\bar{TC}$	Sd	Sd	$\bar{X}-\bar{X}$	r	t	DF	P(2)		
A: Summary Attributes: Total										
.307	.342	.35	.35	.04	.96	-4.1	119	.000	Males	(n=120)
.303	.323	.36	.37	.02	.98	-2.8	119	.006	Females	
A1: Digital only										
.720	.731	.13	.12	.01	.87	-1.15	44	.256	Males	(n=45)
.727	.744	.13	.12	.02	.85	-1.74	44	.088	Females	
A2: Palmar Only										
.233	.320	.30	.31	.09	.96	-4.0	14	.001	Males	(n=15)
.227	.280	.28	.35	.05	.96	-1.8	14	.088	Females	
A3: Digital vs. Palmar										
.015	.055	.04	.10	.04	.002	-2.3	59	.006	Males	(n=60)
.005	.018	.00	.01	.01	.336	-1.4	59	.172	Females	
B: Digital Ridge Counts										
.393	.458	.14	.19	.07	.76	-7.2	189	.000	Males	(n=190)
.383	.456	.14	.17	.07	.75	-9.0	189	.000	Females	
B1: Radial Ridge Counts										
.561	.642	.11	.15	.08	.84	-6.8	44	.000	Males	(n=45)
.539	.575	.12	.16	.04	.77	-2.7	44	.010	Females	
B2: Ulnar Ridge Counts										
.349	.404	.13	.19	.06	.81	-3.4	44	.001	Males	(n=45)
.346	.406	.14	.19	.06	.75	-3.2	44	.003	Females	
B3: Radial vs. Ulnar Ridge Counts										
.337	.399	.09	.16	.06	.41	-4.3	99	.000	Males	(n=100)
.332	.426	.09	.14	.09	.62	-8.8	99	.000	Females	
C: Palmar Patterns and Triradii										
.135	.196	.17	.18	.06	.83	-5.8	90	.000	Males	(n=91)
.129	.183	.17	.16	.05	.76	-4.5	90	.000	Females	
D: Palmar Ridge Counts										
.362	.551	.19	.15	.19	.75	-5.8	14	.000	Males	(n=15)
.329	.521	.19	.18	.19	.90	-8.7	14	.000	Females	

$\bar{SC}$ = Mean of Statistical Correlations; $\bar{TC}$ = Mean of taxonomic Correlations

$\bar{X}-\bar{X}$ = $\bar{TC}$ - $\bar{SC}$; r = Pearson's r; P(2) = 2 tailed probability.

Table 6.1: Concordance between principal vectors and components as measured by Spearman's correlation coefficient.

i) Correlations between PCO vectors from distances based on 26 summary traits and 110 traits:

Males:

PCO26(1) vs PCO110(1) = 0.88
PCO26(2) vs PCO110(2) = 0.51
PCO26(3) vs PCO110(3) = -0.74

Females:

PCO26(1) vs PCO110(1) = 0.89
PCO26(2) vs PCO110(2) = -0.09 : vs PCO110(3) = -0.49
PCO26(3) vs PCO110(3) = -0.24 : vs PCO110(2) = 0.74

ii) Correlations between PCO vectors and unrotated component scores: (UNC)

Males:

PCO26(1) vs UNC1 = 0.96	:	PCO110(1) vs UNC1	= 0.87
PCO26(2) vs UNC2 = -0.78	:	PCO110(2) vs UNC2	= -0.39
		" vs UNC3	= -0.26
		" vs UNC4	= 0.41
PCO26(3) vs UNC3 = -0.84	:	PCO110(3) vs UNC3	= 0.70

Females:

PCO26(1) vs UNC1 = 0.97	:	PCO110(1) vs UNC1	= 0.90
PCO26(2) vs UNC2 = -0.70	:	PCO110(2) vs UNC2	= -0.15
		" vs UNC3	= 0.65
PCO26(3) vs UNC3 = 0.66	:	PCO110(3) vs UNC3	= 0.02
		" vs UNC2	= 0.45

iii) Correlations between PCO vectors and rotated component scores: (C)

Males:

PCO26(1) vs C1 = 0.33	:	PCO110(1) vs C1	= 0.34
" vs C2 = 0.62	:	" vs C2	= 0.60
PCO26(2) vs C2 = 0.01	:	PCO110(2) vs C2	= 0.07
" vs C3 = -.075	:	" vs C3	= -0.53
		" vs C4	= -0.40
PCO26(3) vs C3 = -0.13	:	PCO110(3) vs C3	= -0.01
" vs C1 = 0.55	:	" vs C1	= -0.55

Table 6.1: (continued)

Females:

PCO26(1) vs C1 = 0.73	:	PCO110(1) vs C1 = 0.67
PCO26(2) vs C2 = -0.70	:	PCO110(2) vs C2 = 0.28
		" vs C3 = -0.46
PCO26(3) vs C3 = -0.51	:	PCO110(3) vs C3 = 0.35
" vs C5 = 0.33	:	" vs C2 = 0.38

iv) Correlations between unrotated and rotated component scores:

Males:

UNC1 vs C1 = 0.31	:	vs C2 = 0.63		
UNC2 vs C2 = 0.00				
" vs C3 = 0.26				
UNC3 vs C3 = 0.31	:	vs C4 = 0.28	:	vs C1 = -0.58
UNC4 vs C4 = -0.30	:	vs C6 = 0.48		
UNC5 vs C5 = -0.28	:	vs C6 = 0.49	:	vs C4 = -0.30
UNC6 vs C6 = -0.03	:	vs C4 = 0.37	:	vs C5 = 0.55

Females:

UNC1 vs C1 = 0.71						
UNC2 vs C2 = 0.42	:	vs C4 = 0.38				
UNC3 vs C3 = -0.32	:	vs C2 = 0.52				
UNC4 vs C4 = -0.22	:	vs C3 = 0.44	:	vs C5 = -0.36	:	vs C6 = 0.31
UNC5 vs C5 = 0.16	:	vs C4 = 0.46	:	vs C6 = 0.52		
UNC6 vs C6 = 0.03	:	vs C3 = -0.37	:	vs C5 = -0.47		

Notes:

a) All combinations not specified show very low correlations.

b) All correlations above 0.2 are significant.

c) All correlations between male and female vectors and components are very low: usually below 0.1: The highest is V26(2) males vs UNC3 fmelaes = -0.34.

TABLE 7.1 : T-test Probabilities for differences in attribute means between the sexes and X^2 Probabilities for comparisons involving qualitative attributes.

Attribute	Right Hand T.Prob.	Left Hand T.Prob.	Attribute	Right Hand T.Prob.	Left Hand T.Prob.	Right Hand X^2 Prob.	Left Hand X^2 Prob.
RF1	.000	.000	AB	.000	.024		
RF2	.188	.000	BC	.348	.004		
RF3	.009	.000	CD	.009	.000		
RF4	.000	.000	TPRC	.000	.000		
RF5	.000	.000	TD	.000	.000		
TRADRC	.000	.000	TOTHI	.434	.128		
FU1	.000	.774	TPLMI	.008	.000		
FU2	.000	.238	ATD	.000	.000		
FU3	.000	.415					
FU4	.000	.040					
FU5	.000	.418					
TULNRC	.000	.483					
F1	.000	.000	PT	.593	.013	.401	.004
F2	.002	.000	RT	.207	.004	.437	.014
F3	.000	.000	P2	.000	.000	.000	.000
F4	.000	.000	P3	.000	.000	.000	.001
F5	.000	.000	P3T	.075	.008	.084	.009
TRC	.000	.000	P4	.000	.428	.000	.004
ABS1	.000	.000	PH	.265	.318	.495	.260
ABS2	.001	.014	CH	.948	.227	.995	.420
ABS3	.000	.000	TEF	.345	.004	.410	.009
ABS4	.000	.000	t	.000	.000	.000	.000
ABS5	.000	.000	t'	.000	.000	.000	.000
TABSRC	.000	.000	t''	.724	.329	.420	.519
D1	.000	.596	t^b	.725	.233	.748	.247
D2	.000	.232	FP1	-	-	.000	.001
D3	.000	.011	FP2	-	-	.001	.002
D4	.000	.003	FP3	-	-	.000	.006
D5	.000	.180	FP4	-	-	.000	.000
TFPI	.000	.021	FP5	-	-	.000	.048
			TOTAL FINGER PATTERNS			.000	.000

TABLE 7.2 : T-test probabilities for univariate comparisons between ethnic categories (males).
(1) Cushites; (2) Nilotes; (3) Bantu.

Attribute	Right Hand			Left Hand		
	1v2	1v3	2v3	1v2	1v3	2v3
FR1	.000	.000	.097	.000	.000	.760
FR2	.002	.000	.017	.000	.000	.029
FR3	.032	.020	.987	.000	.000	.574
FR4	.001	.059	.043	.002	.000	.764
FR5	.000	.000	.470	.000	.000	.323
TRADRC	.000	.000	.490	.000	.000	.216
FU1	.000	.044	.000	.000	.263	.000
FU2	.005	.073	.105	.044	.035	.883
FU3	.027	.004	.572	.108	.006	.257
FU4	.003	.000	.061	.045	.002	.284
FU5	.479	.198	.063	.771	.003	.002
TULNRC	.000	.000	.364	.001	.001	.683
F1	.000	.000	.069	.000	.000	.292
F2	.000	.000	.312	.003	.000	.284
F3	.012	.002	.725	.001	.000	.220
F4	.001	.022	.110	.002	.000	.701
F5	.000	.000	.455	.000	.000	.191
TRC	.000	.000	.368	.000	.000	.461
ABS1	.000	.000	.001	.000	.000	.009
ABS2	.000	.000	.833	.001	.000	.266
ABS3	.007	.001	.690	.001	.000	.299
ABS4	.000	.000	.990	.003	.000	.401
ABS5	.000	.000	.530	.000	.000	.021
TABSRC	.000	.000	.373	.000	.000	.571
D1	.002	.107	.031	.000	.649	.000
D2	.036	.043	.701	.019	.007	.895
D3	.046	.007	.579	.049	.003	.366
D4	.055	.004	.465	.875	.047	.050
D5	.669	.374	.119	.895	.005	.001
TFPI	.001	.000	.910	.000	.000	.640
AB	.000	.176	.002	.000	.014	.001
BC	.000	.000	.614	.028	.000	.111
CD	.081	.906	.016	.617	.975	.500
TPRC	.000	.003	.015	.002	.014	.159
TD	.218	.001	.017	.163	.097	.871
TOTHI	.825	.213	.258	.025	.128	.232
TPLMI	.137	.030	.579	.004	.000	.524
ATD	.000	.000	.050	.000	.000	.009
PT	.020	.018	.641	.000	.000	.524
RT	.221	.052	.619	.000	.000	.413
P2	.462	.052	.001	.619	.086	.009
P3	.120	.238	.499	.962	.463	.366
P3T	.952	.135	.098	.256	.926	.121
P4	.512	.001	.006	.137	.235	.544
PH	.478	.454	.960	.687	.199	.361
CH	.593	.049	.124	.004	.014	.353
TEF	.056	.020	.981	.000	.000	.960
t	.003	.000	.670	.009	.001	.683
t'_b	.001	.000	.874	.007	.000	.477
t^b	.410	.033	.180	.002	.006	.445

TABLE 7.3 : T-test probabilities for univariate comparisons between ethnic categories (females)
(1) Cushites; (2) Nilotes; (3) Bantu

Attribute	Right Hand			Left Hand		
	1v2	1v3	2v3	1v2	1v3	2v3
FR1	.000	.001	.890	.000	.000	.422
FR2	.418	.019	.036	.075	.000	.014
FR3	.648	.830	.721	.304	.095	.430
FR4	.118	.955	.025	.304	.095	.430
FR5	.068	.072	.827	.001	.000	.360
TRADRC	.047	.047	.930	.001	.000	.288
FU1	.009	.852	.000	.000	.905	.000
FU2	.341	.647	.415	.616	.747	.237
FU3	.398	.161	.440	.532	.106	.177
FU4	.403	.001	.001	.933	.177	.054
FU5	.131	.007	.115	.121	.323	.879
TULNRC	.035	.026	.788	.110	.255	.369
F1	.001	.002	.554	.000	.000	.015
F2	.073	.005	.219	.216	.028	.213
F3	.387	.448	.836	.313	.084	.385
F4	.139	.700	.101	.078	.005	.226
F5	.071	.000	.015	.002	.000	.249
TRC	.031	.044	.754	.002	.000	.543
ABS1	.000	.042	.020	.000	.002	.000
ABS2	.222	.077	.537	.233	.091	.565
ABS3	.428	.297	.826	.316	.038	.195
ABS4	.176	.037	.469	.277	.015	.096
ABS5	.032	.006	.603	.011	.000	.113
TABSRC	.023	.018	.876	.006	.001	.776
D1	.001	.094	.009	.000	.062	.000
D2	.739	.658	.881	.080	.055	.849
D3	.269	.047	.277	.745	.146	.128
D4	.115	.002	.071	.420	.032	.082
D5	.022	.003	.388	.257	.132	.789
TFPI	.012	.008	.866	.013	.018	.635
AB	.002	.078	.049	.006	.009	.730
BC	.003	.000	.430	.017	.000	.137
CD	.012	.652	.001	.001	.011	.107
TPRC	.000	.017	.044	.001	.001	.582
ATD	.128	.000	.000	.409	.000	.000
TD	.697	.182	.203	.275	.265	.927
TOTHI	.901	.123	.068	.158	.092	.724
TPLMI	.160	.382	.400	.001	.000	.968
PT	.002	.017	.176	.000	.000	.626
RT	.001	.004	.264	.000	.000	.891
P2	.516	.237	.569	.186	.077	.738
P3	.767	.955	.603	.454	.483	.873
P3T	.475	.906	.360	.166	.524	.271
P4	.570	.144	.288	.296	.150	.707
PH	.794	.410	.446	.888	.751	.822
CH	.741	.264	.043	.178	.082	.755
TEF	.000	.004	.183	.000	.000	.713
t	.004	.002	.931	.020	.000	.139
t'_b	.005	.020	.352	.025	.003	.479
t'	.652	.134	.171	.063	.040	.839

Table 7.4; Summary of inter-category T-test probabilities; number of significant results for types of attribute group.

Variable Group	Number of Attributes	Number of Significant Differences (<0.05) Males 1v2*	Males 1v3	Males 2v3	Females 1v2	Females 1v3	Females 2v3
Radial/Unilateral Ridge Counts	24	24	23	3	11	16	4
Ulnar/Absolute Ridge Counts	24	21	22	7	9	12	4
Finger Pattern Intensity	12	8	9	4	5	5	2
Total Digital	60	53	54	14	25	33	10
%		88.3	90.0	23.3	41.7	55.0	16.7
Palmar Ridge Counts	8	6	5	4	8	7	3
Palmar Triradial Intensity	6	2	3	1	1	1	0
Thenar Patterns	6	4	5	0	6	6	0
Interdigital Patterns	8	0	1	3	0	0	0
Hypothenar/Axial Patterns Triradii & ATD angle 12	12	8	10	2	4	6	3
Total Palmar	40	20	24	10	19	20	6
%		50.0	60.0	25.0	47.5	50.0	15.0
All Attributes Number & %	100	73	78	24	44	53	16

* 1 = Cushitic Category
2 = Nilotic Category
3 = Bantu Category

Table 7.5: Differences in means, standard deviations or frequencies between the sexes (males minus females) in Kenyan Ethnic Categories for a representative sample of attributes.

	Cushites		Nilotes		Bantu	
	Differences in					
Variables	mean or %	SD	mean or %	SD	mean or %	SD
DIGITAL						
RTRADRC	5.2	0.52	2.4	-0.14	2.8	-0.26
LTRADRC	6.36	0.33	4.63	-0.51	4.6	-0.31
RTRC	5.35	0.56	2.70	-0.16	3.17	-0.30
LTRC	5.75	0.58	4.17	-0.81	4.00	-0.53
RTULNRC	5.24	3.29	3.01	0.41	3.51	1.36
LTULNRC	1.77	1.97	0.07	-1.10	-0.40	0.06
RTABSRC	10.57	3.68	5.38	0.02	6.39	1.36
LTABSRC	8.36	3.02	4.58	-1.73	3.16	-0.32
RTFPI(x10)	3.68	0.28	3.06	0.01	3.11	0.08
LTFPI(x10)	1.26	-0.11	1.22	-1.41	0.55	-1.20
RARCH	-0.6	-	-0.9	-	-1.2	-
LARCH	-1.4	-	-1.8	-	-1.8	-
RULOOP	-6.3	-	-4.9	-	-4.2	-
LULOOP	0.0	-	1.6	-	2.7	-
RWHORL	5.4	-	3.2	-	3.3	-
LWHORL	1.5	-	1.3	-	-1.3	-
RDLOOP	0.7	-	1.9	-	1.1	-
LDLOOP	-0.4	-	0.1	-	1.4	-
PALMAR						
TDR(x10)	0.49	0.63	0.73	0.31	1.01	0.68
TDL(x10)	0.78	0.71	0.81	0.37	0.89	0.77
RTPLMI(x10)	0.45	0.62	0.21	-0.71	0.98	0.44
LTPLMI(x10)	1.32	1.66	0.94	0.94	1.45	1.28
RTOTHI(x10)	-0.17	0.22	-0.19	-0.24	-0.01	0.03
LTOTHI(x10)	-0.30	-0.35	-0.39	-0.38	-0.11	0.09
RTPRC	-1.11	1.81	-0.80	0.69	-1.03	0.78
LTPRC	-0.36	1.60	-0.97	0.76	-1.42	0.37
TEFR	1.6	-	-3.8	-	-0.7	-
TEFL	8.7	-	4.8	-	6.2	-
P3R	7.1	-	12.2	-	9.8	-
P3L	1.5	-	3.5	-	4.8	-
P4R	-9.8	-	-10.0	-	-6.5	-
P4L	-0.4	-	0.4	-	-1.3	-
CHR	1.3	-	-1.0	-	0.2	-
CHL	-0.6	-	-3.0	-	-1.1	-
TR	5.0	-	6.6	-	5.6	-
TL	4.0	-	4.6	-	7.2	-

Table 8.1: Principal coordinates analysis of Kenyan ethnic groups (males); Analysis based on 26 summary traits.

Δg distance matrix:

Somali												
Galla	68											
Dorobo	105	145										
Maasai	253	121	482									
Kalenjin	451	240	649	60								
Karimojong	714	505	1027	339	438							
Luo	591	424	801	355	440	167						
Luyia	452	239	586	176	132	385	299					
Central Bantu	468	218	603	122	78	371	354	58				
Pokomo	468	240	610	199	192	352	300	47	59			
Mji Kenda	560	408	570	551	600	629	435	226	325	201		
Taita	1375	995	1665	683	548	610	730	412	458	361	743	
	SOM	GAL	DOR	MAA	KAL	KAR	LUO	LUY	CB	POK	MJI	TAI

Latent Vectors (coordinates)

	1	2	3	4	5	6	7	8
Somali	15.13	1.80	1.01	-3.83	0.61	-3.32	-0.60	-0.36
Galla	9.49	0.51	2.05	-1.36	-0.67	1.09	-1.33	-0.34
Dorobo	19.35	-3.15	-1.44	-1.86	1.26	3.49	1.36	0.14
Maasai	1.70	4.00	7.22	0.18	-0.66	-2.09	-0.09	1.43
Kalenjin	-2.13	0.69	9.94	3.53	1.06	-0.09	1.65	0.50
Karimojong	-7.69	12.65	-4.13	-2.27	-4.33	0.88	1.23	-0.76
Luo	-3.88	9.38	-8.43	3.11	5.01	0.25	-0.90	0.62
Luyia	-3.58	-4.11	0.45	3.00	1.00	-1.02	1.50	-3.13
Central Bantu	-3.29	-2.67	3.69	4.25	-2.52	1.56	-0.91	1.01
Pokomo	-4.37	-4.34	-0.90	0.43	-1.01	0.37	-3.52	-1.05
Mji Kenda	0.05	-9.21	-11.94	1.33	-1.98	-1.78	1.21	1.39
Taita	-20.79	-5.54	2.50	-6.50	2.24	0.64	0.39	0.55

Squared distances from centroid = Somali 261.1; Galla 102.6; Dorobo 406.0; Maasai 80.0; Kalenjin 121.4; Karimojong 263.0; Luo 210.4; Luyia 53.4; Central Bantu 61.9; Pokomo 54.8; Mji Kenda 239.7; Taita 517.4

Latent roots (percentage variance):

1=1250.1(52.7); 2=436.2(18.4); 3=409.7(17.3); 4=118.6(5.0); 5= 65.2(2.8); 6= 36.8(1.6); 7= 26.1(1.1); 8= 17.7(0.7); Trace = 2371.5

Table 8.2: Principal coordinates analysis of Kenyan ethnic groups (females); Analysis based on 26 summary traits.

Δg distance matrix:

Somali											
Galla	153										
Maasai	267	90									
Kalenjin	541	213	196								
Karimojong	284	199	116	244							
Luo	292	250	167	377	130						
Luyia	482	192	119	75	146	205					
Central Bantu	434	115	117	63	239	321	57				
Pokomo	627	280	142	224	242	280	127	146			
Mji Kenda	371	437	413	918	519	295	661	643	624		
Taita	461	230	151	228	173	134	114	171	170	477	
	SOM	GLA	MAA	KAL	KAR	LUO	LUY	CB	POK	MIJ	TAI

Latent vectors (coordinates)

	1	2	3	4	5	6	7	8
Somali	-10.69	-10.20	-1.73	0.36	0.91	1.45	1.03	0.20
Galla	-1.35	-6.56	3.51	-0.05	1.97	0.31	-0.00	-1.38
Maasai	0.32	-0.63	1.26	3.66	0.89	-1.09	-4.10	0.46
Kalenjin	10.95	-3.91	-0.06	-2.41	-1.89	0.44	-0.05	2.82
Karimojong	0.09	-0.50	-7.43	3.59	-0.85	-3.11	1.50	0.03
Luo	-4.89	4.56	-5.80	-1.61	-1.06	3.42	-1.17	-0.27
Luyia	7.20	1.32	-1.02	-1.57	-2.50	-0.26	-0.41	-2.53
Central Bantu	6.84	-2.12	4.94	-1.77	-1.14	-0.77	0.70	-0.61
Pokomo	6.43	6.55	3.30	5.36	1.09	2.28	1.79	0.28
Mji Kenda	-17.08	5.96	4.96	-1.14	-2.12	-1.39	0.42	0.71
Taita	2.19	5.55	-1.92	-4.42	4.71	-1.29	0.29	0.29

Squared distances from centroid = Somali 228.8; Galla 69.5; Maasai 34.8; Kalenjin 153.1; Karimojong 81.6; Luo 96.0; Luyia 71.2; Central Bantu 82.8; Pokomo 133.4; Mji Kenda 360.3; Taita 83.1

Latent roots (percentage variance):

1=696.4(49.9); 2=229.0(21.4); 3=170.3(12.2); 4=89.9(6.5); Trace = 1394.7
5= 46.4(3.3); 4= 34.4(2.5); 7= 25.6(1.8); 8=17.6(1.3);

Table 8.3: Analysis of variance for mean ethnic group distances between and within ethnic categories for males and females.

Division	No.	Mean	SD	Max.	Min.
a) Males:					
Between all Ethnic Categories	38	433.3	256.9	1375	78
Within Cushites	1	68.0	-	68	68
Within Nilotes	6	298.2	153.5	440	60
Within Bantu	10	288.9	219.4	743	47

F Ratio = 1.857: P = 0.149: Between groups D.F. = 3; Within groups D.F. = 51
Bartlett-Box F = 0.967: P = 0.380

b) Females:					
Between all Ethnic Categories	38	283.4	174.8	918	63
Within Cushites	1	153.0	-	153	153
Within Nilotes	6	205.0	96.1	377	116
Within Bantu	10	319.1	249.7	661	58

F Ratio = 0.641: P = 0.592: Between groups D.F. = 3; Within groups D.F. = 51
Bartlett-Box F = 2.476: P = 0.084

Table 8.4: T-tests for mean inter-ethnic group distances between (0) and within (1) ethnic categories for males and females-

				Differences in variances		Pooled variance estimate		
Division	No	Mean	SD	F	Prob.	T	DF	Prob.
a) Males:								
0	38	433.4	256.9	1.76	0.223	2.21	53	0.032
1	17	279.2	193.5					
b) Females								
0	38	283.4	174.8	1.37	0.419	0.27	53	0.804
1	17	269.1	204.7					

Table 8.5: Qualitative breakdown of the distribution of inter-ethnic group distances between and within ethnic categories.

		Δg Distance Categories					
		LT 200		200-399		400 +	
Division	No	no	%	no	%	no	%
Males:							
Between Ethnic Categories	38	7	18.4	11	28.9	20	52.6
Within Ethnic Categories	17	6	35.3	6	35.3	5	29.4
Females:							
Between Ethnic Categories	38	13	34.2	16	42.1	9	23.7
Within Ethnic Categories	17	11	64.7	2	11.8	4	21.5

Males: X^2(2 d.f.) = 2.96; p = 0.228

Females: X^2(2 d.f.) = 5.81; p = 0.055

Table 8.6: Distribution of $\Delta\bar{g}$ distances between populations at various sample sizes.

Sample Size	Number of Distances	Mean	Sd	Se	Median	Range
LT30(M,26)	55	917	398	49	830	2172
(F,26)	120	806	431	40	708	2360
(M,110)	55	1169	254	34	1145	1290
(F,110)	120	1122	284	26	1096	1475
30-49						
(M,26)	45	1119	719	107	940	3437
(F,26)	120	533	298	27	449	1571
(M,110)	45	1049	386	64	918	1486
(F,110)	120	669	192	18	629	962
50-59						
(M,26)		579	323	44	498	1358
(F,26)	21	367	152	33	325	468
(M,110)	55	646	214	29	628	765
(F,110)	21	497	96	21	481	329
60-69						
(M,26)	55	579	329	44	512	1656
(F,26)	10	541	320	101	452	1047
(M,110)	55	635	207	28	602	987
(F,110)	10					
70-99						
(M,26)	21	421	204	45	354	783
(F,26)	6	223	98	40	191	257
(M,110)	21	465	124	27	459	494
(F,110)	6	335	67	27	303	158
100+						
(M,26)		427	203	44	386	737
(F,26)	10	770	608	192	476	1952
(M,110)	21	346	103	23	338	399
(F,110)	10	663	317	100	532	1071

TABLE 8:7 : ANALYSIS OF VARIANCE FOR MALE ETHNIC GROUP MINIMAL POPULATION SAMPLES (NON SUMMARY AND SUMMARY ATTRIBUTES)

	CUSHITES		MAASAI		DOROBO		KALENJIN		LUO/KAR		LUYIA		CENT.BANTU		COAST.BANTU	
	F	P	F	P	F	P	F	P	F	P	F	P	F	P	F	P
A) NON SUMMARY DIGITAL ATTRIBUTES																
RFR1	0.45	0.773	0.94	0.392	1.07	0.175	2.09	0.009*	1.22	0.298	1.11	0.353	1.03	0.429	1.31	0.241
RFR2	0.65	0.627	0.08	0.928	0.18	0.675	2.96	0.008*	1.33	0.268	1.23	0.255	1.65	0.060	2.02	0.051
RFR3	0.78	0.590	1.75	0.176	1.28	0.277	3.56	0.002*	1.12	0.329	1.49	0.117	1.53	0.095	1.95	0.059
RFR4	0.13	0.971	0.62	0.540	0.33	0.570	1.60	0.150	1.27	0.283	2.01	0.001*	1.14	0.319	3.94	0.000*
RFR5	0.35	0.842	0.17	0.845	0.00	0.999	3.83	0.001*	0.92	0.399	2.00	0.020*	0.55	0.995	2.24	0.030*
LFR1	0.00	0.523	2.32	0.101	0.71	0.401	2.31	0.033*	2.03	0.133	0.70	0.695	1.56	0.003	1.30	0.249
LFR2	1.61	0.170	0.34	0.711	0.01	0.994	1.60	0.145	0.01	0.446	1.34	0.107	2.27	0.005*	2.76	0.000*
LFR3	1.06	0.375	0.98	0.379	0.10	0.676	1.09	0.001	2.02	0.135	2.36	0.005*	1.90	0.023*	3.09	0.003*
LFR4	0.04	0.997	0.01	0.993	0.53	0.470	2.24	0.039*	1.23	0.293	2.70	0.001*	1.60	0.054	2.61	0.012*
LFR5	0.65	0.626	0.33	0.710	0.66	0.410	2.57	0.019*	0.62	0.540	2.65	0.001*	0.93	0.531	1.36	0.220
RFU1	0.42	0.796	0.20	0.755	1.36	0.240	1.17	0.323	1.16	0.316	1.55	0.007	0.02	0.650	2.60	0.012*
RFU2	0.10	0.901	0.32	0.720	1.47	0.230	0.56	0.702	1.04	0.345	1.61	0.070	0.43	0.900	1.21	0.293
RFU3	1.12	0.325	0.26	0.700	0.13	0.721	0.05	0.459	0.47	0.627	1.47	0.125	0.79	0.479	2.45	0.010*
RFU4	1.66	0.157	2.43	0.090	3.21	0.077	1.16	0.330	6.06	0.003*	1.15	0.316	1.05	0.020*	1.59	0.130
RFU5	1.03	0.121	0.09	0.414	0.50	0.450	0.26	0.950	1.57	0.210	0.50	0.972	1.10	0.350	3.15	0.003*
LFU1	2.22	0.066	0.17	0.047	0.66	0.420	1.10	0.314	1.31	0.271	1.74	0.051	0.72	0.750	2.04	0.040*
LFU2	0.37	0.031	0.07	0.420	0.07	0.792	0.06	0.451	5.61	0.004*	0.64	0.023	0.55	0.903	2.21	0.032*
LFU3	1.09	0.360	0.21	0.014	0.00	0.907	1.55	0.100	1.43	0.240	0.07	0.505	0.06	0.590	1.60	0.112
LFU4	2.05	0.023*	1.10	0.336	0.44	0.500	1.03	0.093	2.12	0.122	1.29	0.217	1.03	0.066	0.90	0.506
LFU5	2.36	0.053	2.70	0.065	3.70	0.050	0.55	0.773	0.94	0.394	0.61	0.047	0.09	0.569	0.00	0.590
B) NON SUMMARY PALMAR ATTRIBUTES																
RAB	1.00	0.409	0.69	0.501	5.52	0.220	2.37	0.029*	0.14	0.565	2.13	0.012*	4.29	0.000*	2.16	0.036*
RBC	0.64	0.632	1.11	0.332	0.25	0.620	0.75	0.613	1.03	0.360	1.51	0.109	3.09	0.000*	1.02	0.415
RCD	0.63	0.642	2.59	0.070	0.00	0.999	1.49	0.179	2.15	0.119	2.52	0.003*	4.14	0.000*	3.24	0.002*
LAB	0.91	0.460	1.36	0.261	0.65	0.423	3.07	0.001*	0.57	0.566	2.27	0.007*	4.16	0.000*	1.45	0.102
LBC	2.30	0.057	0.09	0.915	0.55	0.461	1.43	0.202	0.03	0.960	1.29	0.215	3.20	0.000*	1.49	0.170
LCD	1.30	0.240	2.65	0.074	1.14	0.209	0.56	0.702	0.30	0.730	1.46	0.131	5.26	0.000*	2.24	0.030*
PTR	0.06	0.406	0.02	0.902	2.23	0.140	1.35	0.235	0.21	0.011	0.00	0.663	1.24	0.239	0.95	0.739
RTR	1.09	0.363	0.62	0.541	4.05	0.031*	0.46	0.036	0.20	0.753	0.96	0.405	1.02	0.430	1.05	0.392
P2R	1.22	0.301	0.24	0.707	0.25	0.621	1.93	0.074	1.77	0.172	0.40	0.900	0.95	0.499	1.34	0.231
P3R	0.30	0.077	1.13	0.324	3.64	0.000	2.70	0.012*	0.06	0.941	0.03	0.620	1.20	0.212	0.62	0.739
P3TR	0.60	0.603	0.03	0.536	0.39	0.573	2.03	0.000	0.54	0.506	1.14	0.325	1.23	0.244	0.54	0.005
P4R	0.12	0.974	0.34	0.712	3.70	0.055	0.77	0.594	0.14	0.009	0.54	0.096	2.37	0.003*	1.29	0.251
PHR	0.64	0.632	0.39	0.677	1.00	0.302	0.46	0.032	1.11	0.332	2.00	0.015*	0.62	0.047	3.06	0.004*
CHR	0.60	0.604	0.14	0.070	0.00	0.942	0.99	0.000	0.20	0.021	1.34	0.104	1.05	0.020*	2.14	0.030*
TEFR	0.97	0.421	0.25	0.777	3.94	0.051	0.07	0.517	0.01	0.992	0.00	0.577	1.13	0.322	1.07	0.304
TR	1.73	0.141	0.61	0.544	1.64	0.204	4.50	0.000*	2.65	0.072	1.33	0.190	1.73	0.045*	1.26	0.270
T1R	1.05	0.300	1.06	0.349	0.90	0.325	3.52	0.002*	2.61	0.076	0.07	0.591	1.50	0.000	1.56	0.146
TBR	0.40	0.010	0.10	0.903	0.00	0.942	1.07	0.300	0.22	0.002	1.53	0.104	1.71	0.040*	2.03	0.049*
PTL	0.39	0.010	0.10	0.030	1.75	0.109	0.90	0.439	0.22	0.005	2.05	0.016*	1.02	0.432	0.50	0.374
RTL	1.07	0.369	0.21	0.113	2.05	0.095	1.13	0.347	2.12	0.122	1.66	0.067	1.04	0.409	0.59	0.767
P2L	1.63	0.166	1.25	0.290	6.05	0.016*	0.60	0.664	0.25	0.701	0.65	0.013	1.13	0.330	1.07	0.304
P3L	1.39	0.237	1.95	0.145	0.00	0.773	1.31	0.252	0.51	0.599	1.00	0.377	1.90	0.023*	1.13	0.343
P3TL	0.56	0.609	2.01	0.063	1.67	0.201	0.41	0.009	0.11	0.095	1.30	0.200	1.30	0.156	0.06	0.542
P4L	0.33	0.053	0.04	0.432	0.42	0.520	0.21	0.975	0.29	0.747	0.90	0.557	1.11	0.344	0.74	0.641
PHL	2.00	0.094	0.02	0.903	0.27	0.607	0.63	0.710	0.63	0.531	1.25	0.239	1.74	0.043*	1.23	0.206
CHL	0.93	0.446	0.39	0.677	0.01	0.910	0.37	0.099	0.74	0.476	1.54	0.099	1.56	0.004	1.20	0.260
TEFL	0.74	0.560	0.00	0.410	2.47	0.120	1.14	0.340	0.90	0.370	1.91	0.027*	1.03	0.417	0.54	0.000
TL	0.74	0.567	0.01	0.991	1.64	0.204	2.77	0.012*	2.10	0.115	1.01	0.443	1.06	0.027*	0.97	0.455
T1L	1.26	0.203	0.30	0.742	1.00	0.320	2.55	0.020*	1.14	0.322	0.09	0.559	0.99	0.462	1.67	0.115
TBL	1.11	0.351	1.02	0.361	0.01	0.910	1.17	0.322	0.03	0.437	1.29	0.211	1.31	0.193	1.37	0.216
C) DIGITAL AND PALMAR SUMMARY ATTRIBUTES																
RTRADRC	0.17	0.955	0.73	0.504	0.04	0.030	4.20	0.000*	1.67	0.190	2.01	0.019*	1.04	0.411	2.62	0.012*
LTRADRC	0.60	0.662	0.40	0.000	0.23	0.634	3.04	0.006*	1.93	0.147	2.37	0.005*	2.06	0.012*	2.31	0.025*
RTULNRC	1.00	0.365	0.30	0.744	2.00	0.090	1.05	0.391	3.75	0.025*	1.90	0.020*	1.04	0.412	2.45	0.010*
LTULNRC	1.60	0.153	0.14	0.073	1.23	0.271	1.93	0.075	2.45	0.000	0.64	0.021	0.91	0.552	1.06	0.074
RTFPI	0.01	0.520	0.22	0.006	0.54	0.463	1.40	0.105	4.34	0.014*	1.71	0.056	0.02	0.642	2.35	0.023*
LTFPI	2.10	0.000	0.70	0.459	0.41	0.524	2.19	0.043*	1.07	0.156	0.00	0.663	1.00	0.376	2.03	0.050*
RTPRC	0.60	0.666	2.63	0.075	4.42	0.039*	0.75	0.606	0.99	0.375	2.07	0.015*	7.17	0.000*	3.47	0.001*
LTPRC	1.17	0.321	2.96	0.054	0.07	0.706	1.00	0.362	0.07	0.931	1.77	0.046*	7.10	0.000*	2.74	0.000*
TDR	0.61	0.654	1.44	0.239	0.10	0.752	1.74	0.110	0.63	0.539	0.99	0.460	1.20	0.273	1.00	0.374
TDL	1.15	0.331	0.04	0.434	0.61	0.430	0.95	0.460	0.26	0.762	0.00	0.660	0.76	0.710	1.26	0.269
RTOTHI	0.75	0.559	0.40	0.671	0.03	0.056	0.07	0.510	0.02	0.977	1.70	0.044*	1.56	0.003	3.43	0.001*
LTOTHI	1.40	0.233	0.29	0.746	0.15	0.699	0.23	0.965	0.64	0.529	1.21	0.272	1.65	0.061	1.70	0.100
RTPLMI	0.16	0.960	2.24	0.109	0.72	0.634	0.04	0.434	1.02	0.315	1.00	0.446	1.63	0.064	2.11	0.041*
LTPLMI	0.35	0.041	1.74	0.179	0.94	0.467	0.75	0.472	0.00	0.375	0.09	0.567	1.25	0.230	1.73	0.100

F = F-RATIO : P = F-PROBABILITY
* = SIGNIFICANCE 0.05

TABLE 8.8 : ANALYSIS OF VARIANCE FOR FEMALE ETHNIC GROUP MINIMAL POPULATION SAMPLES (NON SUMMARY AND SUMMARY ATTRIBUTES)

ATTRIBUTE	CUSHITES		MAASAI		KALENJIN		LUO/KAR		LUYIA		CENT. BANTU		COAST BANTU	
	F	P	F	P	F	P	F	P	F	P	F	P	F	P
A) NON SUMMARY DIGITAL ATTRIBUTES :														
RFR1	1.79	0.130	0.40	0.499	2.05	0.059	1.16	0.315	1.36	0.176	0.69	0.707	1.66	0.129
RFR2	2.96	0.020*	0.10	0.755	0.79	0.577	0.53	0.591	0.83	0.630	0.19	0.999	2.05	0.010*
RFR3	2.69	0.031*	0.03	0.873	1.21	0.298	1.04	0.357	1.16	0.306	0.77	0.702	1.91	0.070
RFR4	1.11	0.350	0.30	0.536	1.41	0.210	0.28	0.752	0.00	0.660	1.09	0.367	2.63	0.016*
RFR5	0.47	0.756	1.90	0.161	1.24	0.284	1.00	0.343	1.05	0.034*	1.91	0.023*	2.03	0.062
LFR1	1.47	0.210	1.39	0.240	1.29	0.262	0.60	0.552	1.20	0.270	1.53	0.094	1.02	0.094
LFR2	3.66	0.000*	0.71	0.399	2.75	0.013*	0.02	0.970	1.00	0.454	1.00	0.446	4.10	0.001*
LFR3	1.60	0.173	0.03	0.363	1.03	0.400	0.14	0.069	1.39	0.162	0.90	0.471	2.25	0.030*
LFR4	0.40	0.007	0.46	0.501	0.35	0.910	0.60	0.550	1.14	0.324	1.92	0.022*	2.97	0.000*
LFR5	0.14	0.969	0.02	0.366	1.00	0.375	2.10	0.125	2.76	0.001*	1.53	0.095	2.40	0.027*
RFU1	1.00	0.120	0.07	0.790	0.91	0.400	0.06	0.427	1.10	0.355	1.65	0.062	4.71	0.000*
RFU2	0.24	0.914	0.60	0.411	1.47	0.109	0.00	0.925	1.17	0.301	0.72	0.757	4.12	0.001*
RFU3	0.06	0.992	0.07	0.707	0.63	0.700	0.33	0.722	0.06	0.596	0.90	0.475	3.44	0.003*
RFU4	1.37	0.245	0.60	0.440	0.26	0.955	0.52	0.594	0.75	0.713	1.21	0.261	2.00	0.011*
RFU5	1.73	0.142	0.20	0.595	0.47	0.029	0.40	0.610	1.35	0.101	1.19	0.275	0.61	0.719
LFU1	2.56	0.030*	0.00	0.903	1.40	0.203	0.10	0.902	0.07	0.590	2.10	0.007*	3.04	0.007*
LFU2	0.92	0.450	1.25	0.264	1.21	0.301	0.45	0.630	0.09	0.563	0.00	0.669	2.30	0.034*
LFU3	0.25	0.907	0.01	0.923	1.32	0.246	0.31	0.733	0.00	0.571	0.97	0.406	2.90	0.009*
LFU4	2.36	0.053	1.95	0.165	0.55	0.769	0.10	0.904	1.35	0.105	0.30	0.901	2.11	0.052
LFU5	0.73	0.571	0.14	0.707	0.96	0.449	0.36	0.700	1.49	0.117	0.56	0.096	0.32	0.925
B) NON SUMMARY PALMAR ATTRIBUTES														
RAB	2.91	0.022*	5.01	0.017*	1.41	0.211	1.67	0.101	2.57	0.002*	2.30	0.003*	3.12	0.005*
RBC	0.07	0.403	0.09	0.769	0.93	0.472	0.16	0.051	1.19	0.206	3.61	0.000*	0.51	0.797
RCD	0.50	0.734	0.60	0.439	1.22	0.297	0.12	0.000	2.21	0.009*	2.95	0.000*	1.19	0.312
LAB	1.10	0.359	3.93	0.049*	3.40	0.003*	0.90	0.409	2.40	0.004*	2.35	0.004*	1.07	0.302
LBC	1.31	0.200	0.06	0.012	1.49	0.179	0.79	0.455	1.55	0.100	2.41	0.003*	0.74	0.619
LCD	1.11	0.353	0.00	0.967	0.91	0.490	0.11	0.094	1.06	0.390	2.47	0.002*	1.70	0.119
PTR	2.01	0.093	2.04	0.093	1.41	0.211	2.10	0.115	1.06	0.391	1.02	0.433	0.93	0.471
RTR	0.04	0.502	1.56	0.213	0.70	0.503	1.95	0.145	1.70	0.045*	1.49	0.107	0.96	0.449
P2R	0.31	0.000	0.11	0.735	0.03	0.540	1.73	0.100	1.13	0.336	0.00	0.504	0.09	0.505
P3R	0.56	0.609	0.07	0.413	0.01	0.726	1.93	0.140	0.64	0.022	1.01	0.444	0.23	0.966
P3TR	1.07	0.372	0.11	0.735	1.16	0.326	0.66	0.519	1.12	0.343	1.17	0.296	1.75	0.100
P4R	0.94	0.430	0.23	0.630	0.59	0.730	0.93	0.390	0.49	0.932	1.53	0.096	1.47	0.107
PHR	2.56	0.030*	0.00	0.963	0.09	0.997	2.02	0.135	1.52	0.107	1.32	0.191	0.90	0.439
CHR	1.13	0.343	0.23	0.629	0.54	0.770	0.44	0.646	0.07	0.590	0.91	0.540	2.39	0.020*
TEFR	1.49	0.206	2.40	0.123	1.11	0.354	2.21	0.112	1.52	0.109	1.31	0.197	1.02	0.410
TR	1.97	0.099	2.52	0.114	1.60	0.125	1.54	0.216	0.43	0.950	2.71	0.001*	1.14	0.339
T1R	2.55	0.039*	5.32	0.022*	1.30	0.222	0.34	0.710	0.54	0.901	1.73	0.046*	1.07	0.300
TBR	1.00	0.409	0.02	0.070	0.50	0.730	0.22	0.000	0.59	0.597	1.04	0.407	1.95	0.073
PTL	0.56	0.695	0.06	0.417	0.74	0.619	1.70	0.100	1.01	0.437	0.56	0.099	0.94	0.464
RTL	0.54	0.700	0.52	0.470	0.62	0.714	1.26	0.207	1.52	0.107	0.79	0.676	1.93	0.075
P2L	1.16	0.326	2.23	0.137	0.00	0.990	0.67	0.515	0.07	0.507	0.62	0.051	0.35	0.909
P3L	0.52	0.720	0.33	0.564	1.20	0.265	0.27	0.762	0.70	0.602	1.02	0.430	0.76	0.604
P3TL	0.60	0.609	0.70	0.403	1.00	0.422	0.55	0.500	1.65	0.070	1.12	0.334	0.40	0.001
P4L	0.10	0.940	0.03	0.073	1.43	0.202	0.11	0.093	1.70	0.045*	1.29	0.206	0.09	0.499
PHL	4.77	0.001*	0.00	0.340	0.95	0.457	1.00	0.343	0.69	0.776	0.00	0.672	2.26	0.030*
CHL	0.49	0.746	0.01	0.909	0.40	0.079	2.55	0.001	1.13	0.336	1.14	0.316	2.10	0.045*
TEFL	0.50	0.674	0.70	0.404	0.74	0.614	1.57	0.211	1.24	0.250	0.71	0.769	1.40	0.215
TL	0.49	0.742	0.77	0.302	3.34	0.003*	1.47	0.232	0.70	0.606	3.04	0.000*	2.35	0.031*
T1L	1.44	0.220	2.75	0.099	2.71	0.014*	0.90	0.407	0.67	0.794	2.12	0.009*	1.67	0.120
TBL	0.43	0.706	0.20	0.652	0.56	0.765	1.70	0.171	0.96	0.491	1.11	0.346	1.97	0.069
C) DIGITAL AND PALMAR SUMMARY ATTRIBUTES														
RTRADRC	2.32	0.057	0.59	0.444	1.29	0.261	0.00	0.450	1.67	0.066	0.92	0.541	2.75	0.013*
LTRADRC	2.49	0.044*	0.60	0.439	1.07	0.370	0.43	0.652	1.05	0.035*	1.63	0.067	3.41	0.003*
RTULNRC	0.63	0.645	0.01	0.912	0.03	0.546	0.06	0.939	0.95	0.501	1.32	0.107	5.64	0.000*
LTULNRC	1.02	0.399	0.04	0.049	1.00	0.426	0.06	0.930	0.95	0.500	0.93	0.524	3.40	0.002*
RTFPI	1.00	0.114	0.06	0.000	0.66	0.604	0.27	0.764	0.03	0.629	0.06	0.607	4.65	0.000*
LTFPI	2.76	0.020*	0.47	0.495	0.64	0.702	0.62	0.530	1.10	0.293	1.14	0.316	3.40	0.002*
RTPRC	2.41	0.049*	1.03	0.311	1.46	0.191	0.64	0.530	2.01	0.001*	4.16	0.000*	0.60	0.729
LTPRC	1.43	0.223	0.96	0.329	2.40	0.023*	0.50	0.562	1.96	0.023*	3.67	0.000*	0.40	0.021
TBR	0.20	0.936	0.20	0.655	0.61	0.726	1.12	0.329	0.06	0.599	0.77	0.697	0.75	0.609
TBL	0.97	0.424	1.50	0.222	0.56	0.764	0.02	0.901	0.52	0.910	0.59	0.074	0.67	0.672
RTOTHI	1.17	0.324	0.02	0.093	0.40	0.077	0.03	0.972	0.96	0.494	0.71	0.770	1.00	0.373
LTOTHI	1.39	0.237	0.06	0.012	0.10	0.996	2.34	0.099	0.01	0.645	1.16	0.305	2.39	0.020*
RTPLMI	0.04	0.500	0.04	0.047	0.55	0.760	1.47	0.232	1.11	0.353	0.55	0.906	2.43	0.026*
LTPLMI	1.57	0.103	2.26	0.134	0.07	0.520	1.02	0.361	0.00	0.657	0.44	0.963	1.73	0.113

F= F-RATIO : P= F-PROBABILITY.

** SIGNIFICANCE 0.05

Table 8.9: Number and percentage of significant differences from analysis of variance of minimal population samples by ethnic group

	Non Summary Attributes						Summary Attributes	
	Digital		Palmar		Total			
Ethnic Group	No(20)	%	No(30)	%	No(50)	%	No(14)	%
Males:								
Cushites	1	5.0	0	0.0	1	2.0	0	0.0
Maasai	0	0.0	0	0.0	0	0.0	0	0.0
Dorobo	0	0.0	2	6.7	2	4.0	1	7.1
Kalenjin	7	35.0	6	20.0	13	26.0	3	21.4
Luo/Karimojong	2	10.0	0	0.0	2	4.0	2	14.3
Luyia	5	25.0	6	20.0	11	22.0	6	42.9
Central Bantu	3	15.0	13	43.3	16	32.0	3	21.4
Coastal Bantu	10	50.0	6	20.0	16	32.0	9	64.3
Females:								
Cushites	4	20.0	4	13.3	8	16.0	3	21.4
Maasai	0	0.0	3	10.0	3	6.0	0	0.0
Kalenjin	1	5.1	3	10.0	4	8.0	1	7.1
Luo/Kariomojong	0	0.0	0	0.0	0	0.0	0	0.0
Luyia	2	10.0	5	16.7	7	14.0	3	21.4
Central Bantu	3	15.0	10	33.3	13	26.0	2	14.3
Coastal Bantu	13	65.0	5	16.7	18	36.0	8	57.1

TABLE **8.10** PEARSON CORRELATIONS BETWEEN ETHNIC GROUPS - (WITH MINIMAL SAMPLE POPULATIONS RECODED AS BELONGING TO A PARTICULAR ETHNIC GROUP(1) OR NOT BELONGING TO THAT GROUP(0)) FOR 26 SUMMARY TRAITS (MALES)

	POPULATION GROUP VARIABLE							
TRAIT	1	2	3	4	5	6	7	8
RTRADRC	0.3	0.0	0.3	0.2	-0.1	0.1	0.1	-0.1
LTRADRC	0.4	0.0	0.3	0.2	-0.1	0.1	0.2	-0.2
RTULNRC	0.3	0.0	0.2	0.2	0.0	0.1	-0.1	0.1
LTULNRC	0.3	0.0	0.4	0.3	-0.1	-0.2	0.0	0.0
RTRC	0.3	-0.1	0.3	0.2	-0.1	0.1	0.0	0.0
LTRC	0.4	0.0	0.4	0.3	-0.1	0.1	0.1	-0.1
RTABSRC	0.3	0.0	0.3	0.2	-0.1	0.1	0.0	0.0
LTABSRC	0.4	0.0	0.4	0.3	-0.1	0.0	0.1	-0.1
RTFPI	0.3	0.0	0.2	0.2	0.0	0.0	0.0	0.0
LTFPI	0.4	0.0	0.3	0.2	0.0	-0.2	0.1	-0.1
RTPRC	-0.2	0.0	-0.1	0.1	0.1	0.3	0.3	-0.3
LTPRC	-0.1	-0.1	0.0	0.0	0.1	0.1	0.2	-0.2
TDR	-0.2	-0.2	-0.2	-0.2	0.2	0.2	-0.4	0.4
TDL	-0.2	-0.2	0.0	0.0	0.4	0.3	-0.2	0.2
RTPLMI	-0.2	-0.2	0.0	-0.2	0.2	0.0	-0.5	0.5
LTPLMI	-0.3	-0.3	0.0	-0.1	0.3	0.2	-0.3	0.3
RTOTHI	0.1	0.1	-0.1	-0.1	0.2	0.0	-0.2	0.2
LTOTHI	0.1	-0.1	0.1	0.0	0.2	-0.1	-0.3	0.3
RARCH	-0.2	0.0	-0.2	-0.1	0.1	0.0	-0.1	0.1
RULOOP	-0.2	0.0	-0.2	-0.1	-0.1	-0.1	0.1	-0.1
RCWHORL	0.3	0.1	0.3	0.3	0.0	-0.1	0.1	-0.1
RDLOOP	-0.1	-0.1	0.0	0.0	-0.1	-0.1	-0.2	0.2
LARCH	-0.3	0.1	-0.1	0.0	0.1	-0.1	-0.2	0.2
LULOOP	-0.1	0.0	-0.2	-0.2	0.0	0.3	0.0	0.0
LCWHORL	0.4	0.2	0.3	0.3	0.0	-0.2	0.3	-0.3
LDLOOP	-0.1	-0.3	0.1	0.0	-0.1	-0.1	-0.3	0.3

TABLE **8.11** PEARSON CORRELATIONS BETWEEN ETHNIC GROUPS :- (WITH MINIMAL SAMPLE POPULATIONS RECODED AS BELONGING TO A PARTICULAR ETHNIC GROUP(1) OR NOT BELONGING TO THAT GROUP(0)) FOR 26 SUMMARY TRAITS (FEMALES).

	POPULATION GROUP VARIABLE						
TRAIT	1	2	4	5	6	7	8
RTRADRC	0.2	0.1	-0.3	0.2	-0.1	0.0	0.0
LTRADRC	0.4	0.1	-0.1	0.1	-0.2	-0.1	0.0
RTULNRC	0.3	0.1	-0.3	0.2	-0.1	-0.2	0.3
LTULNRC	0.2	0.1	-0.3	0.1	-0.2	0.0	0.2
RTRC	0.2	0.1	-0.3	0.2	0.0	-0.1	0.0
LTRC	0.3	0.1	-0.2	0.1	-0.2	-0.1	0.1
RTABSRC	0.3	0.1	-0.3	0.2	-0.1	-0.1	0.1
LTABSRC	0.3	0.1	-0.2	0.1	-0.2	-0.1	0.1
RTFPI	0.3	0.1	-0.2	0.1	-0.2	-0.1	0.2
LTFPI	0.3	0.0	-0.1	0.0	-0.3	0.0	0.1
RTPRC	-0.2	0.1	0.1	0.0	0.1	0.0	-0.1
LTPRC	-0.3	0.0	0.0	0.0	0.2	0.0	-0.1
TDR	-0.1	0.0	-0.2	0.2	0.2	-0.3	0.4
TDL	-0.1	0.0	-0.3	0.2	0.3	-0.3	0.3
RTPLMI	-0.2	0.0	0.0	0.1	0.2	-0.3	0.4
LTPLMI	-0.3	-0.1	0.0	0.2	0.0	-0.2	0.4
RTOTHI	0.1	0.1	0.1	0.2	-0.1	-0.3	0.1
LTOTHI	0.2	0.1	-0.2	0.2	-0.1	-0.1	0.1
RARCH	-0.2	-0.1	0.0	-0.1	0.0	0.1	0.3
RULOOP	-0.2	-0.1	0.3	-0.1	0.3	0.1	-0.4
RCWHORL	0.4	0.2	-0.2	0.2	-0.1	-0.2	0.0
RDLOOP	-0.1	-0.1	-0.3	-0.2	-0.1	0.2	0.4
LARCH	-0.2	0.1	0.0	-0.1	-0.1	0.1	0.1
LULOOP	-0.2	-0.1	0.2	0.1	0.3	-0.1	-0.3
LCWHORL	0.4	0.1	0.0	0.1	-0.3	-0.1	0.1
LDLOOP	0.0	0.0	-0.3	-0.2	-0.1	0.3	0.2

GROUP CODES :-

(1) CUSHITES (2) MAASAI (3) DOROBO (NO FEMALE SAMPLE) (4) KALENJIN
(5) LUO AND KARIMOJONG NILOTES (6) LUYIA BANTU (7) CENTRAL BANTU
(8) COASTAL BANTU(POKOMO, MJI KENDA AND TAITA)

Table 9.1: Altitude and rainfall zone values and details for minimal ethnic population samples

Sample	Altitude	Rainfall	Sample	Altitude	Rainfall
Somali	1	1	Bukhayo	3	4
Rendille	2	1	Samia	3	4
Gabbra	2	1	Butsotso	3	4
Boran	2	1	Bunyala	3	4
Burji	3	2	Kabras	3	4
Samburu	2	2	Bukusu	4	4
Kadjiado Maasai	3	2	Kiambu Kikuyu	4	4
Narok Maasai*	3	2	Muranga Kikuyu	3	4
Ngwesi*	4	2	Nyeri Kikuyu	4	4
Mukogodo*	4	2	Ndia	4	4
Kony	4	4	Kamba	3	2
Nandi	4	4	Embu	3	4
Kipsigis	4	4	Mbere	3	2
Tugen	4	3	Chuka	3	4
Keyo	4	3	Muthambe	3	4
Marakwet	4	3	Mwimbi	3	4
Pokot	4	3	Igoji	3	4
Iteso	3	4	Imenti	3	3
Turkana	2	1	Tigania	3	3
Luo	3	3	Igembe	3	3
Gusii	3	4	Tharaka	3	3
Tiriki	3	4	Pokomo	1	1
Maragoli	3	4	Malakote *	1	1
Bunyore	3	4	Giriama	1	3
Idakho	3	4	Chonyi	1	3
Marama	3	4	Mid Mji Kenda	1	3
Wanga	3	4	Digo	1	3
Marach	3	4	Taita	3	3
			Taveta	2	2

* = No female sample.

Zone details and sample sizes:

Zone No.	Nature	No of individuals for pooled samples in zone	
		Males	Females
ALTITUDE:			
1	up to 1000ft.	670	372
2	1000 up to 3000ft.	574	352
3	3000 up to 5500ft.	1617	1414
4	5500ft. or more	664	509
RAINFALL:			
1	0 up to 20 inches	753	405
2	20 up to 35 inches	585	455
3	35 up to 50 inches	960	701
4	50 inches or more.	1227	1086

Table 9.2: Significant Pearson's correlations for summary taxonomic attributes with altitude; and partial correlations for summary taxonomic attributes with rainfall: controlling for altitude.

ALTITUDE

	MALES			FEMALES	
	r	s		r	s
LDLOOP	-.35	.004	RULOOP	.27	.026
RTULNRC	-.30	.011	RTULNRC	-.24	.042
RULOOP	.29	.013			
RTABSRC	-.25	.029			
			TDL	-.30	.015
TDR	-.34	.015	TDR	-.26	.030
			LTPLMI	-.25	.037
RTPLMI	-.29	.015			
RTPRC	.28	.018			
LTOTHI	-.28	.017			

RAINFALL

LCWHORL	-.47	.001	LTRADRC	-.39	.004
			LTRC	-.38	.006
LTABSRC	-.38	.004	LTABSRC	-.36	.009
RCWHORL	-.38	.004	LCWHORL	-.32	.022
LTRADRC	-.34	.011	RTRADRC	-.31	.023
LTRC	-.32	.016			
			RTRC	-.29	.036
LTFPI	-.29	.031	RTABSRC	-.29	.035
LTULNRC	-.28	.040	RTFPI	-.29	.032
			RCWHORL	-.28	.040
LTPLMI	.38	.004			
TDR	.32	.016			
TDL	.29	.028			

Table 9.3: Significant Pearson's correlations for taxonomic non-summary attributes with altitude.

MALES

A. DIGITAL ATTRIBUTES

	r	s
RFU1	-.43	.001
LFU1	-.42	.001
LD1	-.42	.001
ULOOPR1	.40	.001
RD1	-.37	.002
ULOOPL1	.36	.003
DLOOPL1	-.34	.004
RFR4	-.30	.011
RFR5	-.28	.019
DLOOPR1	-.27	.020
WHORLL4	.26	.028
DLOOPL2	-.26	.025
WHORLR1	-.25	.031
DLOOPL4	-.24	.034

B. PALMAR ATTRIBUTES:

TDR4	.35	.004
TDR6	-.34	.005
P4R	-.33	.006
TDL6	-.33	.006
CHL	-.32	.008
RCD	.29	.016
P2L	-.28	.018
LAB	-.27	.021
RAB	.24	.037
P2R	-.24	.038
TDL4	-.23	.043
TDR5	-.23	.046

FEMALES

A.

	r	s
LFR4	-.50	.001
RFR4	-.49	.001
LFU1	-.49	.001
ULOOPR3	.46	.001
ULOOPR1	.45	.001
ULOOPR2	.45	.001
LFR3	-.44	.001
ULOOPL1	.44	.001
RFU2	-.42	.001
RFU3	-.42	.001
RD1	-.42	.001
RFU1	-.40	.001
LFU2	-.36	.004
ULOOPL2	.35	.006
WHORLL2	-.34	.007
DLOOPL3	-.33	.008
RFR5	-.32	.009
RD4	-.32	.009
WHORLR1	-.32	.010
DLOOPR4	-.32	.010
DLOOPL2	-.32	.010
RFU4	-.31	.011
LD1	-.31	.011
LFR5	-.30	.015
LD2	-.30	.015
RADLL1	-.30	.014
RFR3	-.29	.018
WHORLL1	-.29	.016
DLOOPR1	-.29	.018
RD3	-.28	.021
ULOOPR4	.27	.026
RADLR4	.27	.026
DLOOPR2	-.27	.026
LFU3	-.26	.032
ULOOPL3	.26	.033
WHORLR4	-.25	.036
DLOOPR3	-.24	.043
RD2	-.23	.046
DLOOPL4	-.23	.046

B.

TDR6	-.32	.010
P4R	-.28	.022
TDR3	.25	.036

Table 9.4: Significant partial correlations for taxonomic non-summary attributes with rainfall; controlling for altitude.

MALES

A. DIGITAL ATTRIBUTES

	Pr	s
RADLL2	-.48	.0001
RFR2	-.46	.001
RFU5	-.46	.001
WHORLR5	-.46	.001
LFR1	-.44	.001
LFU5	-.42	.001
LFR2	-.39	.003
WHORLL5	-.39	.003
LFU3	-.38	.003
RADLR2	-.38	.003
WHORLR4	-.38	.004
WHORLL3	-.37	.006
RFU4	-.34	.010
ARCHL1	.34	.010
ULOOPL5	.34	.011
WHORLL2	.33	.012
RD5	-.32	.017
ULOOPR4	.32	.017
WHORLR2	-.32	.017
WHORLL4	-.30	.027
ULOOPL3	-.28	.038
RD4	-.27	.045
WHORLL1	-.27	.044

B. PALMAR ATTRIBUTES

RBC	.44	.001
TDR4	-.42	.001
P2R	.41	.002
TDL4	-.41	.002
P2L	.37	.006
LBC	.35	.008
TEFL	.35	.008
TDL5	-.34	.011
TDR6	-.32	.017
CHR	-.29	.031

FEMALES

A.

	Pr	s
RFR2	-.41	.001
RADLL1	.37	.004
LFR1	-.36	.005
WHORLR4	-.36	.005
ULOOPR2	-.34	.007
WHORLL1	-.34	.007
RFR1	-.33	.008
DLOOPR1	.32	.010
DLOOPL1	.31	.012
RFU4	-.30	.015
ULOOPR4	.29	.020
DLOOPR2	.28	.023
ULOOPL4	.27	.026
LFR5	-.26	.032
RD4	-.24	.041
ARCHR1	.24	.038
RADLL2	.24	.042
LFR2	-.23	.049
LFU5	-.23	.049
WHORLL3	-.23	.049

B.

LBC	.40	.002
RBC	.39	.002
TEFL	.29	.019
TDL4	-.29	.019
P4R	.28	.021
CHL	-.28	.024
TDL5	.26	.030
P3TR	-.24	.043
P4L	.24	.042

Table 9.5: Analysis of variance of summary taxonomic attributes with altitude: displaying atltitude zone means. (Only attributes that correlate significantly with altitude are included).

MALES

Zone	LDLOOP	RTULNRC	RULOOP	RTABSRC	TDR	RTPLMI	RTPRC	LTOTHI
1	13.3	21.4	60.6	82.3	4.406	5.856	95.2	1.269
2	9.0	19.5	60.0	80.0	4.293	5.726	96.7	1.256
3	10.1	18.2	64.7	77.2	4.326	5.730	98.4	1.223
4	8.5	17.5	64.6	76.0	4.249	5.667	98.0	1.198
F.Ratio	4.23	1.94	2.55	1.27	3.48	1.93	2.20	1.55
F.Prob.	.009	.13	.065	.295	.022	.136	.099	.21

FEMALES

Zone	RULOOP	RTULNRC	TDR	TDL	LTPLMI
1	63.0	17.4	4.293	4.259	5.955
2	67.1	16.5	4.196	4.197	5.683
3	70.7	13.8	4.253	4.230	5.795
4	72.6	11.6	4.177	4.170	5.776
F.Ratio	7.68	5.77	3.33	1.979	2.41
F.Prob.	.000	.002	.027	.129	.078

Table 9.6: Analysis of variance of summary taxonomic attributes with rainfall: displaying rainfall zones means. (Only attributes that correlate significantly with rainfall are included)

MALES

Zone	LCWHORL	LTABSRC	RCWHORL	TRADRC	LTRC	LTFPI	TULNRC	LTPLMI	TDR	TDL
1	17.4	77.1	21.5	57.8	60.4	6.306	19.1	5.817	4.299	4.272
2	18.3	77.7	19.5	56.9	59.8	6.358	20.7	5.844	4.297	4.278
3	14.9	70.5	16.9	53.3	56.4	6.172	17.6	5.951	4.327	4.323
4	14.1	70.6	16.0	53.6	56.5	6.100	17.1	5.955	4.321	4.310
F.Ratio	2.88	3.79	3.84	2.57	2.28	2.15	3.17	1.34	.191	.622
F.Prob.	.045	.016	.015	.064	.090	.106	.032	.271	.902	.604

FEMALES

Zone	LTRADRC	LTRC	LTABSRC	LCWHORL	RTRADRC	RTRC	RTFPI	RCWHORL	LTABSRC
1	53.8	56.9	73.0	18.6	59.6	61.7	6.185	16.77	76.3
2	50.9	54.6	70.1	15.3	56.8	58.6	6.109	14.03	72.0
3	48.3	51.8	66.0	15.0	55.0	56.5	5.975	11.7	68.4
4	47.9	51.3	64.5	14.0	54.9	56.8	5.913	12.4	68.5
F.Ratio	3.46	3.34	2.76	2.07	2.63	.63	1.89	2.62	2.42
F.Prob.	.023	.027	.052	.117	.061	.061	.143	.062	.077

Table 9.7: Analysis of variance of non-summary taxonomic attributes with altitude: displaying altitude zone means. (Only attributes that correlate significantly with altitude are included) - (MALES)

A: DIGITAL ATTRIBUTES

Zone	RFU1	LFU1	LD1	ULOOPR1	RD1	ULOOPL1	DLOOPL1	RFR4	RFR5	DLOOPR1	WHORLL4	DLOOPL2
1	7.2	6.7	1.394	44.6	1.443	47.1	31.3	14.1	12.1	25.5	23.7	14.0
2	6.7	5.7	1.359	44.2	1.432	49.8	22.6	13.4	11.9	25.8	25.6	10.5
3	6.2	5.2	1.306	50.7	1.385	54.6	24.9	13.5	11.6	24.1	25.0	10.5
4	5.0	4.4	1.242	56.5	1.330	59.6	19.2	12.8	11.3	19.4	31.5	9.6
F.Ratio	4.56	3.81	3.95	3.88	3.113	2.64	3.53	2.43	1.49	2.09	2.28	1.67
F.Prob.	.006	.015	.013	.014	.034	.059	.021	.076	.228	.112	.091	.186

Zone	WHORLR1	DLOOPL4
1	22.3	9.2
2	22.1	5.0
3	17.9	6.8
4	17.1	4.8
F.Ratio	1.39	2.40
F.Prob	.256	.078

B: PALMAR ATTRIBUTES

Zone	TDR4	TDR6	P4R	TDL6	CH1	RCD	P21	LAB	RAB	P2R	TDL4	TDR5
1	61.1	8.6	73.1	6.8	21.2	34.9	9.2	36.1	35.4	14.5	63.3	27.1
2	73.2	4.8	66.6	4.1	20.2	35.3	5.0	37.3	36.6	10.1	72.1	20.0
3	68.3	6.2	65.6	5.3	15.8	36.1	8.4	37.2	36.6	12.7	64.1	22.6
4	73.2	3.2	62.1	2.3	15.1	36.0	3.8	37.4	36.6	9.1	72.8	20.6
F.Ratio	5.57	4.0	2.37	3.97	2.34	2.18	6.75	2.09	1.89	2.76	7.27	2.14
F.Prob.	.002	.012	.081	.013	.084	.101	.001	.112	.142	.051	.000	.106

Table 9.8: Analysis of variance of non-summary taxonomic attributes with altitude: displaying altitude zone means. (Only attributes that correlate significantly with altitude are included) - (FEMALES)

A: DIGITAL ATTRIBUTES

Zone	LFR4	RFR4	LFU1	ULOOPR3	ULOOPR1	ULOOPR2	LFR3	ULOOPL1	RFU2	RFU3	RD1	RFU1
1	12.8	13.8	6.6	74.1	45.7	49.7	9.8	40.2	4.8	2.1	1.366	5.9
2	12.3	13.1	6.0	79.0	51.9	59.7	9.7	49.6	4.2	1.9	1.399	5.5
3	11.5	12.9	5.5	82.2	56.3	59.2	8.7	50.1	3.8	1.4	1.320	5.0
4	11.0	11.8	3.7	84.2	61.0	66.1	8.5	57.5	3.1	1.1	1.211	3.9
F.Ratio	5.65	6.18	6.80	4.56	4.17	5.33	4.50	4.62	3.69	3.70	5.24	3.65
F.Prob.	.002	.001	.001	.007	.010	.003	.007	.006	.018	.018	.003	.019

Zone	LFU2	ULOOPL2	WHORLL2	DLOOPL3	RFR5	RD4	WHORLR1	DLOOPR4	DLOOPL2	RFU4	LD1
1	5.7	43.7	21.8	5.5	11.3	1.359	16.9	6.5	12.3	3.9	1.335
2	5.1	48.3	22.2	6.2	11.6	1.366	20.4	6.3	7.9	4.1	1.362
3	4.8	47.7	18.0	3.4	10.9	1.278	13.0	3.8	8.5	3.1	1.306
4	4.2	54.1	15.0	2.5	10.4	1.290	11.7	3.4	5.9	3.2	1.215
F.Ratio	2.63	3.27	2.35	2.57	2.47	3.47	3.22	2.31	2.51	3.26	2.72
F.Prob	.060	.029	.084	.065	.073	.023	.031	.088	.070	.029	.054

Zone	LFR5	LD2	RADLL1	RFR3	WHORLL1	DLOOPR1	RD3	ULOOPR4	RADLR4	DLOOPR2	LFU3
1	10.3	1.288	3.9	10.4	14.8	26.7	1.117	59.1	.68	12.7	2.8
2	11.0	1.272	1.3	10.5	17.5	20.9	1.105	58.7	.00	7.1	3.0
3	10.1	1.222	2.1	10.0	11.3	23.9	1.058	66.8	.51	8.7	2.2
4	9.5	1.185	0.4	9.7	11.1	17.1	1.063	63.6	1.52	6.7	2.3
F.Ratio	3.06	1.64	2.81	1.74	3.02	3.49	2.05	3.70	3.79	2.52	2.13
F.Prob.	.037	.193	.049	.172	.038	.023	.119	.018	.016	.069	.108

Table 9.8: (CONTINUED)

A: DIGITAL ATTRIBUTES (continued)

Zone	ULOOPL3	WHORLR4	DLOOPR3	RD2	DLOOPL4
1	67.3	22.6	6.5	1.257	7.0
2	67.2	28.2	3.3	1.254	5.0
3	71.7	19.4	2.7	1.225	4.9
4	72.3	19.5	3.1	1.186	3.2
F.Ratio	1.45	3.12	1.81	1.06	1.10
F.Prob.	.240	.034	.157	.374	.357

B: PALMAR ATTRIBUTES

Zone	TDR6	P4R	TDR3
1	5.7	79.5	1.3
2	3.5	73.9	3.0
3	3.6	75.9	3.1
4	1.8	69.7	4.0
F.Ratio	2.24	2.51	1.23
F.Prob.	.095	.040	.309

Table 9.9: Analysis of variance of non summary taxonomic attributes with rainfall: displaying rainfall zone means. (Only attributes that correlate significantly with rainfall are included) - (MALES)

A: DIGITAL ATTRIBUTES

Zone	RADLL2	RFR2	RFU5	WHORLR5	LFR1	LFU5	LFR2	WHORLL	LFU3	RADLR2	WHORLR4	WHORLL3
1	6.9	10.0	1.6	9.7	13.9	1.4	8.8	7.6	2.8	3.8	15.0	15.0
2	7.4	9.9	1.4	8.5	13.5	1.7	8.9	9.7	3.1	5.9	33.4	15.3
3	10.3	9.0	0.9	6.1	12.4	1.0	7.8	6.0	2.4	5.8	30.1	13.3
4	12.8	8.9	1.0	4.9	12.5	1.0	7.9	5.5	2.3	7.8	26.4	11.4
F.Ratio	4.99	3.87	5.80	4.40	4.14	4.94	3.51	2.98	2.68	2.23	2.55	1.89
F.Prob.	.004	.014	.002	.008	.010	.004	.021	.039	.056	.096	.065	.143

Zone	RFU4	ARCHL1	ULOOPL5	WHORLL2	RD5	ULOOPR4	WHORLR2	WHORLL4	ULOOPL3	RD4	WHORLL1
1	5.3	4.1	82.7	20.9	1.179	48.6	25.6	26.5	69.9	1.472	16.1
2	5.0	6.8	79.7	20.3	1.161	53.4	21.9	29.9	69.6	1.423	16.2
3	4.5	6.6	86.1	17.1	1.138	55.1	20.0	25.5	73.9	1.412	12.6
4	4.3	8.3	85.5	16.8	1.129	56.8	19.9	25.5	72.4	1.392	11.4
F.Ratio	2.17	3.01	3.29	1.08	2.17	1.95	2.19	.72	1.09	1.56	1.77
F. Prob.	.103	.038	.028	.365	.102	.134	.101	.547	.361	.209	.164

B: PALMAR ATTRIBUTES

Zone	RBC	TDR4	P2R	TDL4	P2L	LBC	TEFL	TDL5	TDR6	CHR
1	25.6	71.6	9.0	70.4	5.9	26.1	27.6	21.0	4.5	28.5
2	25.7	70.8	10.9	69.0	5.5	25.6	34.1	23.4	5.1	25.2
3	26.2	68.7	12.4	66.3	8.3	26.4	41.1	23.3	6.8	22.3
4	26.9	68.1	12.5	65.6	7.4	26.8	42.0	26.0	5.6	21.5
F.Ratio	4.42	.54	1.08	1.02	1.19	2.96	2.33	1.54	.647	2.21
F.Prob.	.008	.660	.367	.391	.323	.041	.085	.215	.588	.098

Table 9.10: Analysis of variance of non summary taxonomic attributes with rainfall: displaying rainfall zone means. (Only attributes that correlate significantly with rainfall are included) - (FEMALES)

A: DIGITAL ATTRIBUTES

Zone	RF 2	RADLL1	LFR1	WHORLR4	ULOOPR2	WHORLL1	RFR1	DLOOPR1	DLOOPL1	RFU4	ULOOPR4
1	9.9	1.2	12.5	29.2	10.8	18.9	14.3	17.7	20.6	4.3	58.6
2	9.2	1.2	11.8	23.7	7.8	15.8	13.5	24.6	25.2	3.6	61.9
3	8.8	2.4	10.7	20.1	8.0	10.4	12.8	24.4	26.0	3.4	62.3
4	8.7	2.0	11.0	18.8	8.0	11.1	13.0	22.2	25.3	3.0	67.1
F.Ratio	3.70	.510	3.40	4.05	3.25	5.46	2.69	1.44	.594	3.60	3.05
F.Prob.	.018	.677	.025	.012	.030	.003	.056	.242	.622	.020	.037

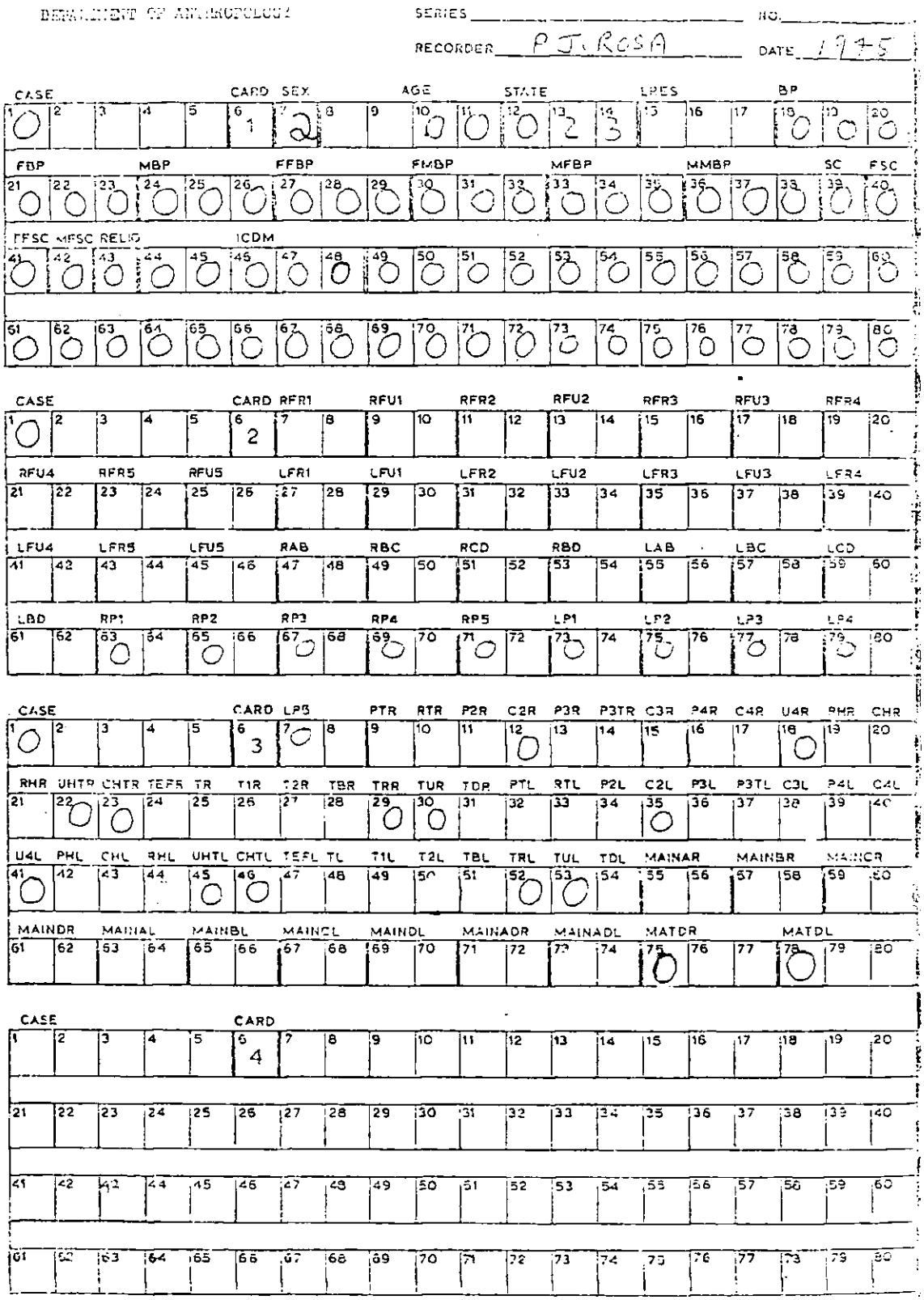
Zone	DLOOPR2	ULOOPL4	LFR5	RD4	ARCHR1	RADLL2	LFR2	LFU5	WHORLL3
1	7.4	57.0	11.2	1.375	4.7	8.5	8.2	1.22	17.3
2	8.2	56.8	10.7	1.316	4.4	9.0	7.6	1.20	12.3
3	9.4	57.3	9.6	1.316	5.8	10.7	6.9	1.16	12.4
4	8.5	61.0	9.9	1.272	7.2	11.8	7.0	1.01	11.4
F.Ratio	.278	0.89	4.60	2.99	1.35	.999	2.48	0.61	2.22
F.Prob.	.241	.453	.007	.040	.270	.401	.072	.613	.098

B: PALMAR ATTRIBUTES

Zone	LBC	RBC	TEFL	TDL4	P4R	CHL	TDL5	P3TR	P4L
1	25.8	25.3	21.6	75.0	75.0	24.0	19.7	5.0	88.1
2	27.0	26.7	25.8	73.7	71.7	17.6	17.8	8.1	88.4
3	26.9	26.4	42.8	72.9	76.1	19.3	21.3	5.2	91.8
4	27.0	26.5	31.6	70.7	75.1	17.0	21.5	4.6	91.7
F.Ratio	1.92	1.94	5.0	0.82	0.46	1.78	0.90	1.72	0.42
F.Prob.	.139	.135	.004	.487	.713	.164	.448	.175	.740

FIGURES

Figure 4.1: The Computer coding sheet.



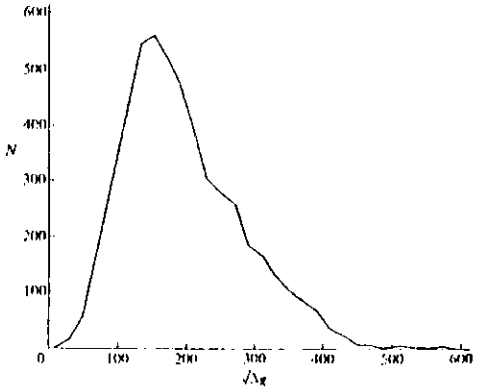


Figure 6.1 : Distribution of the 5050 $\sqrt{\Delta}_g$ distances between 101 populations of sub-Saharan Africa.
(Hiernaux 1972 : Figure 2)

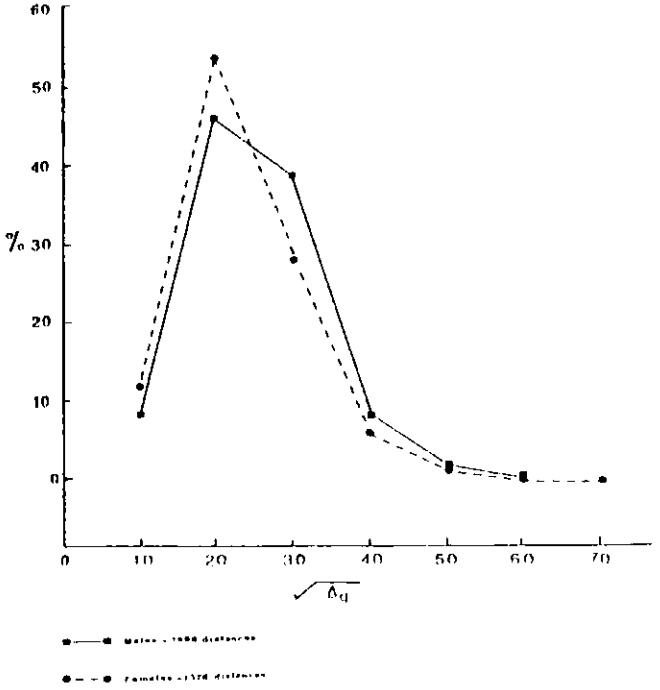


Figure 6.2 : Distribution of $\sqrt{\Delta}_g$ distances between 57 male and 53 female Kenyan minimal ethnic population samples; based on 26 summary traits.

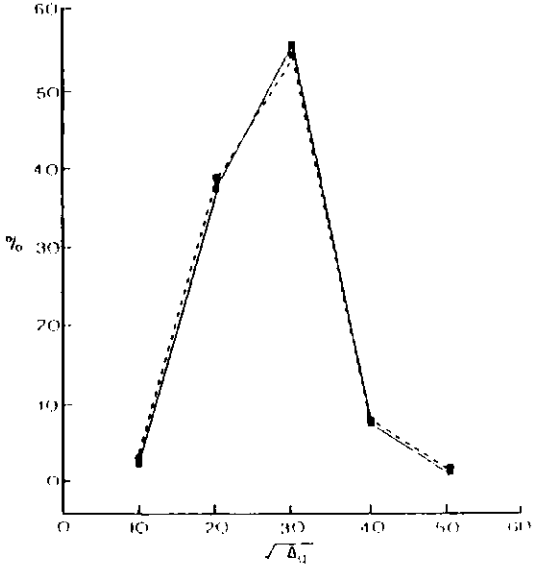


Figure 6.3 : Distribution of $\sqrt{\Delta}_g$ distances between 57 male and 53 female Kenyan minimal ethnic population samples; based on 110 non summary traits.

FIG.6.4 : PCO ANALYSIS OF KENYAN MINIMAL SAMPLES (MALES)
SAMPLE DISTANCES FROM CENTROID IN DELTA G UNITS
ANALYSIS BASED ON TWENTY SIX SUMMARY VARIABLES

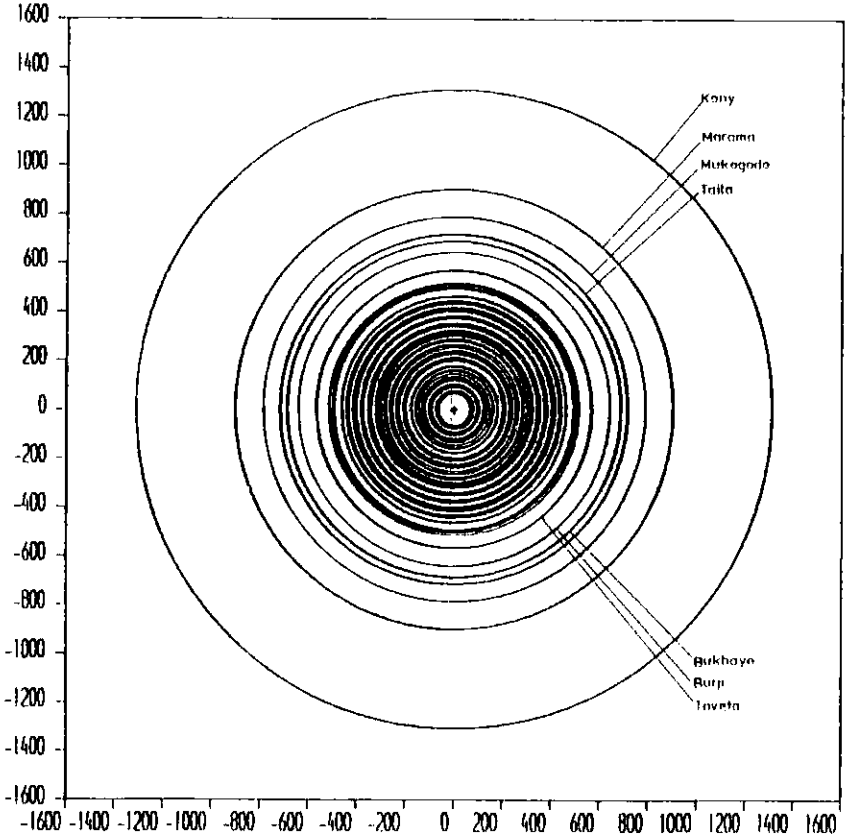


FIG.6.5 : PCO ANALYSIS OF KENYAN MINIMAL SAMPLES (FEMALES)
SAMPLE DISTANCES FROM CENTROID IN DELTA G UNITS
ANALYSIS BASED ON TWENTY SIX SUMMARY VARIABLES

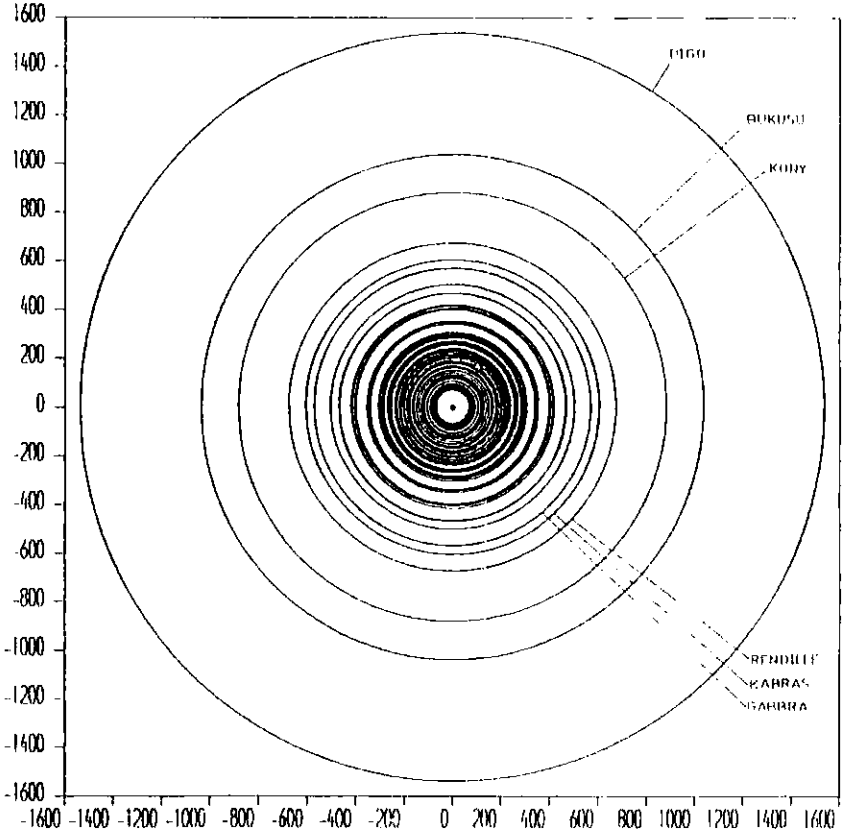


FIG 6.6 : PCO ANALYSIS OF KENYAN MINIMAL SAMPLES (MALES)
SAMPLE DISTANCES FROM CENTROID IN DELTA G UNITS
ANALYSIS BASED ON ONE HUNDRED AND TEN VARIABLES

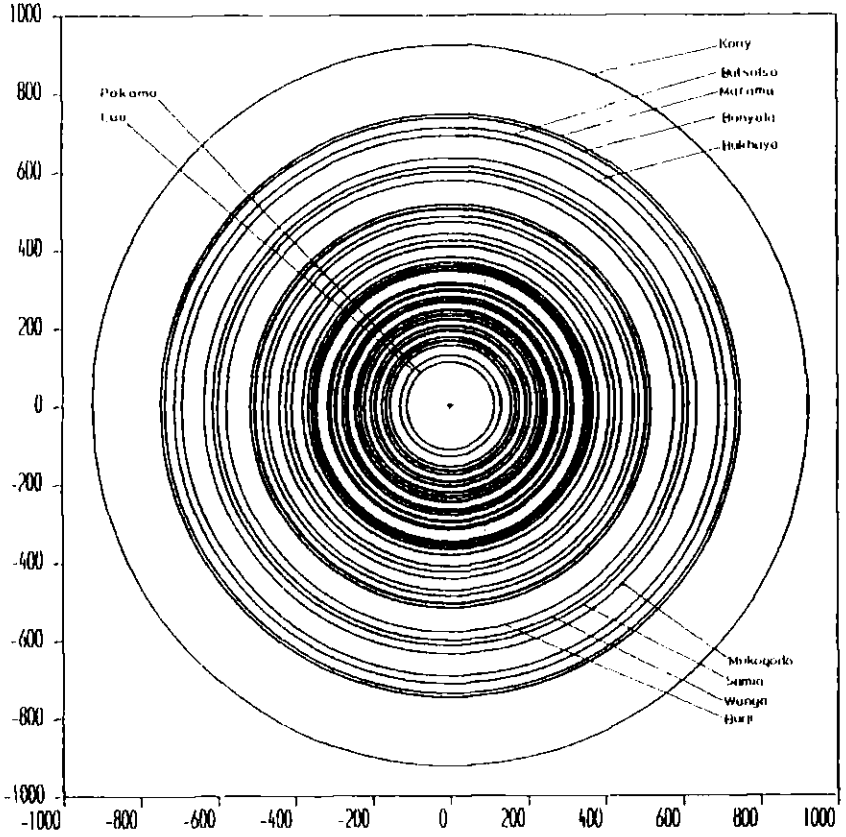


FIG.6.7: PCO ANALYSIS OF KENYAN MINIMAL SAMPLES (FEMALES)
SAMPLE DISTANCES FROM CENTROID IN DELTA G UNITS
ANALYSIS BASED ON ONE HUNDRED AND TEN VARIABLES

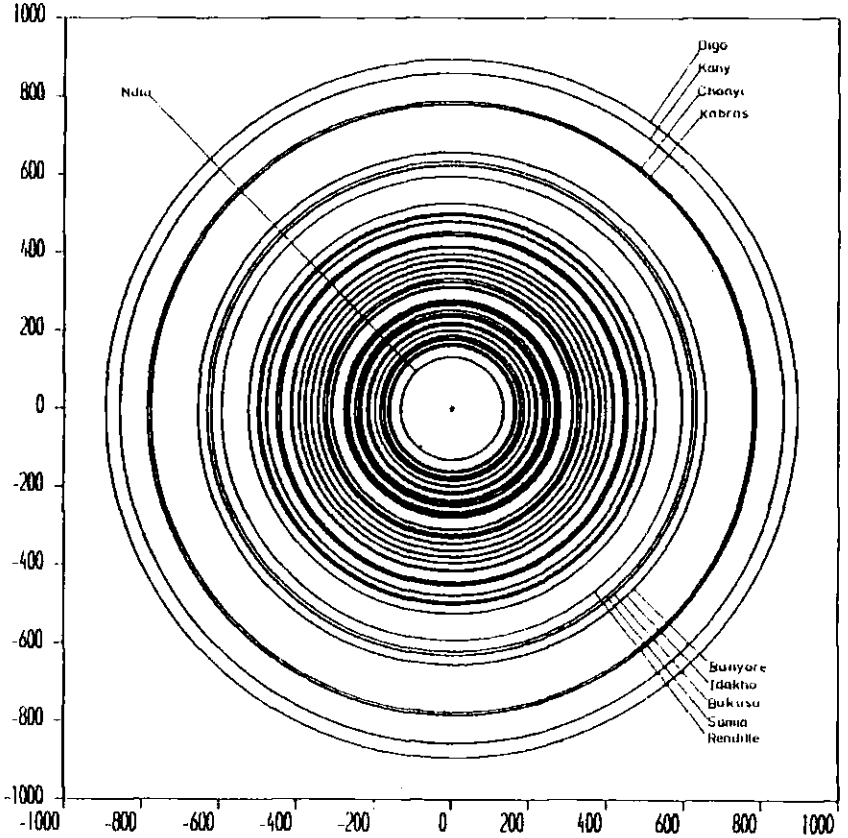


Fig 6.8: Distribution of eleven principal components: Total sample (males & females)

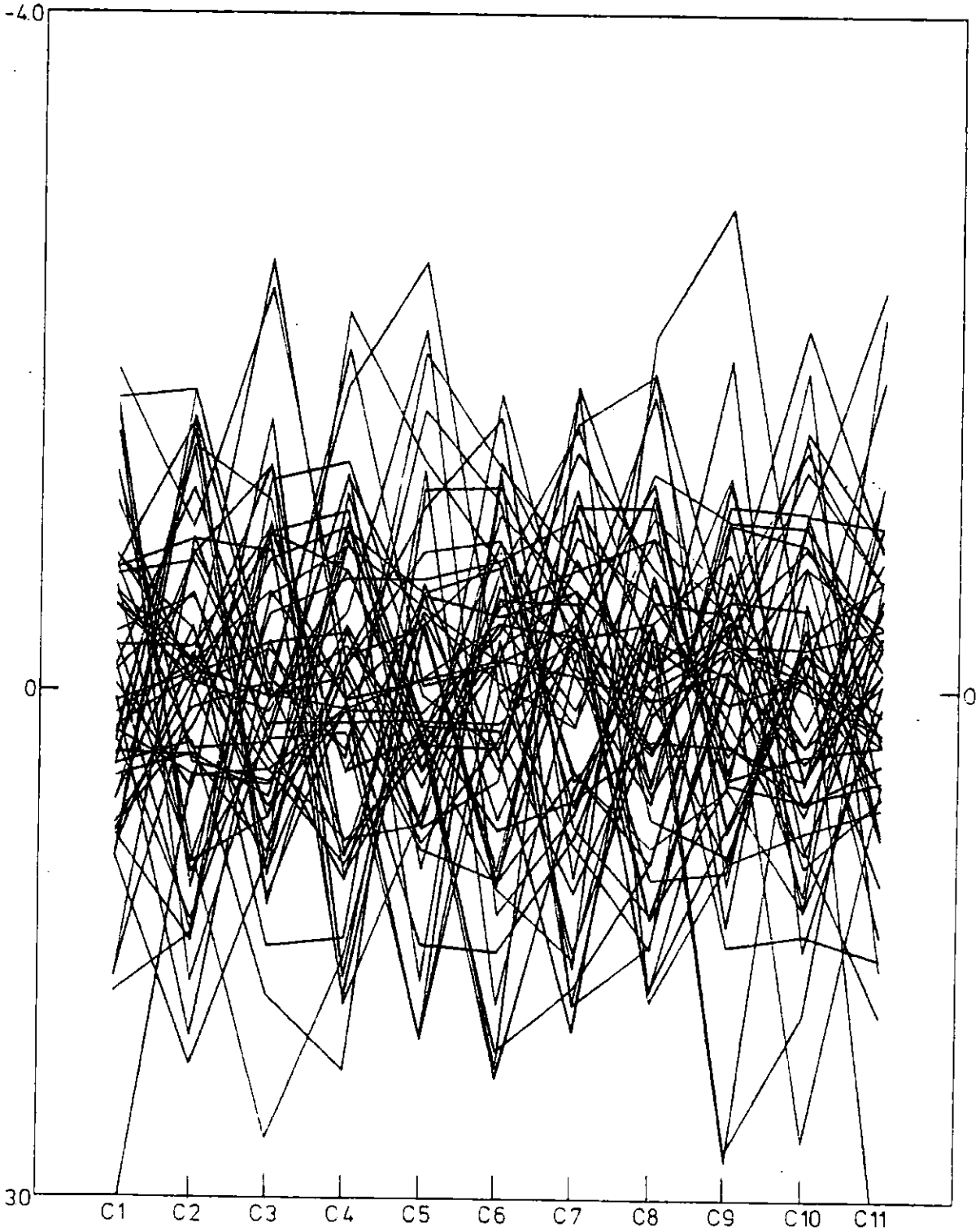


Fig **6.9** : Distribution of six principal components
Total sample (males)

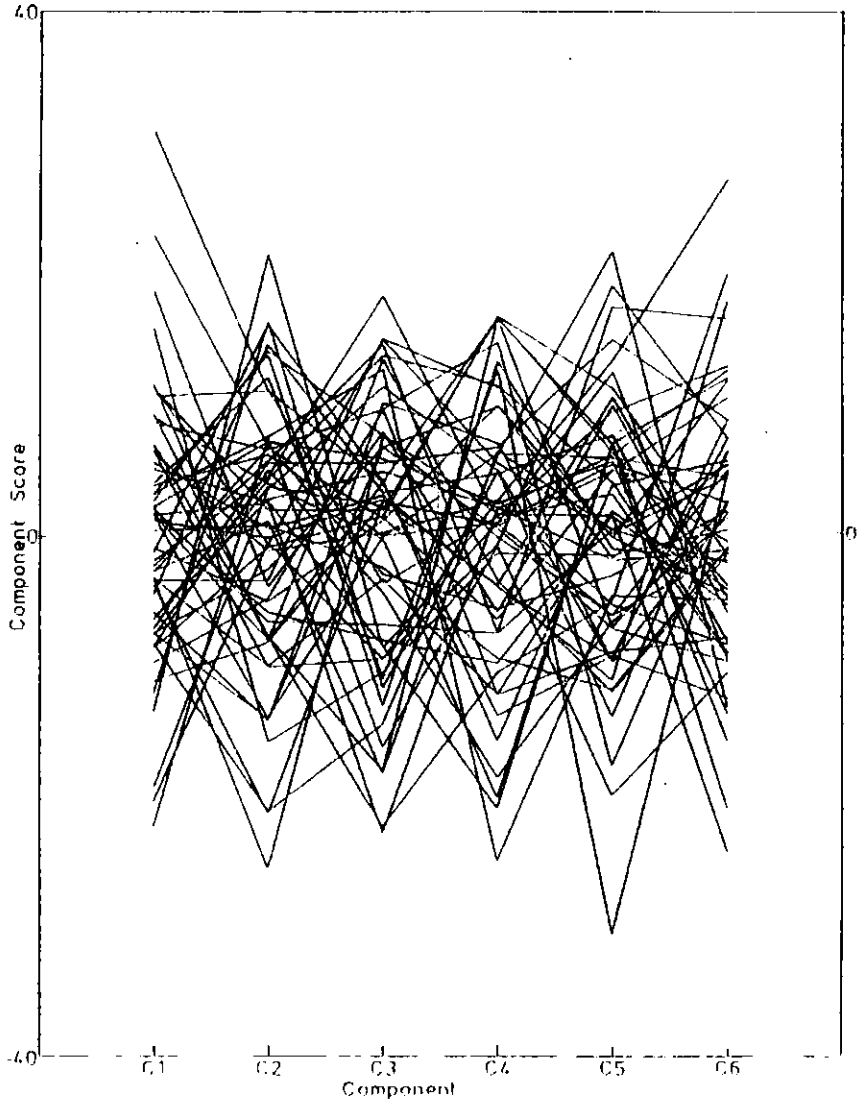


Fig **6.10**: Distribution of six principal components
Total sample (females)

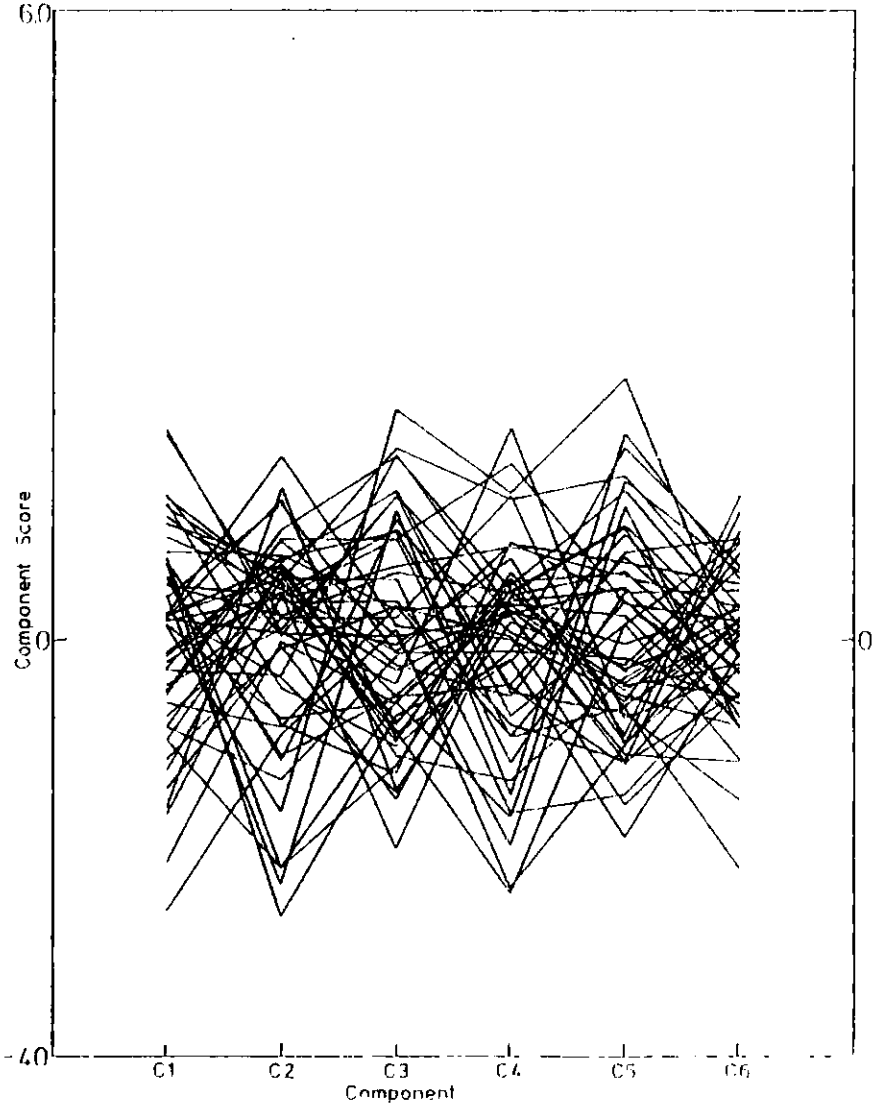


Fig 6:11 Principal co-ordinates analysis of Dg distances between Kenyan minimal samples:(males)-26 summary variables.

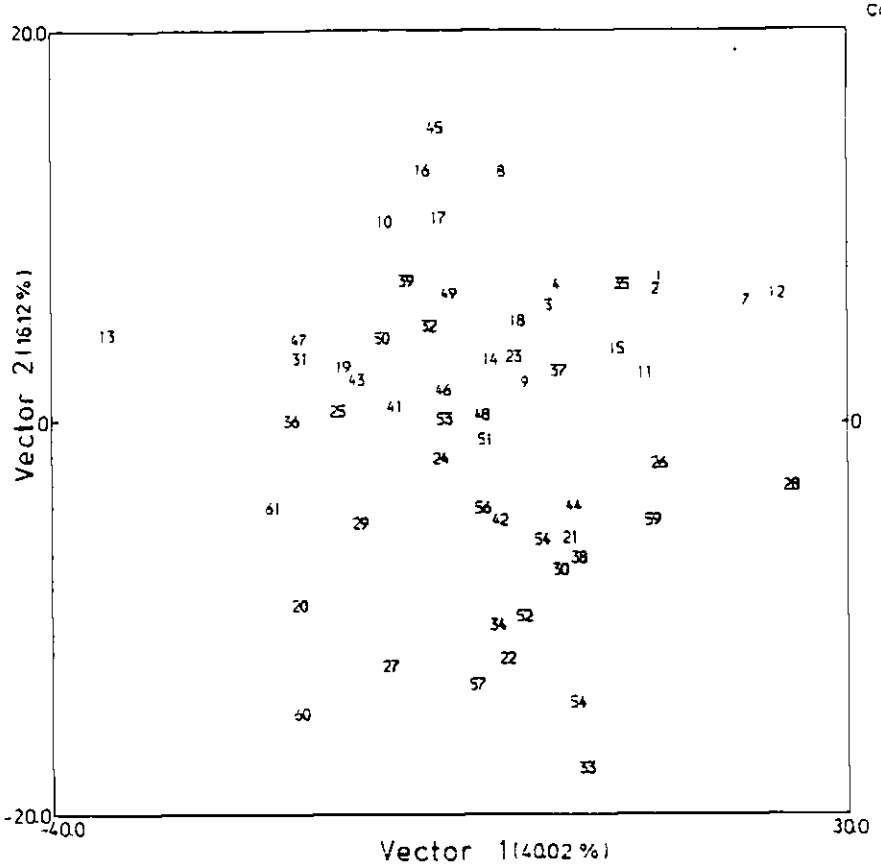
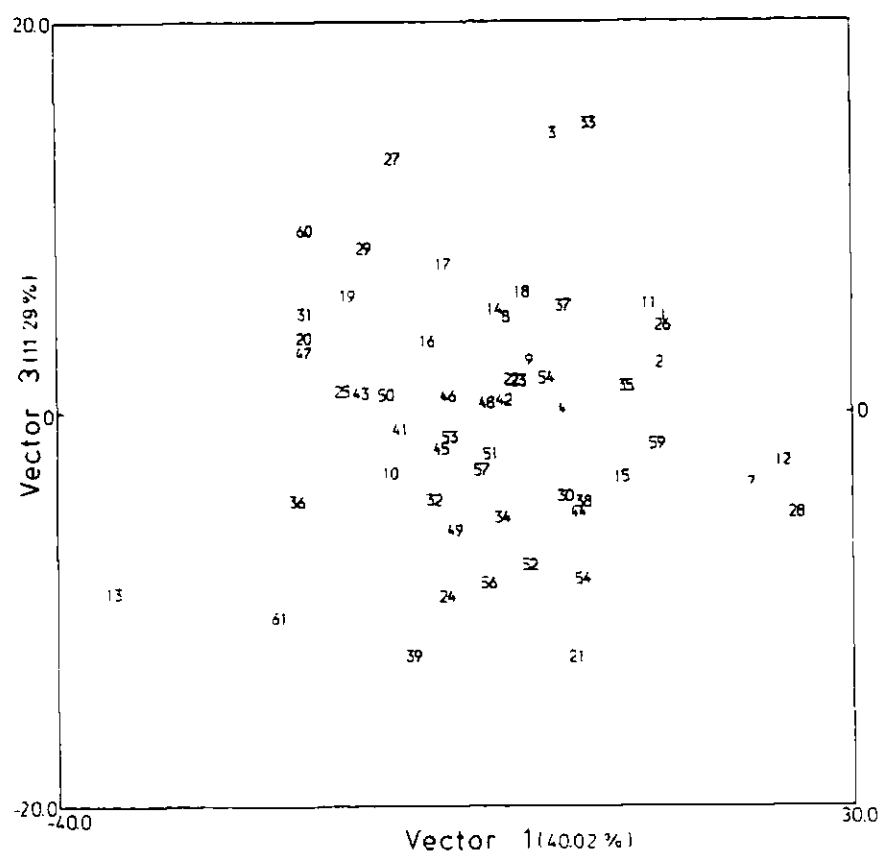


Fig 6:12 Principal co-ordinates analysis of Dg distances between Kenyan minimal samples:(males)- 26 summary variables.



Code no	Pop
1	Somali
2	Rendille
3	Gabbra
4	Boran
7	Burji
8	Samburu
9	Kadjiado Maasai
10	Narok Maasai
11	Ngwesi
12	Mukogodo
13	Kony
14	Nandi
15	Kipsigis
16	Tugen
17	Keyo
18	Marakwet
19	Pokot
20	Iteso
21	Turkana
22	Luo
23	Gusii
24	Tiriki
25	Maragoli
26	Bunyore
27	Idakho
28	Marama
29	Wanga
30	Marach
31	Bukhayo
32	Samia
33	Butsotso
34	Bunyala
35	Kabras
36	Bukusu
37	Kiambu Kikuyu
38	Muranga Kikuyu
39	Nyeri Kikuyu
41	Ndia
42	Kamba
43	Embu
44	Mbere
45	Chuka
46	Muthambe
47	Mwimbi
48	Igoji
49	Imenti
50	Tigania
51	Igembe
52	Tharaka
53	Pokomo
54	Malakote
56	Giriama
57	Chonyi
58	Mid Mji Kenda
59	Digo
60	Taita
61	Taveta

Fig 6:13 Principal co-ordinates analysis of Dg distances between Kenyan minimal samples(males) - 26 summary variables.

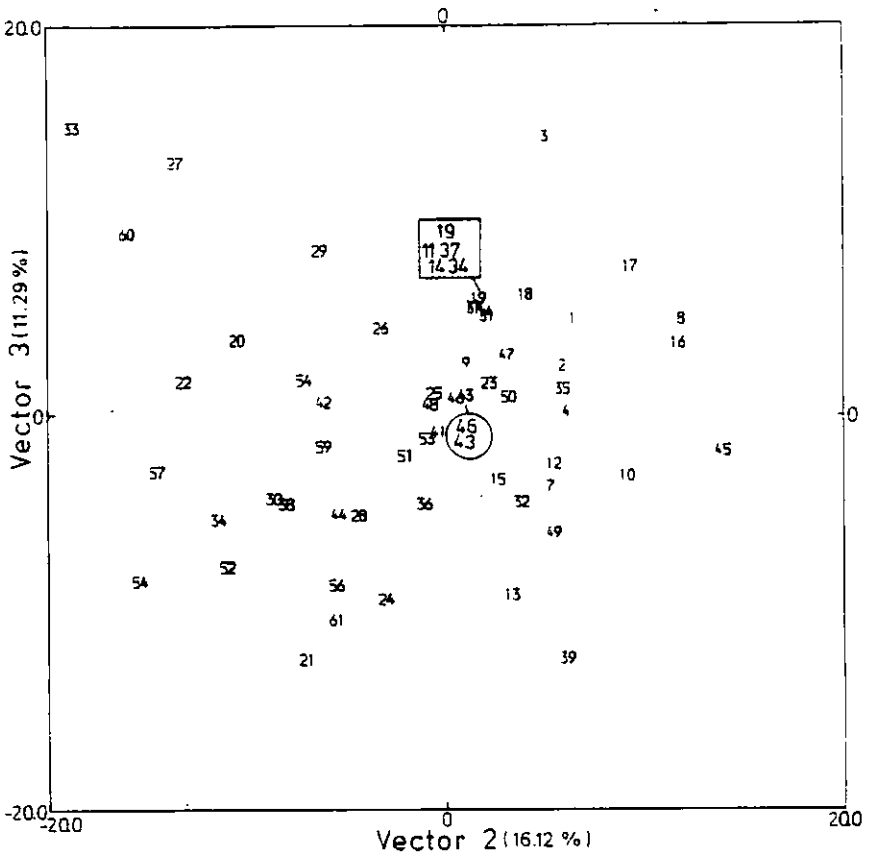
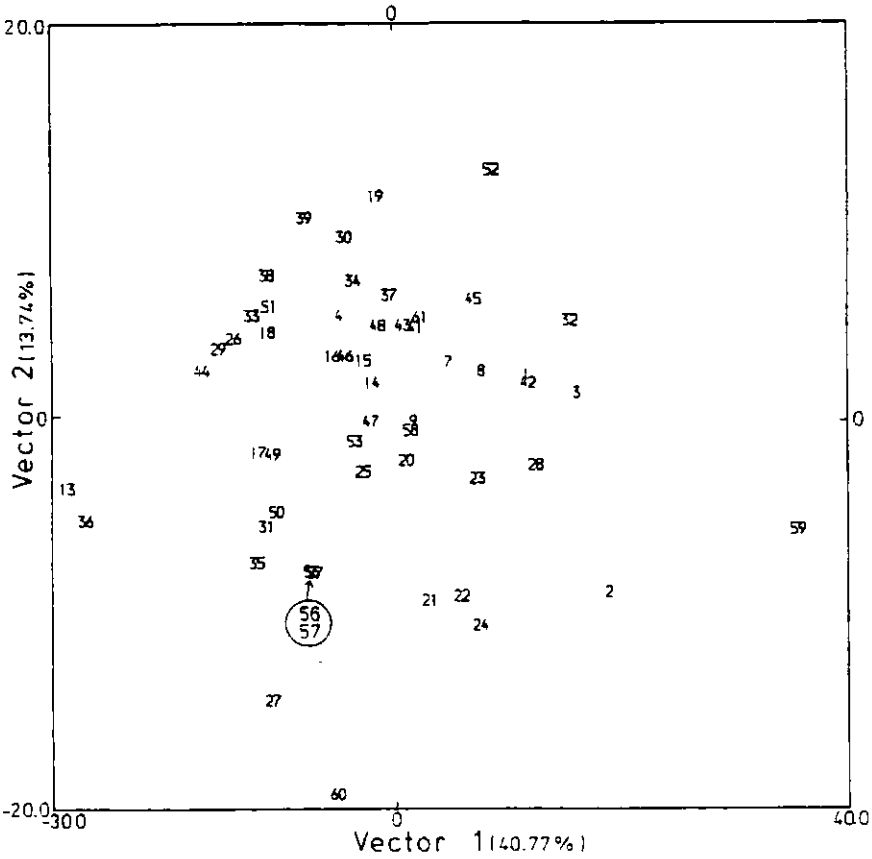
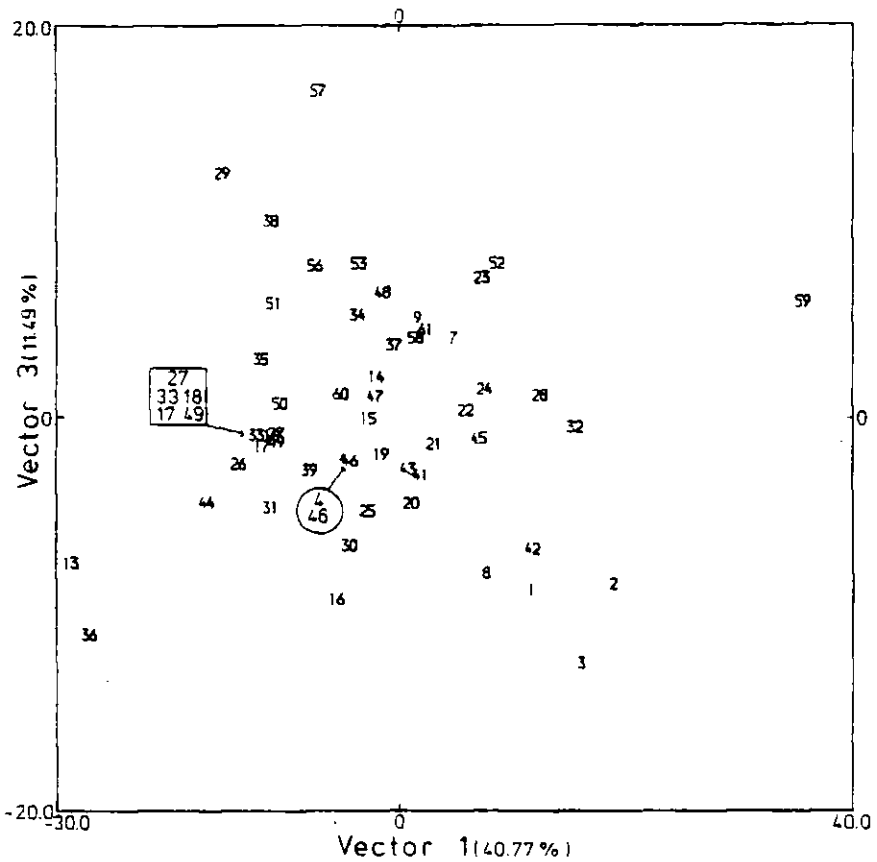


Fig 6:14 Principal co-ordinates analysis of Dg distances between Kenyan minimal samples:(females) - 26 Summary variables.



Code no	Pop
1	Somali
2	Rendille
3	Gabbra
4	Boran
7	Burji
8	Samburu
9	Kadjiado Maasai
10	Narok Maasai
11	Ngwesi
12	Mukogodo
13	Kony
14	Nandi
15	Kipsigis
16	Tugen
17	Keyo
18	Marakwet
19	Pokot
20	Iteso
21	Turkana
22	Luo
23	Gusii
24	Tiriki
25	Maragoli
26	Bunyore
27	Idakho
28	Marama
29	Wanga
30	Marach
31	Bukhayo
32	Samia
33	Butsotso
34	Bunyala
35	Kabras
36	Bukusu
37	Kiambu Kikuyu
38	Muranga Kikuyu
39	Nyeri Kikuyu
41	Ndia
42	Kamba
43	Embu
44	Mbere
45	Chuka
46	Muthambe
47	Mwimbi
48	Igoji
49	Imenti
50	Tigania
51	Igembe
52	Tharaka
53	Pokomo
54	Malakote
56	Giriama
57	Chonyi
58	Mid Mji Kenda
59	Digo
60	Taita
61	Taveta

Fig 6:15 Principal co-ordinates analysis of Dg distances between Kenyan minimal samples: (females) - 26 summary variables.



Code no	Pop
1	Somali
2	Rendille
3	Gabbra
4	Boran
7	Burji
8	Samburu
9	Kadjiado Maasai
10	Narok Maasai
11	Ngwesi
12	Mukogodo
13	Kony
14	Nandi
15	Kipsigis
16	Tugen
17	Keyo
18	Marakwet
19	Pokot
20	Itaso
21	Turkana
22	Luo
23	Gusii
24	Tiriki
25	Maragoli
26	Bunyore
27	Idakho
28	Marama
29	Wanga
30	Marach
31	Bukhayo
32	Samia
33	Butsotso
34	Bunyala
35	Kabras
36	Bukusu
37	Kiambu Kikuyu
38	Muranga Kikuyu
39	Nyeri Kikuyu
41	Ndia
42	Kamba
43	Embu
44	Mbere
45	Chuka
46	Muthambe
47	Mwimbi
48	Igoji
49	Imenti
50	Tigania
51	Igembe
52	Tharaka
53	Pokomo
54	Malakote
56	Giriama
57	Chonyi
58	Mid Mji Kenda
59	Digo
60	Taita
61	Taveta

Fig 6:16 Principal co-ordinates analysis of Dg distances between Kenyan minimal samples: (females) - 26 summary variables.

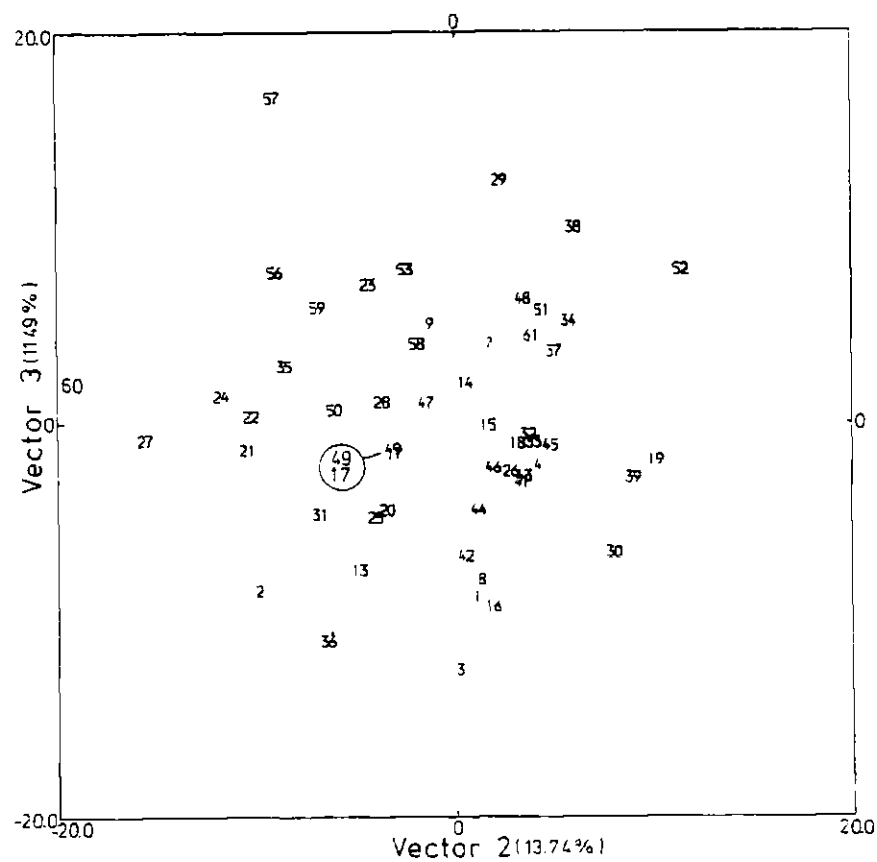


Fig 6:17 Principal co-ordinates analysis of Dg distances between Kenyan minimal samples.(males)-110 variables

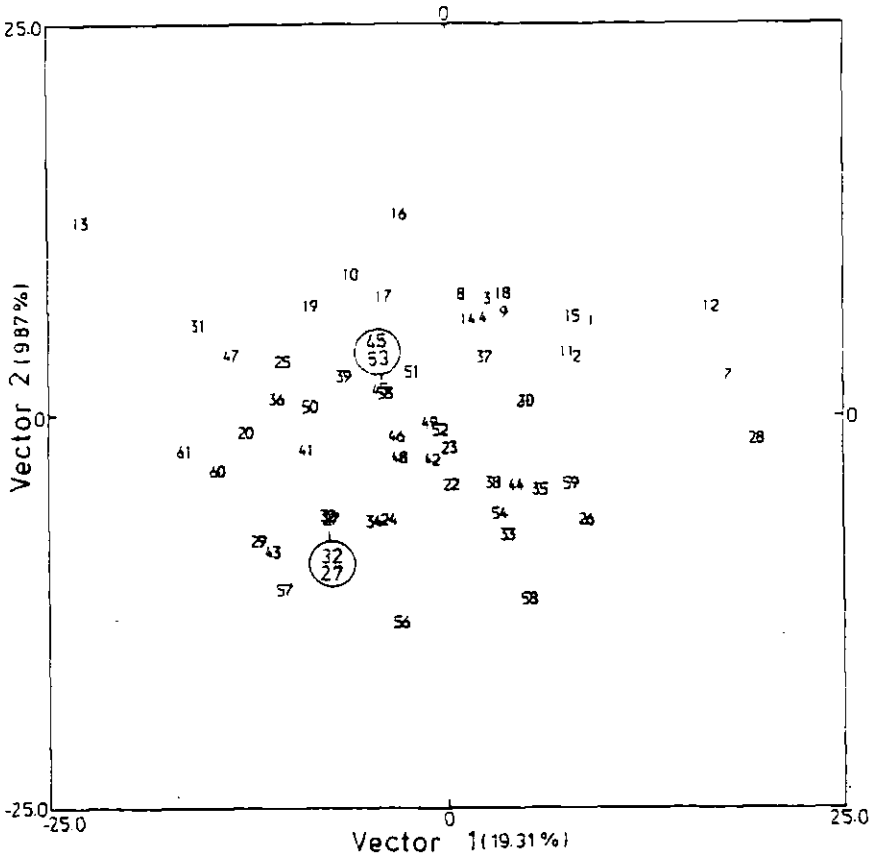
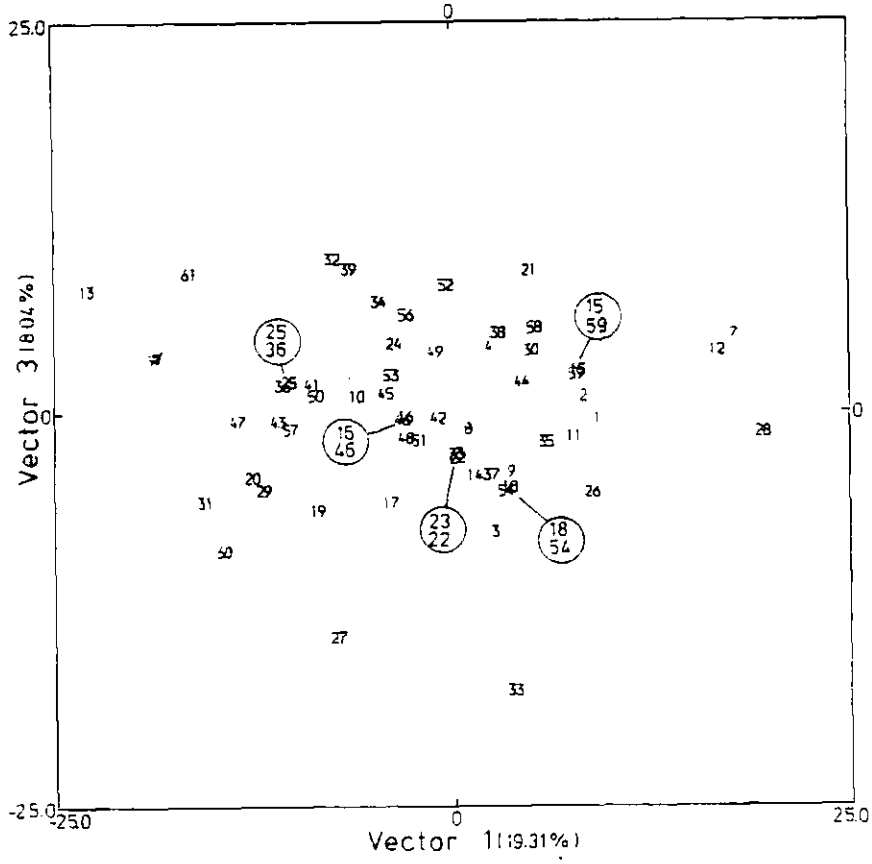
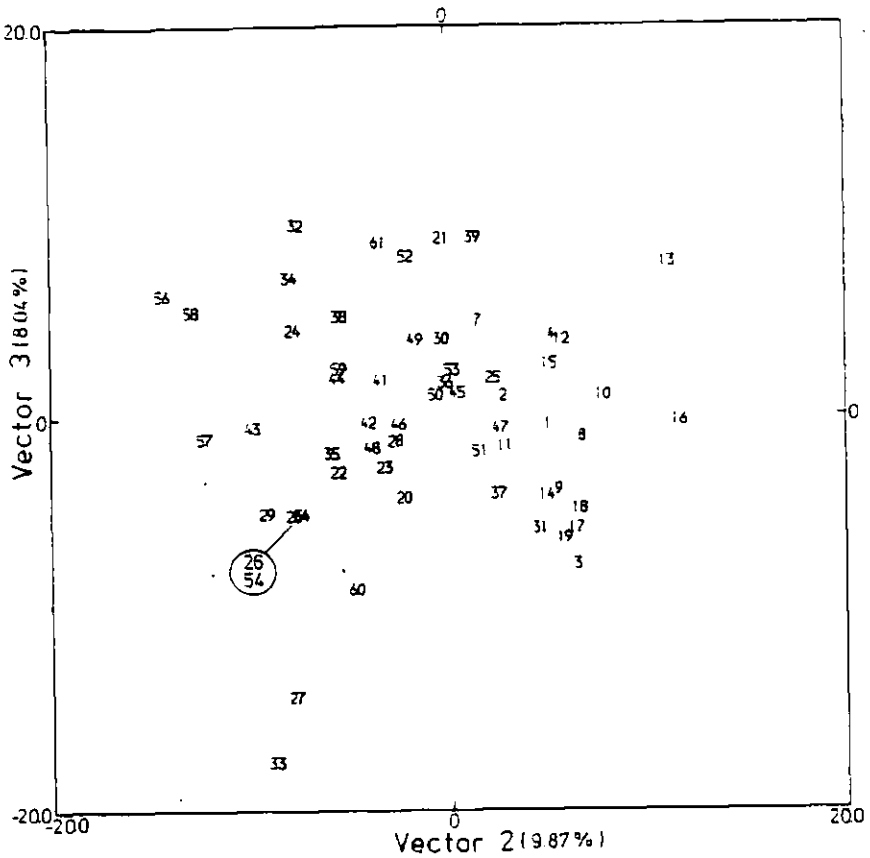


Fig 6:18 Principal co-ordinates analysis of Dg distances between Kenyan minimal samples (males) - 110 variables



Code no	Pop
1	Somali
2	Rendille
3	Gabbra
4	Boran
7	Burji
8	Samburu
9	Kadjiado Maasai
10	Narok Maasai
11	Ngwesi
12	Mukogodo
13	Kony
14	Nandi
15	Kipsigis
16	Tugen
17	Keyo
18	Marakwet
19	Pokot
20	Iteso
21	Turkana
22	Luo
23	Gusii
24	Tiriki
25	Maragoli
26	Bunyore
27	Idakho
28	Marama
29	Wanga
30	Marach
31	Bukhayo
32	Samia
33	Butsotso
34	Bunyala
35	Kabras
36	Bukusu
37	Kiambu Kikuyu
38	Muranga Kikuyu
39	Nyeri Kikuyu
41	Ndia
42	Kamba
43	Embu
44	Mbere
45	Chuka
46	Muthambe
47	Mwimbi
48	Igoji
49	Imenti
50	Tigania
51	Igembe
52	Tharaka
53	Pokomo
54	Malakote
56	Giriama
57	Chonyi
58	Mid Mji Kenda
59	Digo
60	Taita
61	Taveta

Fig 6:19 Principal co-ordinates analysis of Dg distances between Kenyan minimal samples.(males)-110 variables



Code no	Pop
1	Somali
2	Rendille
3	Gabbra
4	Boran
7	Burji
8	Samburu
9	Kadjiado Maasai
10	Narok Maasai
11	Ngwesi
12	Mukogodo
13	Kony
14	Nandi
15	Kipsigis
16	Tugen
17	Keyo
18	Marakwet
19	Pokot
20	Iteso
21	Turkana
22	Luo
23	Gusii
24	Tiriki
25	Maragoli
26	Bunyore
27	Idakho
28	Marama
29	Wanga
30	Marach
31	Bukhayo
32	Samia
33	Butsotso
34	Bunyala
35	Kabras
36	Bukusu
37	Kiambu Kikuyu
38	Muranga Kikuyu
39	Nyeri Kikuyu
41	Ndia
42	Kamba
43	Embu
44	Mbere
45	Chuka
46	Muthambe
47	Mwimbi
48	Igoji
49	Imenti
50	Tigania
51	Igembe
52	Tharaka
53	Pokomo
54	Malakote
56	Giriama
57	Chonyi
58	Mid Mji Kenda
59	Digo
60	Taita
61	Taveta

Fig 6:20 Principal co-ordinates analysis of Dg distances between Kenyan minimal samples:(females)-110 variables.

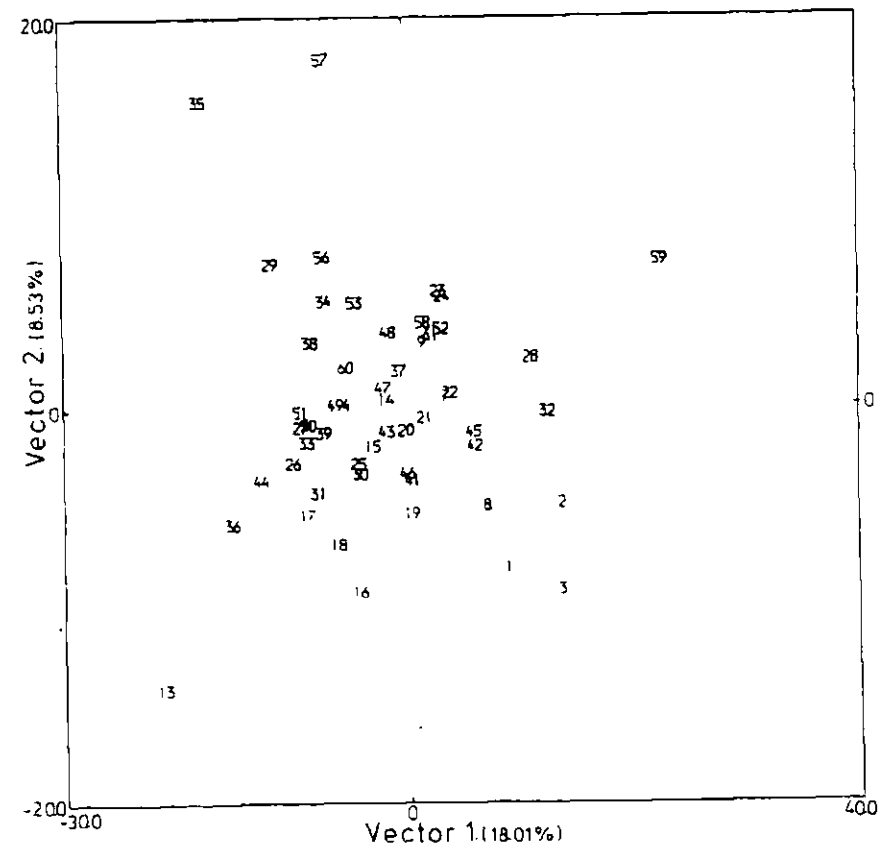


Fig 6:21 Principal co-ordinates analysis of Dg distances between Kenyan minimal samples:(females)-110 variables.

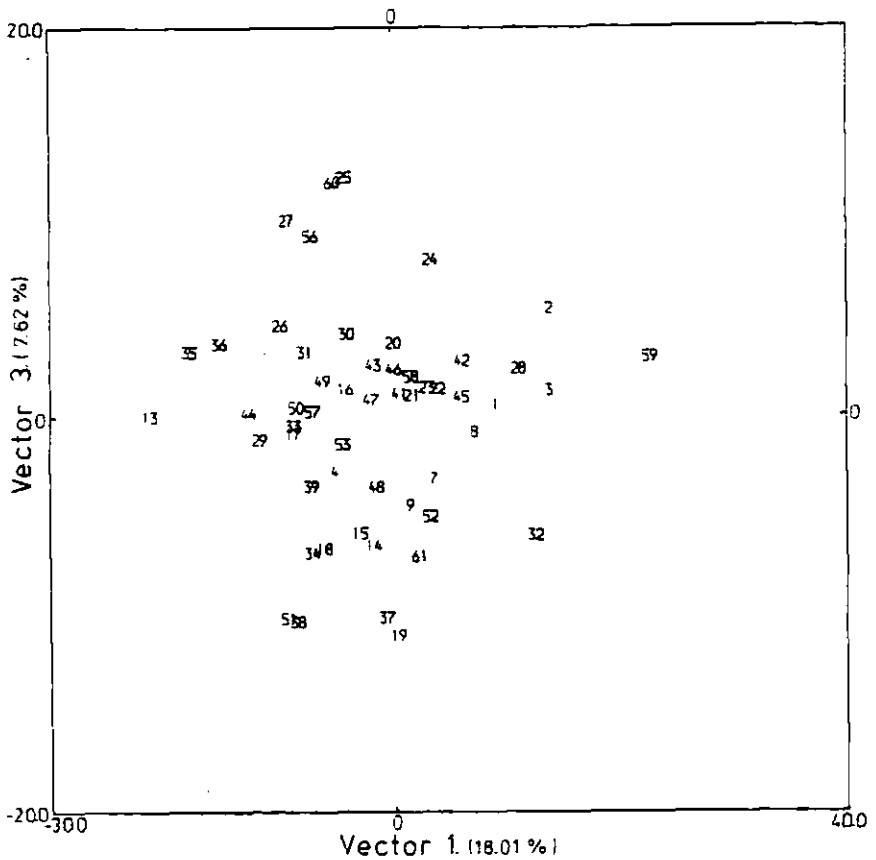
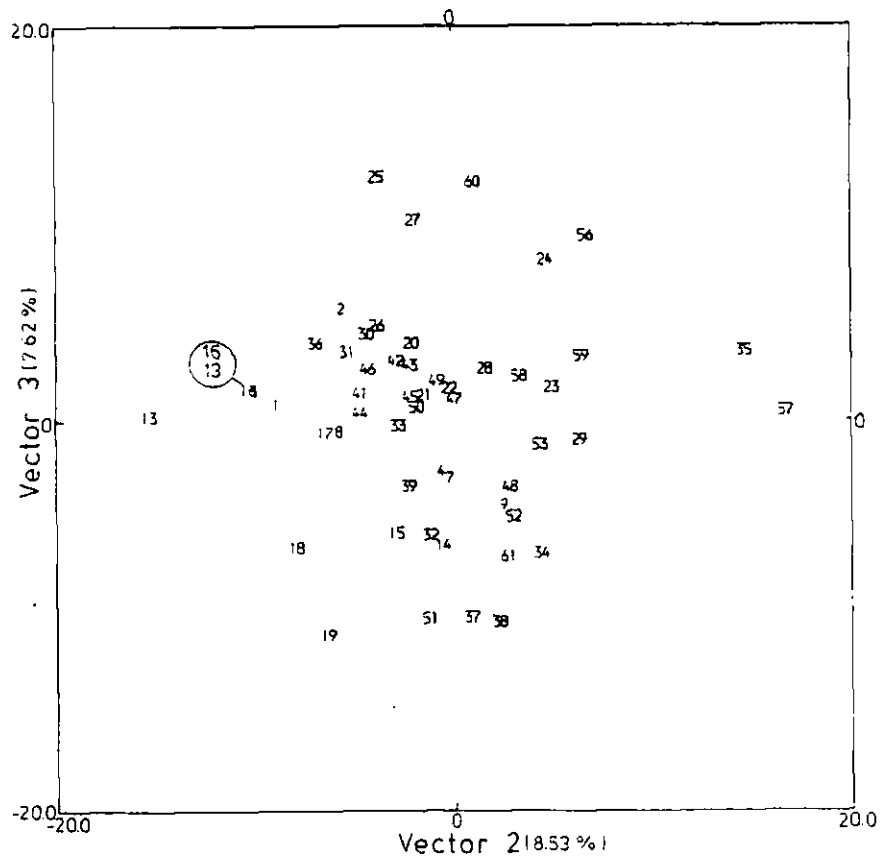


Fig 6:22 Principal co-ordinates analysis of Dg distances between Kenyan minimal samples:(females)-110 variables.



Code no	Pop
1	Somali
2	Rendille
3	Gabbra
4	Boran
7	Burji
8	Samburu
9	Kadjiado Maasai
10	Narok Maasai
11	Ngwesi
12	Mukogodo
13	Kony
14	Nandi
15	Kipsigis
16	Tugen
17	Keyo
18	Marakwet
19	Pokot
20	Iteso
21	Turkana
22	Luo
23	Gusii
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26	Bunyore
27	Idakho
28	Marama
29	Wanga
30	Marach
31	Bukhayo
32	Samia
33	Butsotso
34	Bunyala
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37	Kiambu Kikuyu
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41	Ndia
42	Kamba
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47	Mwimbi
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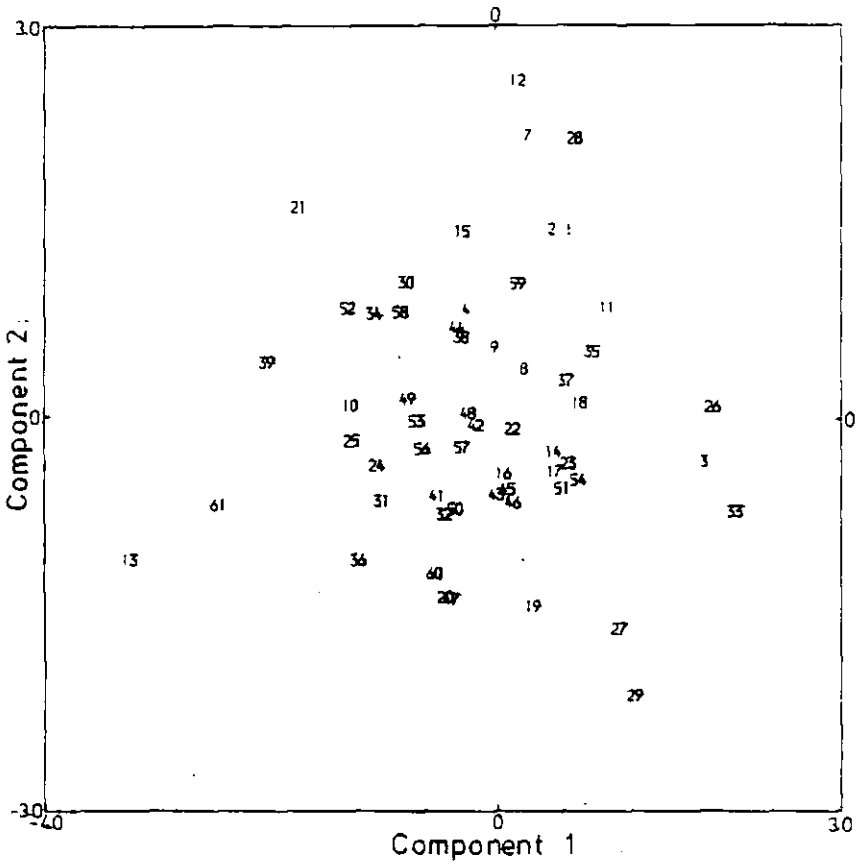
50	Tigania
51	Igembe
52	Tharaka
53	Pokomo
54	Malakote
56	Giriama
57	Chonyi
58	Mid Mji Kenda
59	Digo
60	Taita
61	Taveta

Fig 6:23 Principal components analysis of Kenyan minimal sample variation: (males) - 26 summary variables.



Code no	Pop
1	Somali
2	Rendille
3	Gabbra
4	Boran
7	Burji
8	Samburu
9	Kadjiado Maasai
10	Narok Maasai
11	Ngwesi
12	Mukogodo
13	Kony
14	Nandi
15	Kipsigis
16	Tugen
17	Keyo
18	Marakwet
19	Pokot
20	Iteso
21	Turkana
22	Luo
23	Gusii
24	Tiriki
25	Maragoli
26	Bunyore
27	Idakho
28	Marama
29	Wanga
30	Marach
31	Bukhayo
32	Samia
33	Butsotso
34	Bunyala
35	Kabras
36	Bukusu
37	Kiambu Kikuyu
38	Muranga Kikuyu
39	Nyeri Kikuyu
41	Ndia
42	Kamba
43	Embu
44	Mbere
45	Chuka
46	Muthambe
47	Mwimbi
48	Igoji
49	Imenti
50	Tigania
51	Igembe
52	Tharaka
53	Pokomo
54	Malakote
56	Giriama
57	Chonyi
58	Mid Mji Kenda
59	Digo
60	Taita
61	Taveta

Fig 6:24 Principal components analysis of Kenyan minimal sample variation: (males) - 26 summary variables.

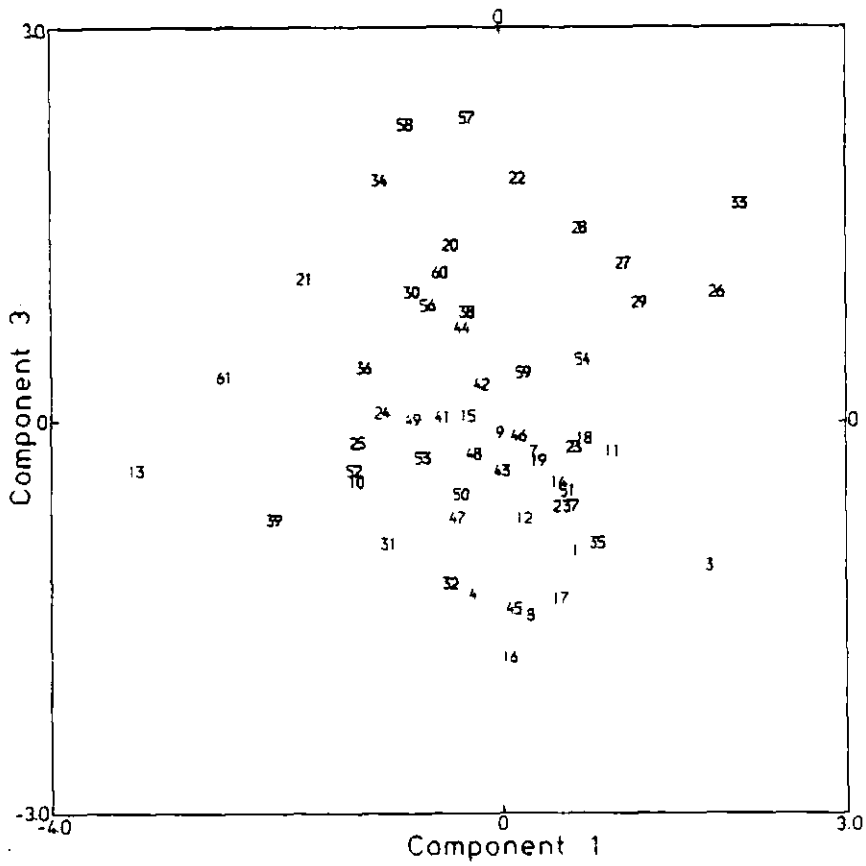


Fig 6:25 Principal components analysis of Kenyan minimal sample variation : (males) - 26 summary variables.

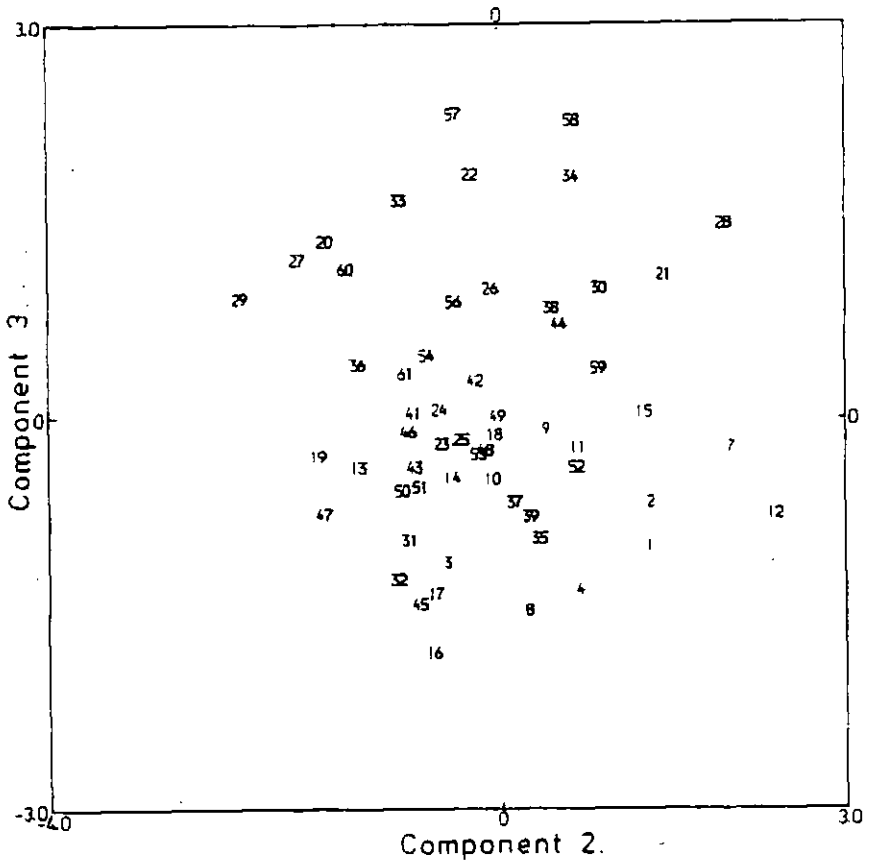
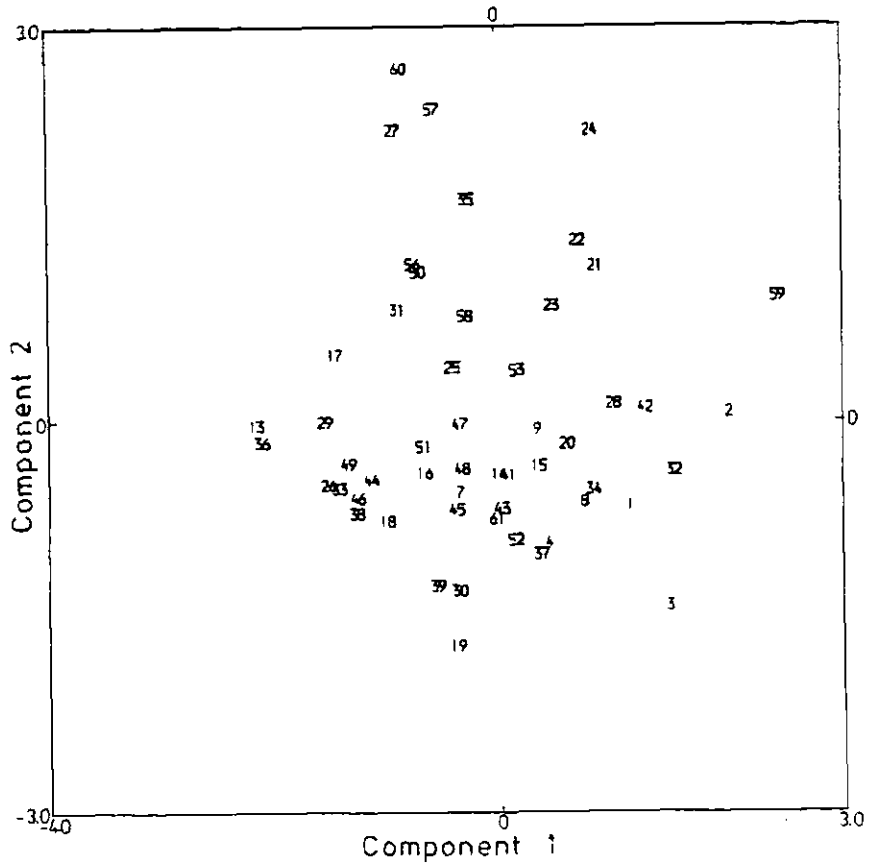


Fig 6:26 Principal components analysis of Kenyan minimal sample variation : (females) - 26 summary variables.



Code no	Pop
1	Somali
2	Rendille
3	Gabbra
4	Boran
7	Burji
8	Samburu
9	Kadjiado Maasai
10	Narok Maasai
11	Ngwesi
12	Mukogodo
13	Kony
14	Nandi
15	Kipsigis
16	Tugen
17	Keyo
18	Marakwet
19	Pokot
20	Iteso
21	Turkana
22	Luo
23	Gusii
24	Tiriki
25	Maragoli
26	Bunyore
27	Idakho
28	Marama
29	Wanga
30	Marach
31	Bukhayo
32	Samia
33	Butsotso
34	Bunyala
35	Kabras
36	Bukusu
37	Kiambu Kikuyu
38	Muranga Kikuyu
39	Nyeri Kikuyu
41	Ndia
42	Kamba
43	Embu
44	Mbere
45	Chuka
46	Muthambe
47	Mwimbi
48	Igoji
49	Imenti
50	Tigania
51	Igembe
52	Tharaka
53	Pokomo
54	Malakote
56	Giriama
57	Chonyi
58	Mid Mji Kenda
59	Digo
60	Taita
61	Taveta

Fig 6:27 Principal components analysis of Kenyan minimal sample variation: (females) - 26 summary variables.

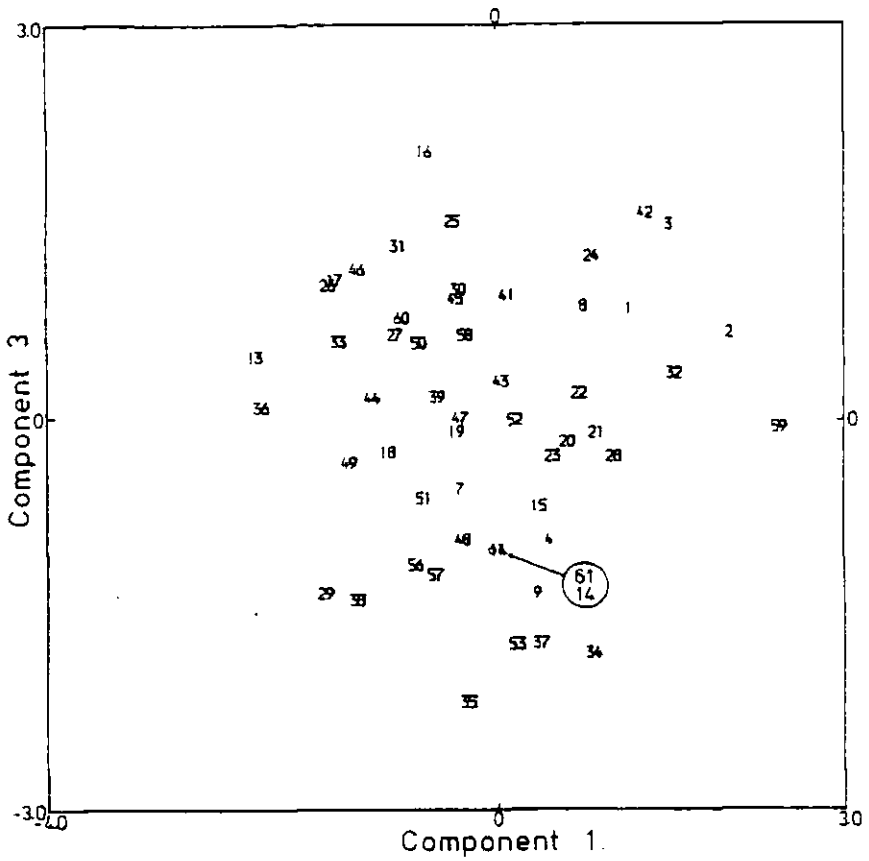
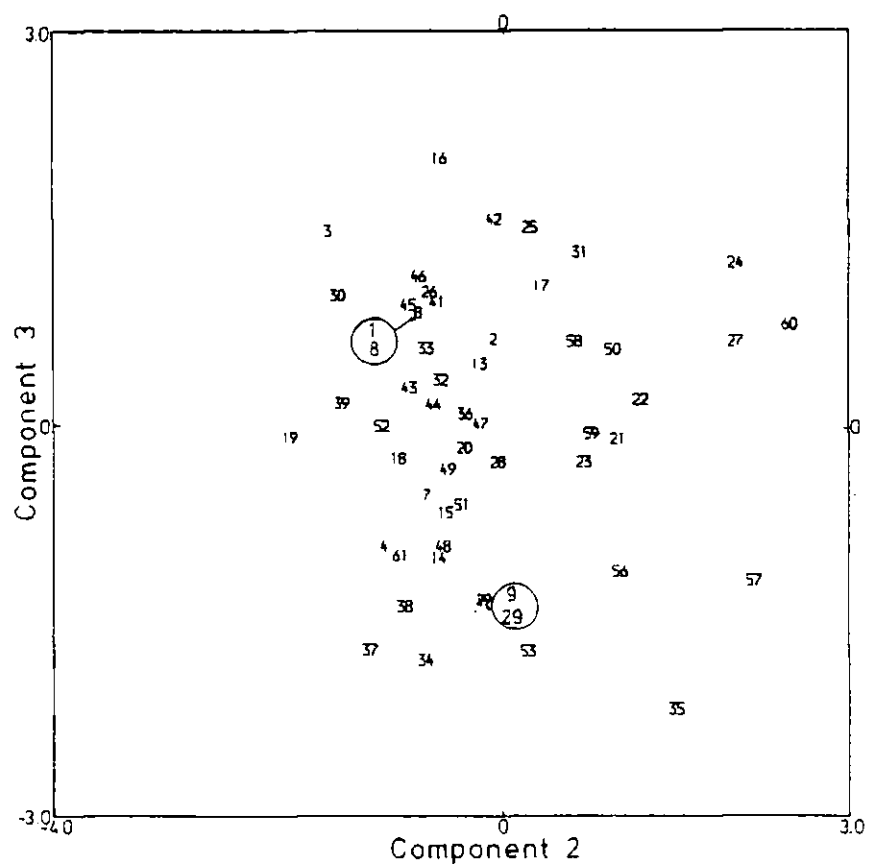


Fig 6:28 Principal components analysis of Kenyan minimal sample variation: (females) - 26 summary variables.



Code no	Pop
1	Somali
2	Rendille
3	Gabbra
4	Boran
7	Burji
8	Samburu
9	Kadjiado Maasai
10	Narok Maasai
11	Ngwesi
12	Mukogodo
13	Kony
14	Nandi
15	Kipsigis
16	Tugen
17	Keyo
18	Marakwet
19	Pokot
20	Iteso
21	Turkana
22	Luo
23	Gusii
24	Tiriki
25	Maragoli
26	Bunyore
27	Idakho
28	Marama
29	Wanga
30	Marach
31	Bukhayo
32	Samia
33	Butsotso
34	Bunyala
35	Kabras
36	Bukusu
37	Kiambu Kikuyu
38	Muranga Kikuyu
39	Nyeri Kikuyu
41	Ndia
42	Kamba
43	Embu
44	Mbere
45	Chuka
46	Muthambe
47	Mwimbi
48	Igoji
49	Imenti
50	Tigania
51	Igembe
52	Tharaka
53	Pokomo
54	Malakote
56	Giriama
57	Chonyi
58	Mid Mji Kenda
59	Digo
60	Taita
61	Taveta

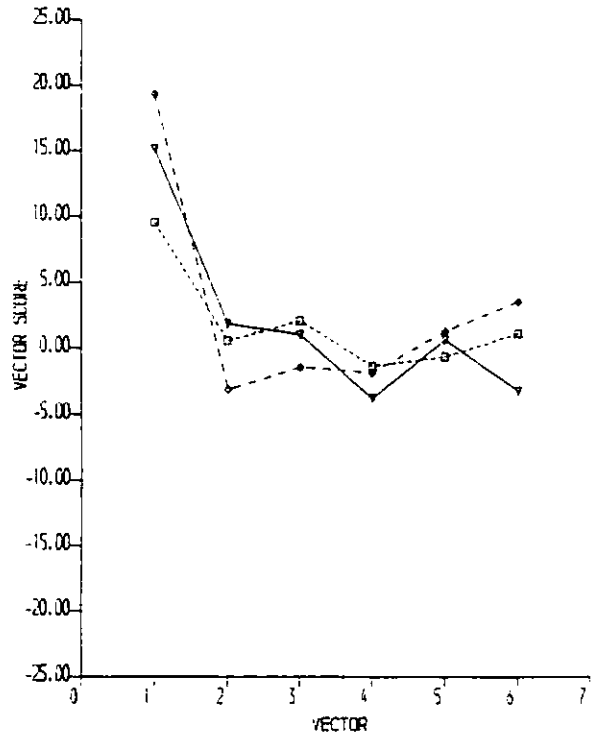


FIG 8:1
DISTRIBUTION OF THE FIRST SIX PRINCIPAL COORDINATES - CUSHITIC GROUPS (MALES) ANALYSIS BASED ON TWENTY SIX DIGITAL AND PALMAR VARIABLES

SOMALI GROUP
GALLA GROUP
DOROBO GROUP

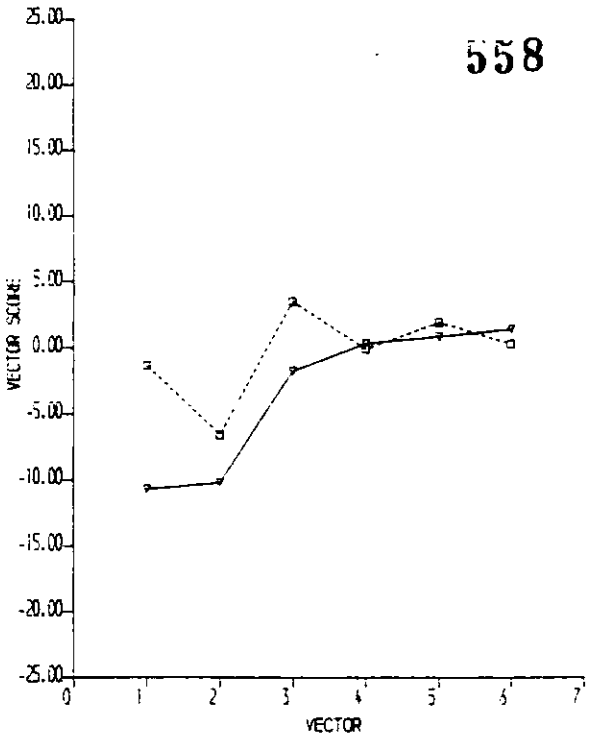


FIG 8:2
DISTRIBUTION OF THE FIRST SIX PRINCIPAL COORDINATES - CUSHITIC GROUPS (FEMALES) ANALYSIS BASED ON TWENTY SIX DIGITAL AND PALMAR VARIABLES

SOMALI GROUP
GALLA GROUP

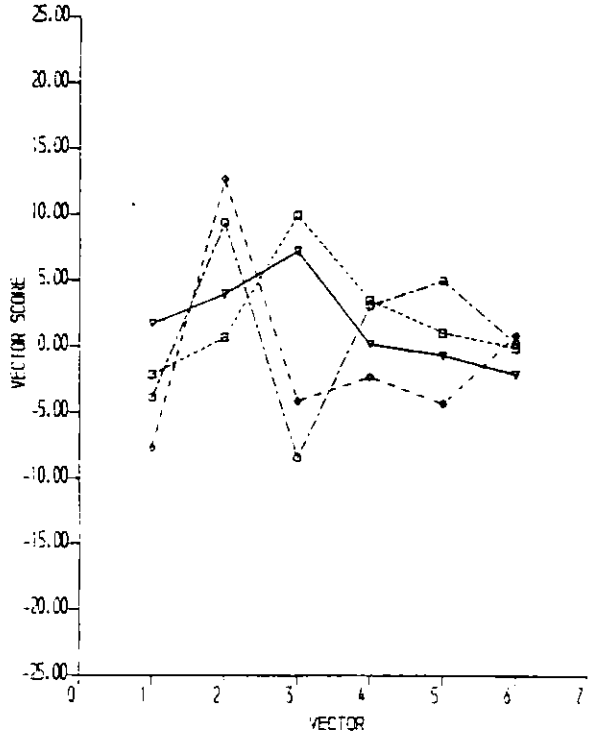


FIG 8:3
DISTRIBUTION OF THE FIRST SIX PRINCIPAL COORDINATES - NILOTIC GROUPS (MALES) ANALYSIS BASED ON TWENTY SIX DIGITAL AND PALMAR VARIABLES

MAASAI GROUP
KALENJIN GROUP
KARIMOJONG GROUP
LUO GROUP

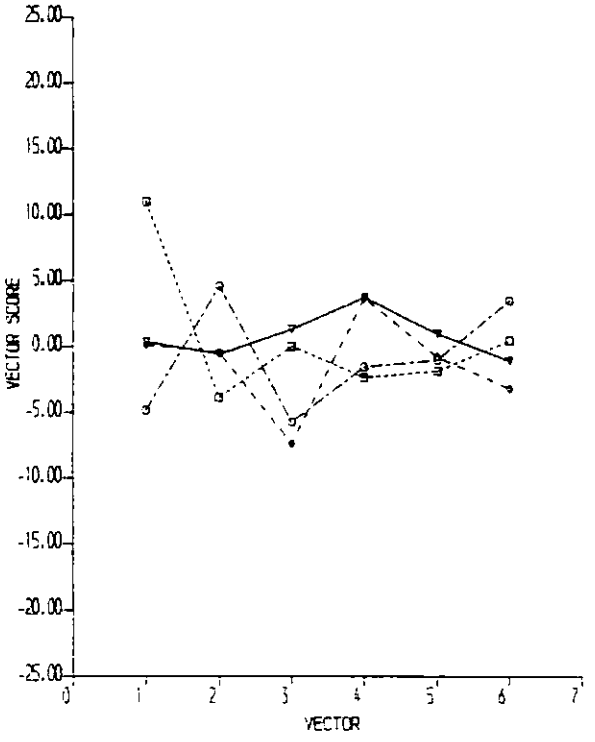


FIG 8:4
DISTRIBUTION OF THE FIRST SIX PRINCIPAL COORDINATES - NILOTIC GROUPS (FEMALES) ANALYSIS BASED ON TWENTY SIX DIGITAL AND PALMAR VARIABLES

MAASAI GROUP
KALENJIN GROUP
KARIMOJONG GROUP
LUO GROUP

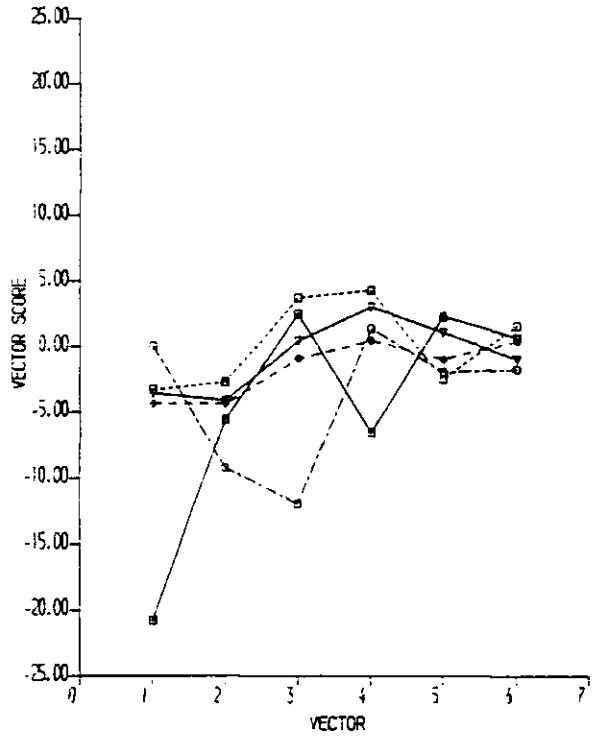


FIG 8:5
DISTRIBUTION OF THE FIRST SIX PRINCIPAL COORDINATES - BANTU GROUPS (MALES)
ANALYSIS BASED ON TWENTY SIX DIGITAL AND PALMAR VARIABLES

LUYIA BANTU
CENTRAL BANTU
POKOMO BANTU
MIJI KENDA BANTU
TAITA BANTU

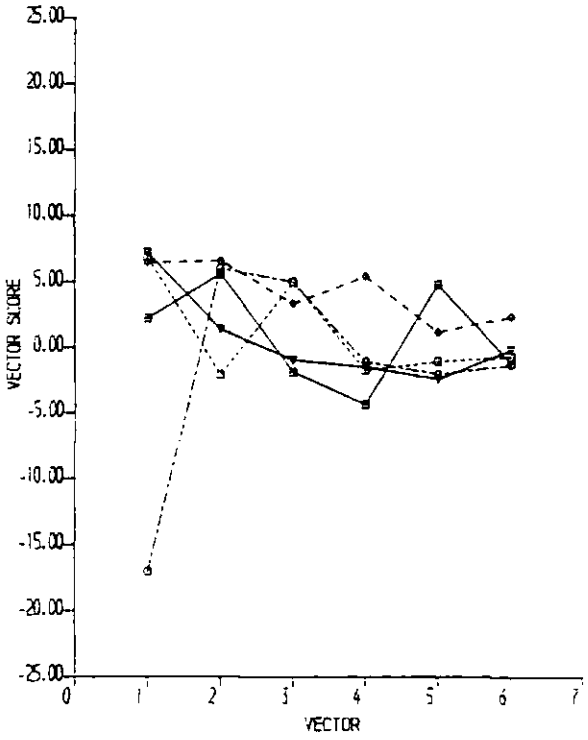


FIG 8:6
DISTRIBUTION OF THE FIRST SIX PRINCIPAL COORDINATES - BANTU GROUPS (FEMALES)
ANALYSIS BASED ON TWENTY SIX DIGITAL AND PALMAR VARIABLES

LUYIA BANTU
CENTRAL BANTU
POKOMO BANTU
MIJI KENDA BANTU
TAITA BANTU

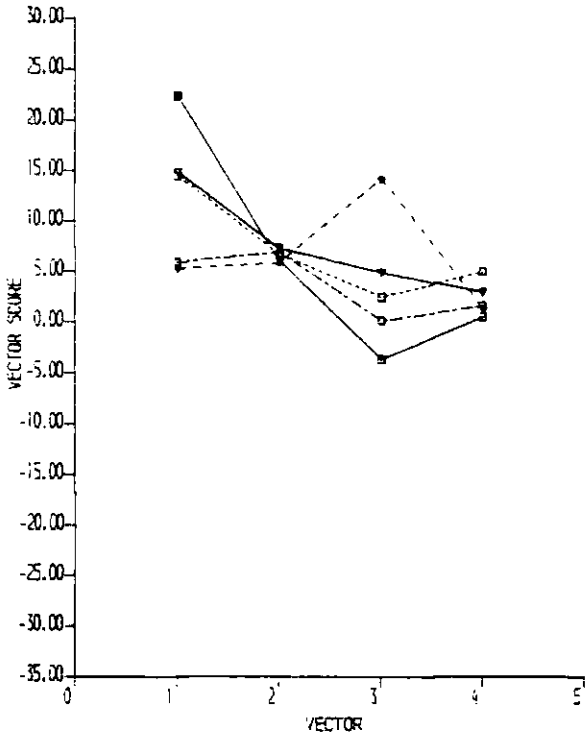


FIG 8:7
DISTRIBUTION OF FIRST FOUR PRINCIPAL CO-ORDINATES CUSHITIC SAMPLES (MALES) ANALYSIS BASED ON TWENTY SIX SUMMARY VARIABLES

SOMALI
RENDILLE
GABBRA
BORAN
BURJI

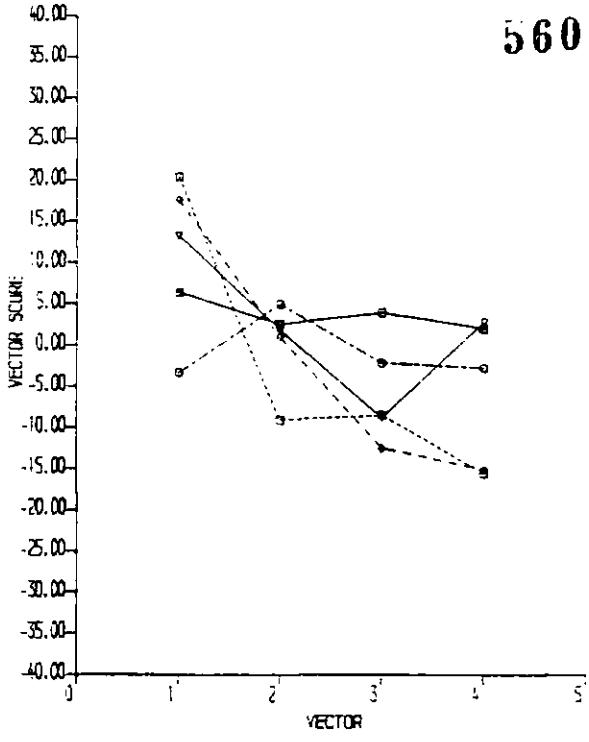


FIG 8:8
DISTRIBUTION OF FIRST FOUR PRINCIPAL CO-ORDINATES CUSHITIC SAMPLES (FEMALES) ANALYSIS BASED ON TWENTY SIX SUMMARY VARIABLES

SOMALI
RENDILLE
GABBRA
BORAN
BURJI

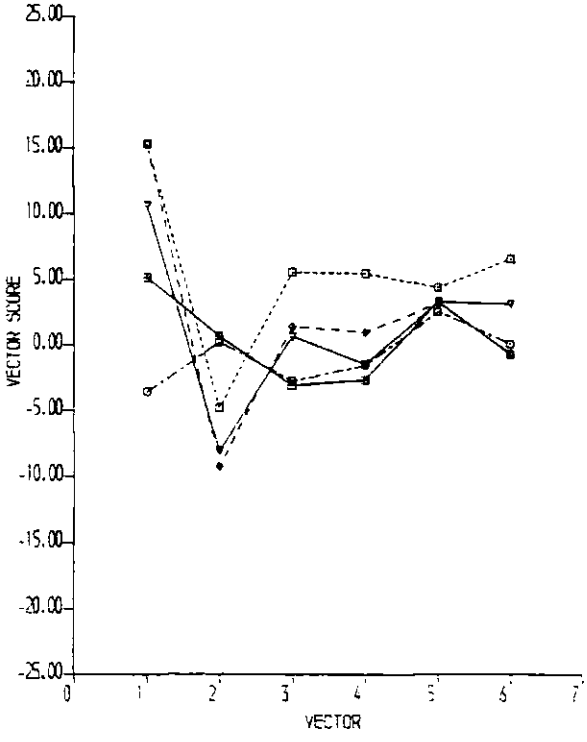


FIG 8:9
DISTRIBUTION OF FIRST SIX PRINCIPAL CO-ORDINATES CUSHITIC SAMPLES (FEMALES) - ANALYSIS BASED ON ONE HUNDRED AND TEN VARIABLES

SOMALI
RENDILLE
GABBRA
BORAN
BURJI

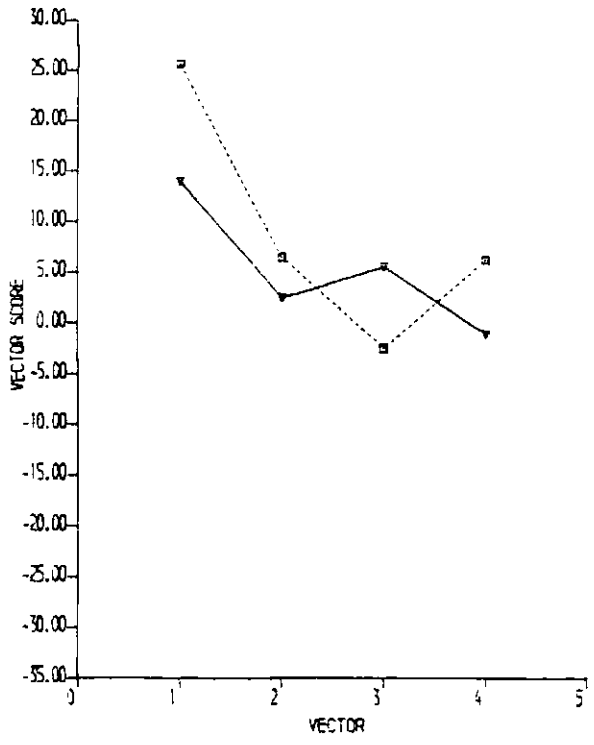


FIG 8:10
DISTRIBUTION OF FIRST FOUR PRINCIPAL CO-ORDINATES - OOROBO SAMPLES (MALES) ANALYSIS BASED ON TWENTY SIX SUMMARY VARIABLES

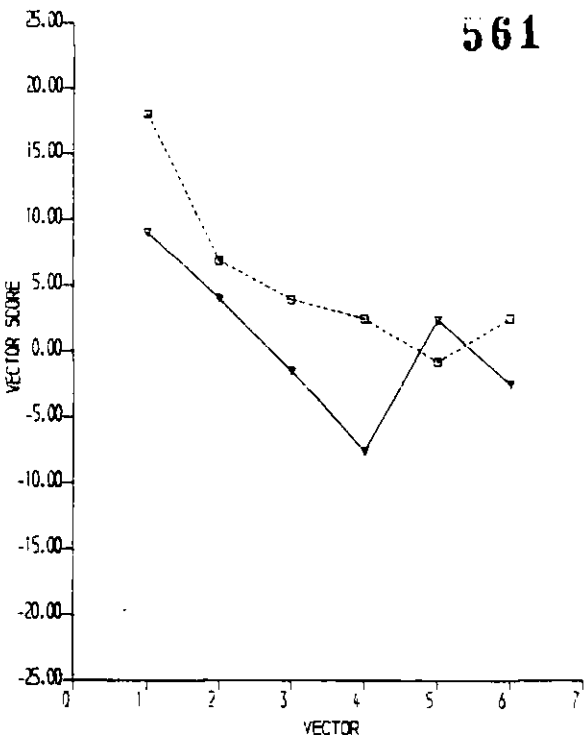


FIG 8:11
DISTRIBUTION OF FIRST SIX PRINCIPAL CO-ORDINATES - OOROBO SAMPLES (MALES) ANALYSIS BASED ON ONE HUNDRED AND TEN VARIABLES

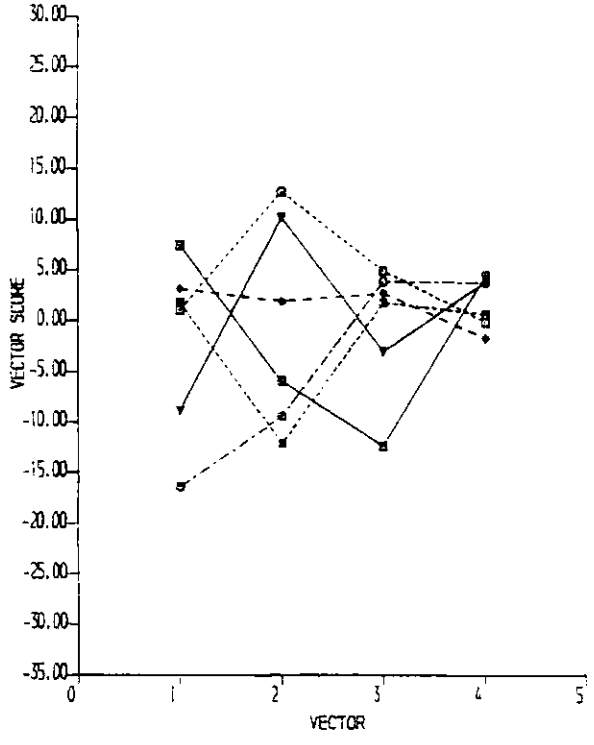


FIG 8:12
DISTRIBUTION OF FIRST FOUR PRINCIPAL CO-ORDINATES NON KALENJIN NILOTIC SAMPLES (MALES) - ANALYSIS BASED ON TWENTY SIX SUMMARY VARIABLES.

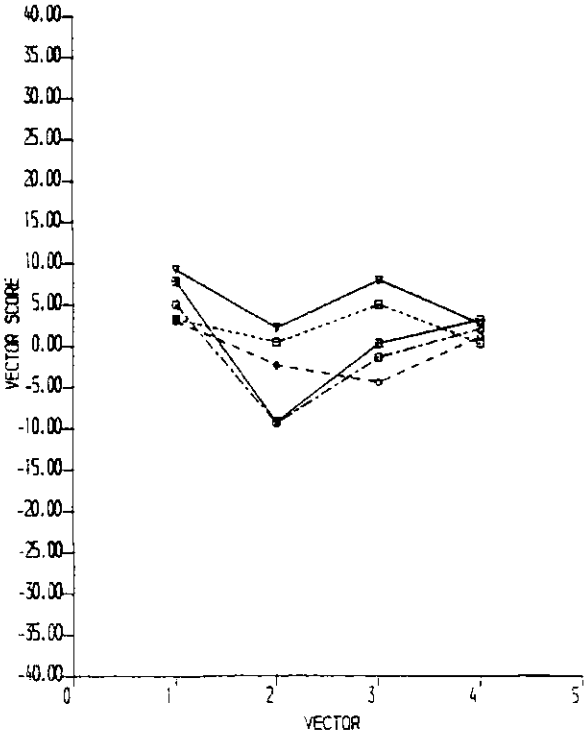


FIG 8:13
DISTRIBUTION OF FIRST FOUR PRINCIPAL CO-ORDINATES NON KALENJIN NILOTIC SAMPLES (FEMALES) - ANALYSIS BASED ON TWENTY SIX SUMMARY VARIABLES.

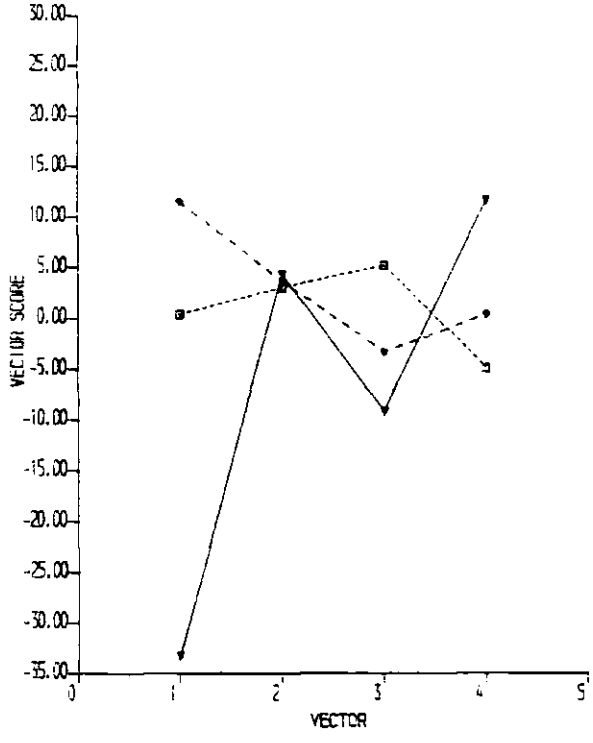


FIG 8:14
DISTRIBUTION OF FIRST FOUR PRINCIPAL CO-ORDINATES - SOUTH-WESTERN KALENJIN SAMPLES (MALES) - ANALYSIS BASED ON TWENTY SIX SUMMARY VARIABLES

KONY
NANDI
KIPSIGIS

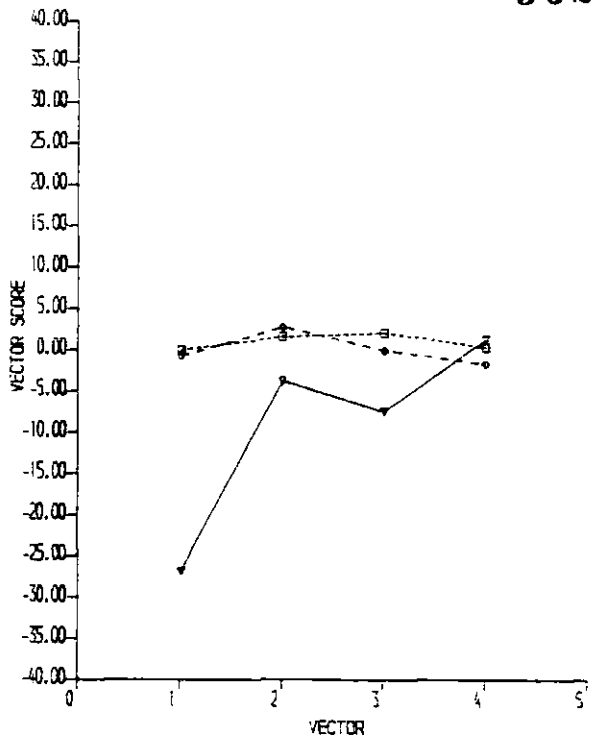


FIG 8:15
DISTRIBUTION OF FIRST FOUR PRINCIPAL CO-ORDINATES - SOUTH-WESTERN KALENJIN SAMPLES (FEMALES) - ANALYSIS BASED ON TWENTY SIX SUMMARY VARIABLES

KONY
NANDI
KIPSIGIS

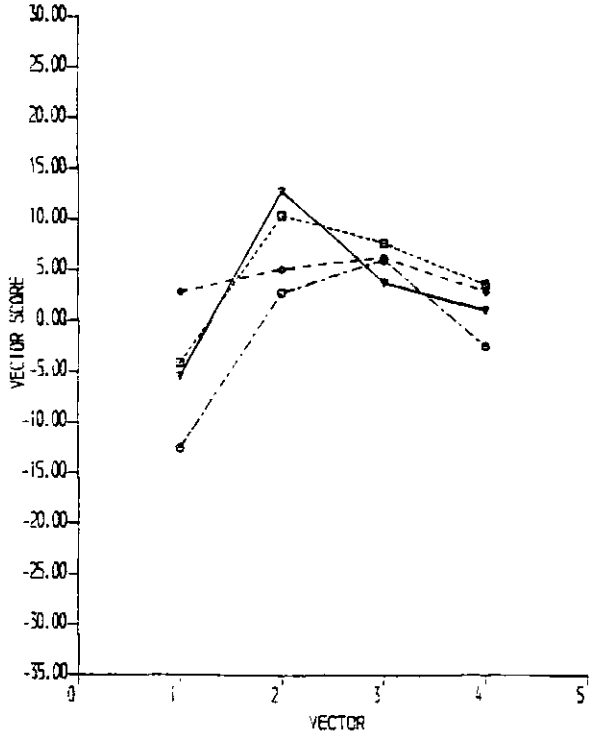


FIG 8:16
DISTRIBUTION OF FIRST FOUR PRINCIPAL CO-ORDINATES - NORTH-EASTERN KALENJIN SAMPLES (MALES) - ANALYSIS BASED ON TWENTY SIX SUMMARY VARIABLES

TUGEN
KEYO
MARAKWET
POKOT

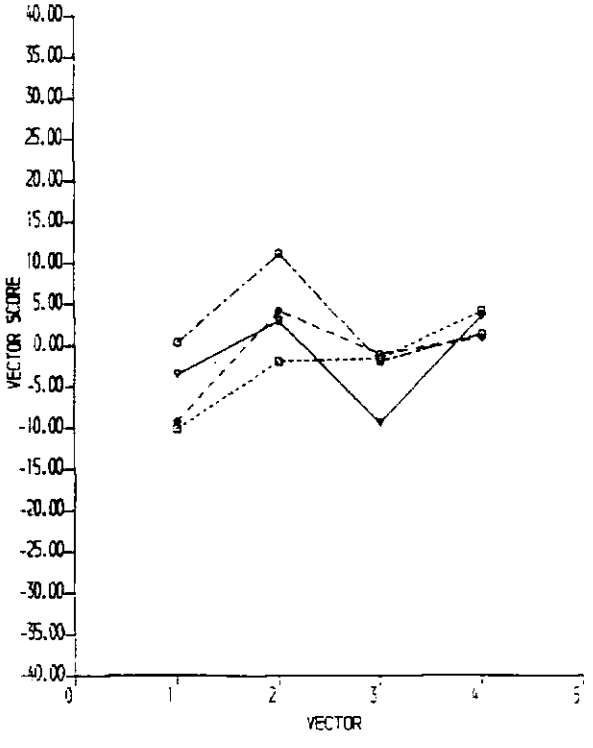


FIG 8:17
DISTRIBUTION OF FIRST FOUR PRINCIPAL CO-ORDINATES - NORTH-EASTERN KALENJIN SAMPLES (FEMALES) - ANALYSIS BASED ON TWENTY SIX SUMMARY VARIABLES

TUGEN
KEYO
MARAKWET
POKOT

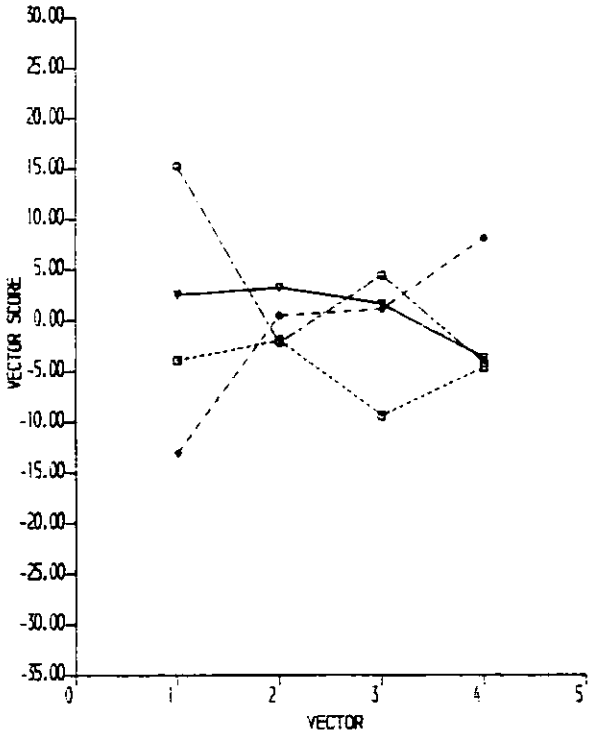


FIG 8:18
DISTRIBUTION OF FIRST FOUR PRINCIPAL CO-ORDINATES - SOUTHERN LUYIA SAMPLES (MALES) - ANALYSIS BASED ON TWENTY SIX SUMMARY VARIABLES

GUSII
TIRIKI
MARAGOLI
BUNYORE

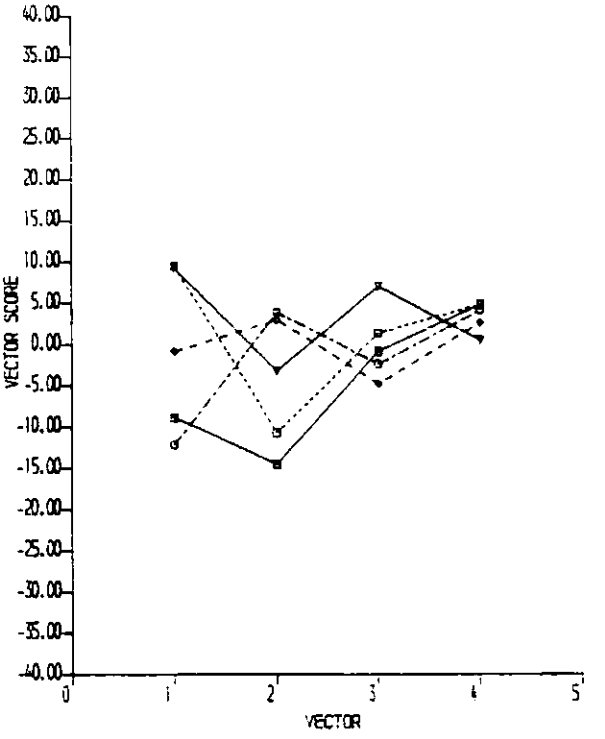


FIG 8:19
DISTRIBUTION OF FIRST FOUR PRINCIPAL CO-ORDINATES - SOUTHERN LUYIA SAMPLES (FEMALES) - BASED ON TWENTY SIX SUMMARY VARIABLES

GUSII
TIRIKI
MARAGOLI
BUNYORE
IDAKHO

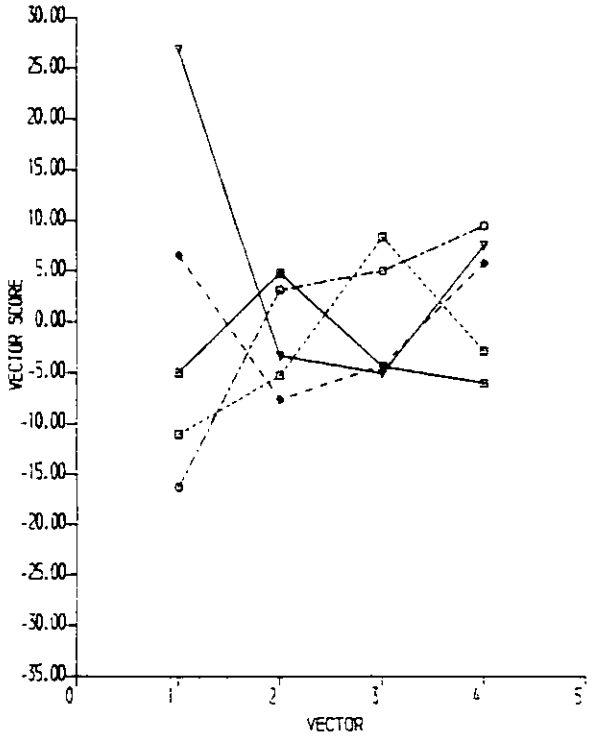


FIG 8:20
DISTRIBUTION OF FIRST FOUR PRINCIPAL CO-ORDINATES CENTRAL LUYIA SAMPLES (MALES) - ANALYSIS BASED ON TWENTY SIX SUMMARY VARIABLES

MARAMA
WANGA
MARACH
BUKHAYO
SAMIA

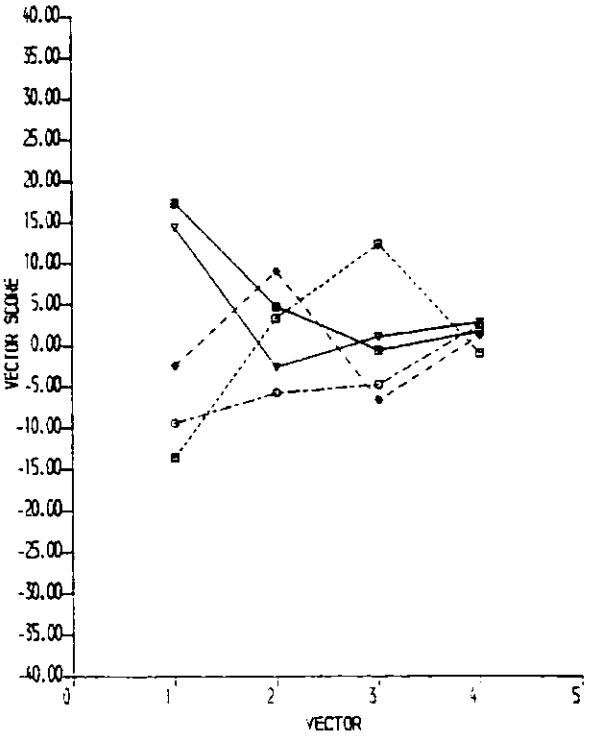


FIG 8:21
DISTRIBUTION OF FIRST FOUR PRINCIPAL CO-ORDINATES CENTRAL LUYIA SAMPLES (FEMALES) - BASED ON TWENTY SIX SUMMARY VARIABLES

MARAMA
WANGA
MARACH
BUKHAYO
SAMIA

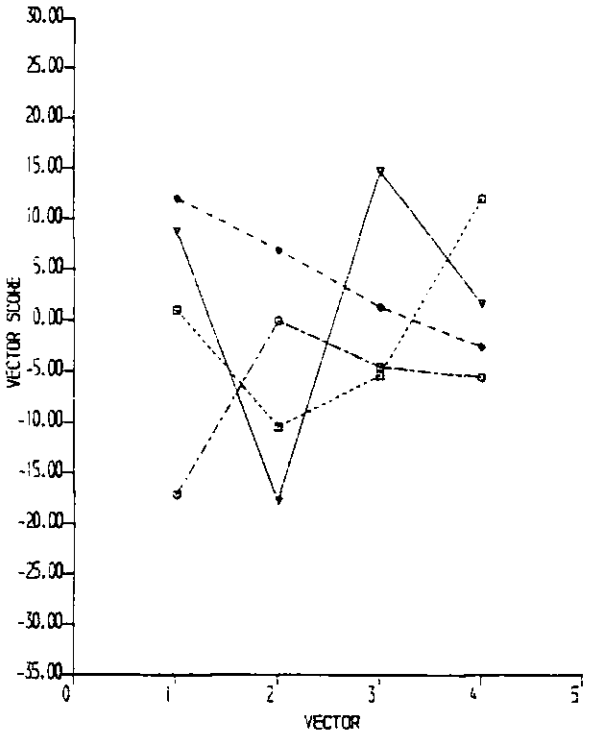


FIG 8:22
DISTRIBUTION OF FIRST FOUR PRINCIPAL CO-ORDINATES NORTHERN LUYIA SAMPLES (MALES) - ANALYSIS BASED ON TWENTY SIX SUMMARY VARIABLES

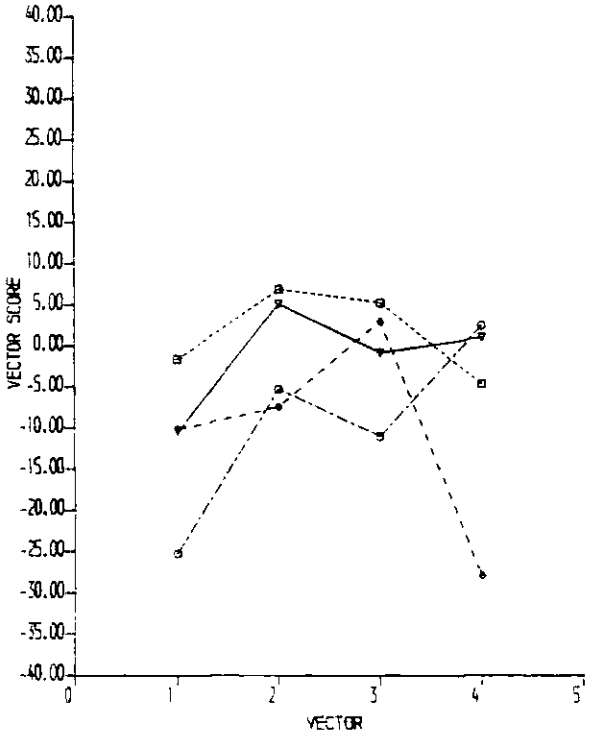


FIG 8·23
DISTRIBUTION OF FIRST FOUR PRINCIPAL CO-ORDINATES NORTHERN LUYIA SAMPLES (FEMALES) - BASED ON TWENTY SIX SUMMARY VARIABLES

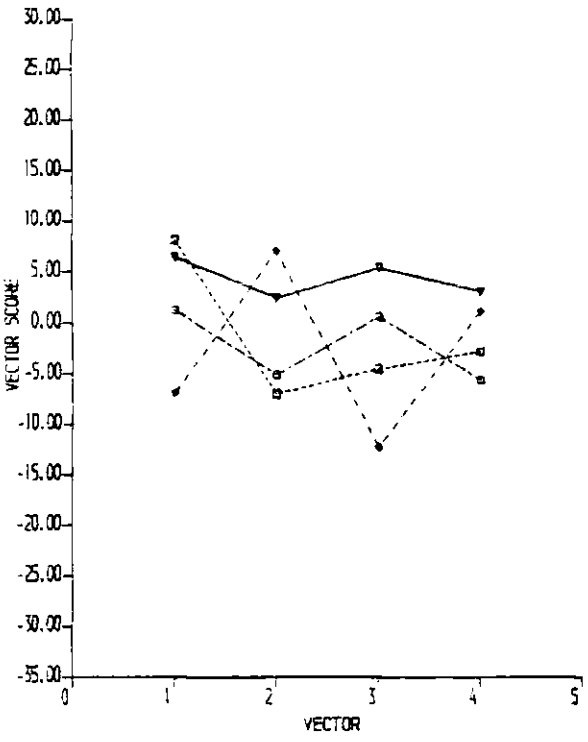


FIG 8:24
DISTRIBUTION OF FIRST FOUR PRINCIPAL CO-ORDINATES - KIKUYU AND KAMBA SAMPLES (MALES) - ANALYSIS BASED ON TWENTY SIX SUMMARY VARIABLES

KIAMBU KIKUYU
MURANGA KIKUYU
NYERI KIKUYU
KAMBA

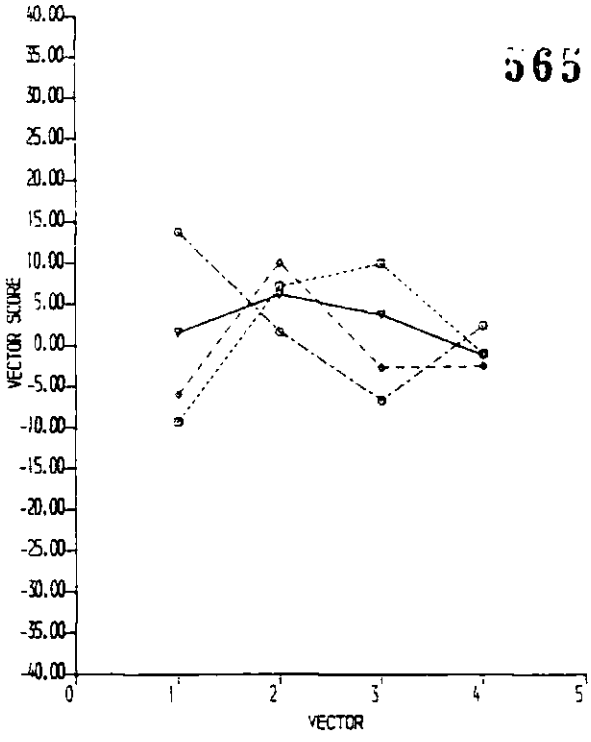


FIG 8:25
DISTRIBUTION OF FIRST FOUR PRINCIPAL CO-ORDINATES - KIKUYU AND KAMBA SAMPLES (FEMALES) - ANALYSIS BASED ON TWENTY SIX SUMMARY VARIABLES

KIAMBU KIKUYU
MURANGA KIKUYU
NYERI KIKUYU
KAMBA

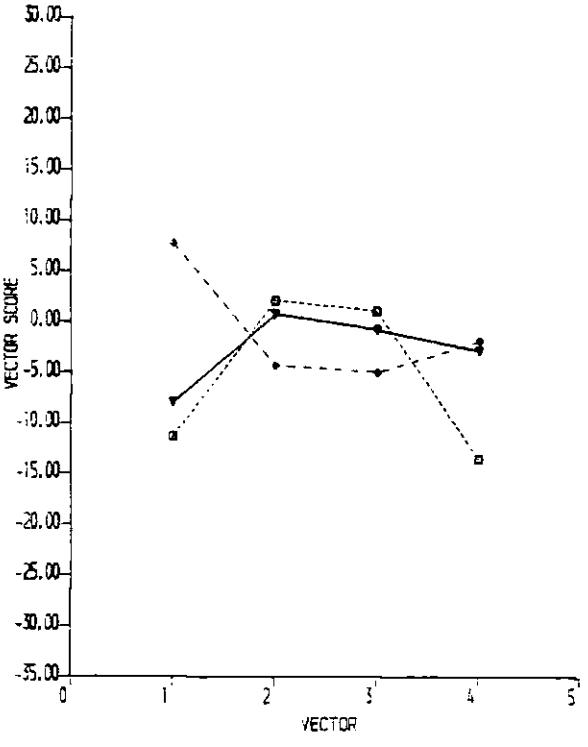


FIG 8:26
DISTRIBUTION OF FIRST FOUR PRINCIPAL CO-ORDINATES - NDIA, EMBU, MBERE SAMPLES (MALES) - ANALYSIS BASED ON TWENTY SIX SUMMARY VARIABLES

NDIA
EMBU
MBERE

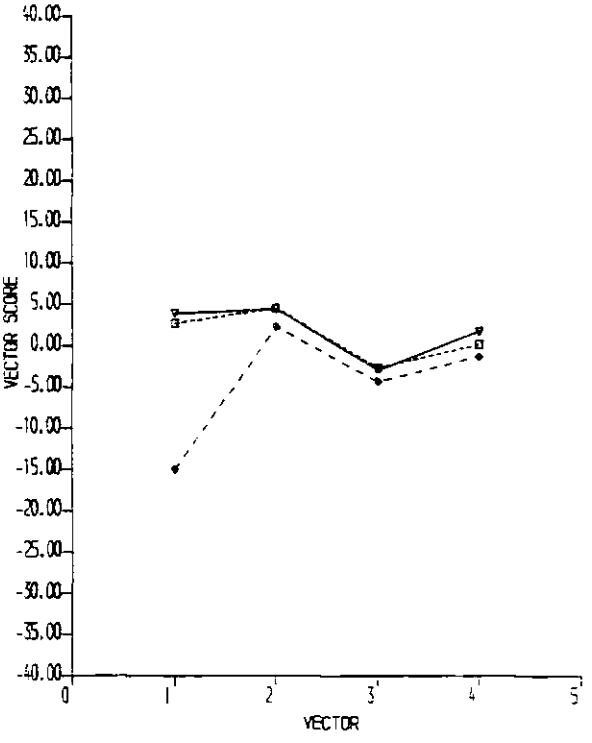


FIG 8:27
DISTRIBUTION OF FIRST FOUR PRINCIPAL CO-ORDINATES - NDIA, EMBU, MBERE SAMPLES (FEMALES) - ANALYSIS BASED ON TWENTY SIX SUMMARY VARIABLES

NDIA
EMBU
MBERE

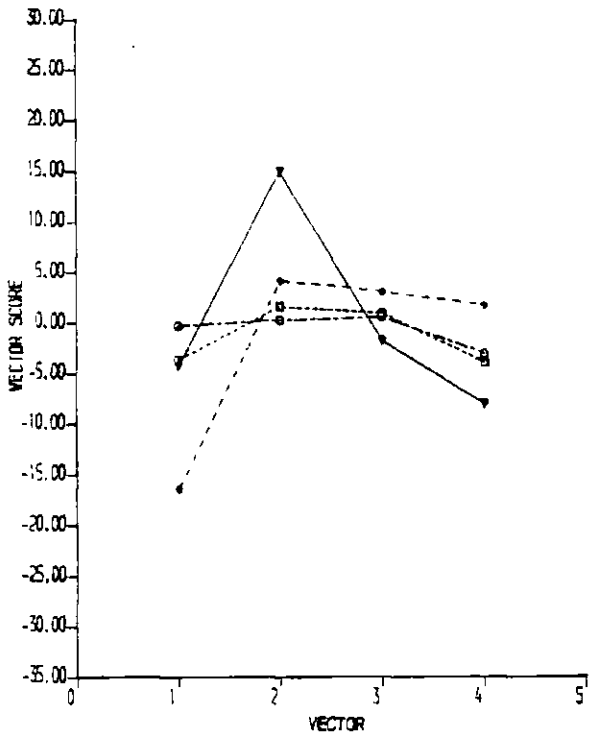


FIG 8:28
DISTRIBUTION OF FIRST FOUR PRINCIPAL CO-ORDINATES - SOUTHERN MERU SAMPLES (MALES) - ANALYSIS BASED ON TWENTY SUMMARY VARIABLES

CHUKA
MUTHAMBI
MWIMBI
IGOJI

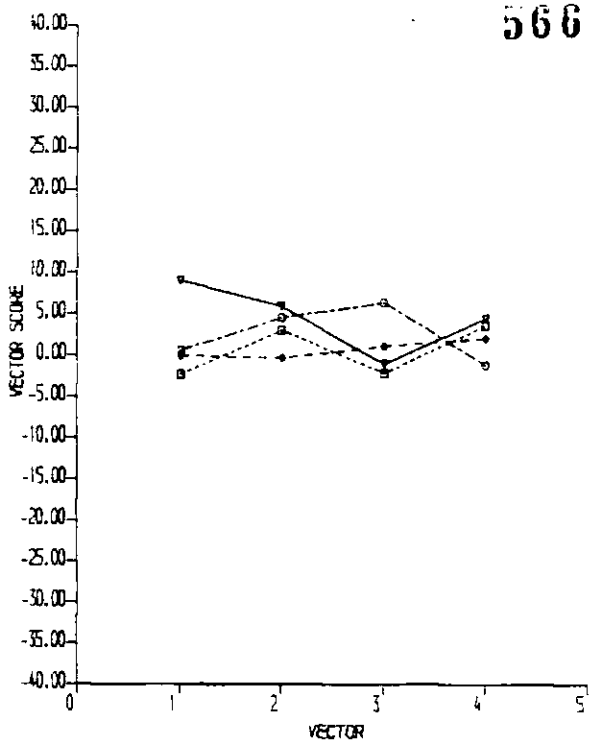


FIG 8:29
DISTRIBUTION OF FIRST FOUR PRINCIPAL CO-ORDINATES - SOUTHERN MERU SAMPLES (FEMALES) - ANALYSIS BASED ON TWENTY SIX SUMMARY VARIABLES

CHUKA
MUTHAMBI
MWIMBI
IGOJI

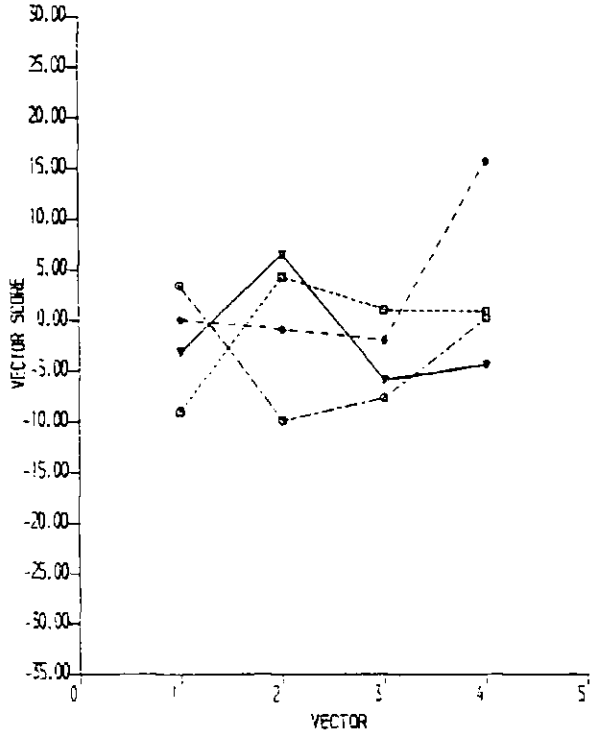


FIG 8:30
DISTRIBUTION OF FIRST FOUR PRINCIPAL CO-ORDINATES - NORTHERN MERU SAMPLES (MALES) - ANALYSIS BASED ON TWENTY SIX SUMMARY VARIABLES

IMENTI
TIGANIA
IGEMBE
THARAKA

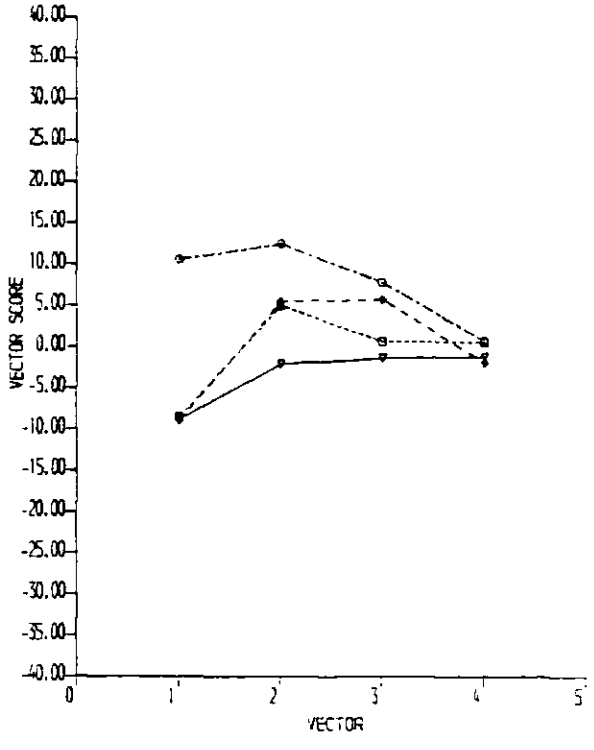


FIG 8:31
DISTRIBUTION OF FIRST FOUR PRINCIPAL CO-ORDINATES - NORTHERN MERU SAMPLES (FEMALES) - ANALYSIS BASED ON TWENTY SIX SUMMARY VARIABLES

IMENTI
TIGANIA
IGEMBE
THARAKA

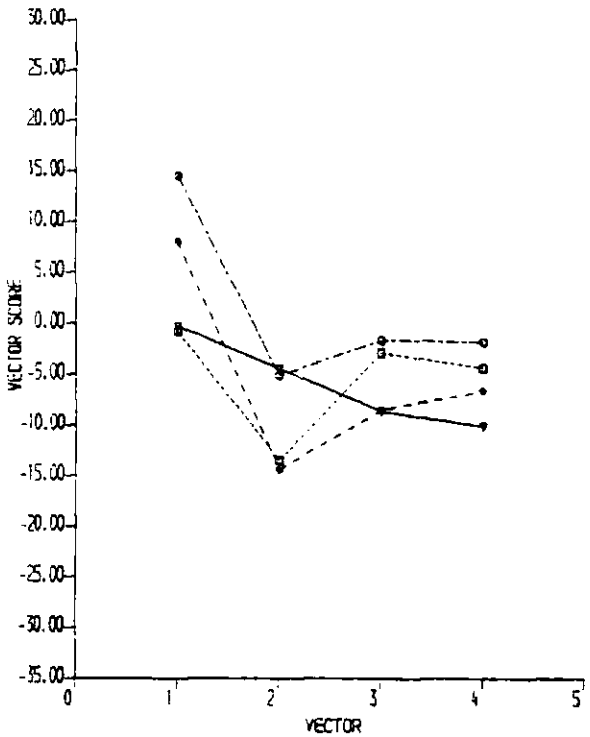


FIG 8:32
DISTRIBUTION OF FIRST FOUR PRINCIPAL CO-ORDINATES- MJI KENDA SAMPLES (MALES) ANALYSIS BASED ON TWENTY SIX SUMMARY VARIABLES

GIRIAMA
CHONYI
MIO MJI KENDA
DIGO

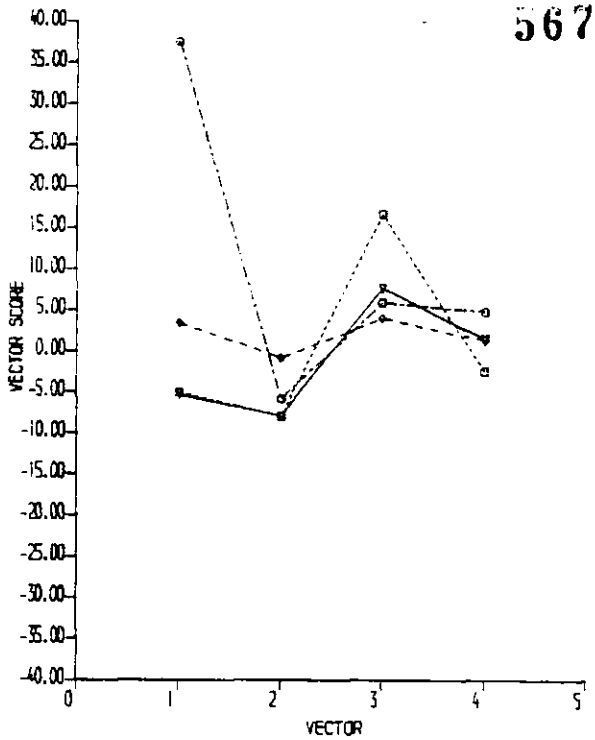


FIG 8:33
DISTRIBUTION OF FIRST FOUR PRINCIPAL CO-ORDINATES- MJI KENDA SAMPLES (FEMALES) ANALYSIS BASED ON TWENTY SIX SUMMARY VARIABLES

GIRIAMA
CHONYI
MIO MJI KENDA
DIGO

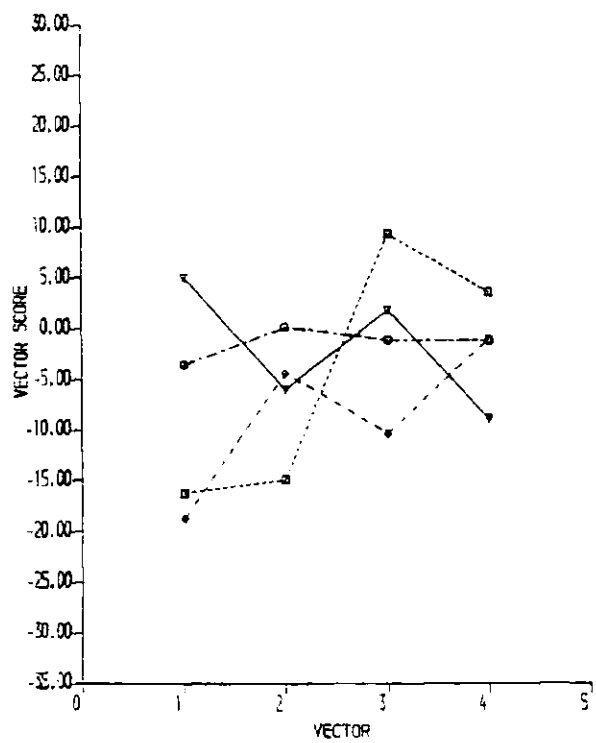


FIG 8:34
DISTRIBUTION OF FIRST FOUR PRINCIPAL CO-ORDINATES - POKOMO AND TAITA SAMPLES (MALES) - ANALYSIS BASED ON TWENTY SIX SUMMARY VARIABLES

NALAKOTE
TAITA
TAVETA
POKOMO

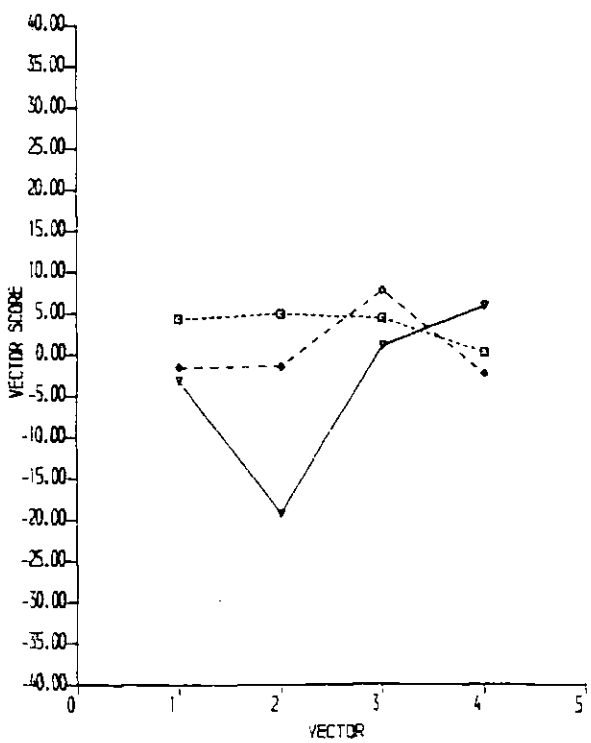


FIG 8:35
DISTRIBUTION OF FIRST FOUR PRINCIPAL CO-ORDINATES - POKOMO AND TAITA SAMPLES (FEMALES) - ANALYSIS BASED ON TWENTY SIX SUMMARY VARIABLES

TAITA
TAVETA
POKOMO

APPENDIX 1: UNIVARIATE TABLES OF DERMATOGLYPHIC VARIATION:

(1): Total Sample
(2): Ethnic Categories
(3): Ethnic Groups
(4): Minimal Ethnic Population Samples

TABLE AP.1.1.1 : DISTRIBUTION OF FINGER RIDGE COUNTS IN THE KENYA TOTAL SAMPLE BY SEX.

ATTRIBUTE	SEX	RIGHT HAND NO.	RIGHT HAND MEAN	RIGHT HAND SD.	RIGHT HAND SE.	LEFT HAND NO.	LEFT HAND MEAN	LEFT HAND SD.	LEFT HAND SE.
RADIAL RIDGE COUNTS:									
FR1	M	3464	14.87	6.35	0.11	3455	13.05	6.29	0.11
	F	2639	13.35	6.11	0.12	2645	11.48	6.10	0.12
FR2	M	3458	9.34	5.46	0.09	3438	8.24	5.45	0.09
	F	2637	9.16	5.15	0.10	2631	7.43	5.23	0.10
FR3	M	3465	10.42	4.88	0.08	3453	10.07	5.32	0.09
	F	2641	10.10	4.81	0.09	2645	9.04	5.41	0.11
FR4	M	3458	13.37	5.40	0.09	3451	12.67	5.35	0.09
	F	2635	12.81	5.62	0.11	2631	11.71	5.62	0.11
FR5	M	3460	11.65	4.55	0.08	3451	11.14	4.47	0.08
	F	2632	10.97	4.71	0.09	2631	10.21	4.66	0.09
TRADRC	M	3385	59.61	20.77	0.36	3334	55.11	21.54	0.37
	F	2578	56.22	20.83	0.41	2571	49.78	21.71	0.43
ULNAR RIDGE COUNTS:									
FU1	M	3464	6.22	7.61	0.13	3468	5.46	7.42	0.13
	F	2648	5.12	6.97	0.14	2649	5.51	7.19	0.14
FU2	M	3469	4.57	6.29	0.11	3465	4.75	6.50	0.11
	F	2648	3.98	6.15	0.12	2646	4.95	6.70	0.13
FU3	M	3479	2.12	4.87	0.08	3482	2.64	5.47	0.09
	F	2651	1.54	4.26	0.08	2654	2.52	5.39	0.11
FU4	M	3472	4.67	6.12	0.10	3467	4.45	6.24	0.11
	F	2643	3.53	5.59	0.11	2653	4.12	6.05	0.12
FU5	M	3476	1.18	3.10	0.05	3481	1.24	3.34	0.06
	F	2653	0.73	2.43	0.05	2651	1.17	3.21	0.06
TULNRC	M	3418	18.73	19.86	0.34	3401	18.49	20.49	0.36
	F	2615	14.88	18.34	0.36	2616	18.12	20.25	0.40
UNILATERAL RIDGE COUNTS:									
F1	M	3452	15.27	6.28	0.11	3442	13.65	6.31	0.11
	F	2635	13.78	6.04	0.12	2639	12.30	6.13	0.12
F2	M	3455	10.60	5.31	0.09	3431	9.91	5.44	0.09
	F	2634	10.10	5.22	0.10	2623	9.20	5.62	0.11
F3	M	3462	10.70	4.88	0.08	3452	10.46	5.30	0.09
	F	2641	10.25	4.89	0.10	2642	9.42	5.55	0.11
F4	M	3454	13.52	5.34	0.09	3439	12.92	5.25	0.09
	F	2629	12.95	5.52	0.11	2630	12.03	5.50	0.11
F5	M	3458	11.69	4.51	0.08	2449	11.19	4.45	0.08
	F	2632	11.00	4.68	0.09	2627	10.30	4.60	0.09
TRC	M	3367	61.67	21.44	0.37	3385	58.00	22.25	0.39
	F	2569	57.95	21.53	0.43	2553	53.21	22.58	0.45
ABSOLUTE RIDGE COUNTS:									
ABS1	M	3452	21.09	11.84	0.20	3442	18.49	11.47	0.20
	F	2635	18.46	10.95	0.21	2639	16.91	11.05	0.22
ABS2	M	3455	13.91	9.07	0.15	3431	13.00	9.27	0.16
	F	2634	13.14	8.92	0.17	2623	12.40	9.50	0.19
ABS3	M	3462	12.55	7.80	0.13	3452	12.71	8.79	0.15
	F	2641	11.64	7.32	0.14	2642	11.56	8.97	0.17
ABS4	M	3454	18.07	9.88	0.17	3439	17.14	9.84	0.17
	F	2629	16.35	9.50	0.19	2630	15.84	9.80	0.19
ABS5	M	3458	12.82	6.11	0.10	3449	12.37	6.24	0.11
	F	2632	11.70	5.75	0.11	2627	11.30	6.25	0.12
TABSRC	M	3367	78.35	36.43	0.63	3385	73.58	37.52	0.65
	F	2569	70.98	34.80	0.69	2553	67.80	37.44	0.74

TABLE AP.1.1.2 : DISTRIBUTION OF FINGER PATTERN INTENSITY IN THE KENYA TOTAL SAMPLE BY SEX.

ATTRIBUTE	SEX	RIGHT HAND NO	MEAN	S.D.	.SE.	LEFT HAND NO	MEAN	S.D.	S.E.
D1	M	3489	1.398	0.582	.010	3496	1.323	0.594	.010
	F	2660	1.332	0.586	.010	2661	1.315	0.628	.012
D2	M	3493	1.298	0.562	.010	3484	1.262	0.565	.010
	F	2661	1.242	0.557	.011	2658	1.245	0.595	.012
D3	M	3497	1.141	0.446	.008	3498	1.143	0.498	.008
	F	2660	1.079	0.427	.008	2667	1.110	0.515	.010
D4	M	3491	1.413	0.528	.010	3500	1.372	0.528	.010
	F	2660	1.314	0.517	.010	2663	1.332	0.547	.011
D5	M	3488	1.144	0.382	.007	3502	1.128	0.378	.006
	F	2667	1.084	0.348	.007	2666	1.115	0.387	.007
TFPI	M	3459	6.392	1.761	.030	3460	6.230	1.833	.031
	F	2645	6.049	1.753	.034	2544	6.114	1.939	.038

TABLE AP.1.1.3 : DISTRIBUTION OF DIGITAL PATTERNS IN THE KENYA TOTAL SAMPLE BY SEX:

ATTRIBUTE	SEX	RIGHT HAND NO.	A %	AT %	UL %	RL %	CW %	DL %	UCP %	RCP %	ACC %	LEFT HAND NO.	A %	AT %	UL %	RL %	CW %	DL %	UCP %	RCP %	ACC %
P1	M	3489	5.0	0.0	49.7	0.5	19.4	23.9	1.1	0.3	.0	3496	6.7	0.0	53.6	0.7	14.0	24.2	0.3	0.5	.0
	F	2660	6.1	0.0	53.9	0.7	15.7	22.5	0.8	0.3	.0	2661	8.9	0.0	49.0	1.7	13.5	25.4	0.3	1.1	.0
P2	M	3493	5.2	0.4	53.3	6.1	21.1	10.4	1.8	1.6	.1	3484	6.1	1.0	50.6	10.2	10.6	10.4	0.9	2.0	.3
	F	2661	6.4	0.3	58.7	4.1	19.0	8.7	1.7	1.1	.0	2658	8.4	0.9	47.9	10.0	19.4	8.7	1.3	3.3	.1
P3	M	3497	3.9	0.1	77.4	0.7	11.4	3.7	2.1	0.4	.0	3498	6.2	0.3	71.2	1.0	13.4	4.0	1.7	0.6	.1
	F	2660	5.5	0.2	80.7	0.3	8.2	3.2	1.0	0.1	.0	2667	8.4	0.6	69.0	1.0	13.6	3.9	1.4	0.5	.0
P4	M	3491	1.0	0.0	54.6	0.5	30.2	5.5	7.2	0.1	.0	3500	2.2	0.1	57.1	1.2	26.9	6.5	5.5	0.5	.0
	F	2660	2.6	0.0	62.7	0.0	22.2	4.4	6.0	0.4	.0	2663	3.9	0.2	57.6	1.4	25.3	5.1	5.6	1.0	.0
P5	M	3488	1.1	0.0	83.1	0.2	7.2	3.7	4.5	0.1	.0	3502	1.5	0.1	83.0	0.3	7.1	4.2	2.9	0.1	.0
	F	2667	2.2	0.0	87.1	0.1	4.3	2.0	4.1	0.1	.0	2666	2.4	0.1	83.0	0.0	7.2	3.1	3.2	0.3	.0
TOTAL FINGERS	M	17458	3.4	0.1	63.6	1.6	17.9	9.5	3.3	0.5	.05	17480	4.0	0.3	63.2	2.0	16.0	10.0	2.3	0.7	.1
	F	13300	4.5	0.1	68.6	1.2	13.9	8.2	3.0	0.4	.01	13315	6.4	0.4	61.5	3.1	15.8	9.2	2.4	1.2	.0

TOTAL FINGER PATTERNS:

ATTRIBUTE	SEX	RIGHT HAND NO.	ARCHES %	LOOPS %	WHORLS %	LEFT HAND NO.	ARCHES %	LOOPS %	WHORLS %
P1	M	3489	5.0	50.2	44.0	3496	6.7	54.3	39.0
	F	2660	6.1	54.6	39.3	2661	8.9	50.7	40.4
P2	M	3493	5.6	59.4	34.9	3484	7.1	60.7	32.2
	F	2661	6.7	62.0	30.6	2658	9.3	57.9	32.0
P3	M	3497	3.9	78.1	18.0	3498	6.5	73.0	20.5
	F	2660	5.7	81.0	13.3	2667	9.0	71.6	19.5
P4	M	3491	1.9	55.1	43.1	3500	2.3	58.2	39.5
	F	2660	2.6	63.5	33.9	2663	4.0	58.9	37.1
P5	M	3488	1.1	83.3	15.5	3502	1.6	84.0	14.3
	F	2667	2.2	87.2	10.6	2666	2.5	83.6	13.9
TOTAL FINGERS	M	17458	3.5	65.2	31.3	17480	4.0	66.1	29.1
	F	13300	4.6	69.0	25.5	13315	6.0	64.6	28.7

TABLE 1.1.4 : DISTRIBUTION OF PALMAR RIDGE COUNTS, & INDICES OF PALMAR TRIRADIAL INTENSITY & THE ATD ANGLE IN THE KENYA TOTAL SAMPLE BY SEX:

ATTRIBUTE	SEX	RIGHT HAND NO	MEAN	S.D.	S.E.	LEFT HAND NO	MEAN	S.D.	S.E.
PALMAR RIDGE COUNTS :									
AB	M	3349	36.32	5.69	0.10	3420	37.00	5.43	0.09
	F	2579	36.85	5.34	0.11	2595	37.32	5.27	0.10
BC	M	3139	26.13	5.41	0.10	3119	26.30	5.43	0.10
	F	2407	26.26	5.14	0.11	2360	26.71	5.04	0.10
CD	M	3126	35.66	5.45	0.10	3121	35.59	6.17	0.11
	F	2397	36.04	5.49	0.11	2327	36.35	5.92	0.12
TPRC	M	3215	97.24	12.51	0.22	3323	97.69	13.00	0.23
	F	2512	98.37	11.69	0.23	2533	98.96	12.40	0.25
INDICES OF TRIRADIAL INTENSITY AND THE ATD ANGLE:									
INTER-DIGITAL	M	2539	4.308	0.626	0.011	3544	4.295	0.628	0.011
	F	2673	4.227	0.569	0.011	2677	4.213	0.564	0.011
TDTHI	M	3503	1.291	0.497	0.008	3500	1.233	0.458	0.008
	F	2654	1.301	0.503	0.010	2652	1.252	0.466	0.009
TPLMI	M	3497	5.720	0.933	0.016	3492	5.899	1.144	0.019
	F	2653	5.659	0.919	0.018	2650	5.778	1.030	0.020
ATD	M	3430	38.36	4.91	0.08	3474	38.46	5.10	0.09
	F	2616	39.95	5.22	0.10	2633	40.10	5.20	0.10

TABLE AP.1.1.5 : DISTRIBUTION OF PALMAR PATTERNS AND TRIRADII IN THE KENYA TOTAL SAMPLE BY SEX.

FREQUENCY OF THENAR AND HYPOTHENAR PATTERNS:

SEX	HAND	THENAR NO	I1 %	I2 %	ITOT %	NO	IR1 %	IR2 %	IRTOT %	HYPOTHENAR NO	HI %	H2 %	HTOT %	NO	HI %	H2 %	HTOT %
M	RH	3536	5.3	0.2	5.7	3536	6.2	0.2	6.6	3540	5.4	0.1	5.6	3540	22.8	0.3	23.4
F	RH	2674	5.8	0.1	6.0	2674	7.0	0.2	7.4	2674	6.1	0.1	6.3	2674	22.7	0.3	23.3
M	LH	3541	15.9	0.8	17.5	3541	18.8	0.3	19.4	3546	5.5	0.1	5.7	3546	17.1	0.1	17.3
F	LH	2676	14.5	0.2	14.9	2677	16.0	0.2	16.4	2678	6.2	0.0	6.2	2678	18.4	0.1	18.6

FREQUENCIES OF INTERDIGITAL PATTERNS & OF NUMBER OF INTERDIGITAL TRIRADII:

SEX	HAND	INTERDIGITAL NO	II %	NO	III %	NO	IIIT %	NO	IV1 %	IV2 %	IV3 %	IVTOT %	NO. OF TRIRADII (TD3 TO TD8+) NO	3 %	4 %	5 %	6 %	7 %	8+ %
M	RH	3542	11.2	3535	46.0	3536	6.7	3535	61.0	2.5	0.0	66.0	3539	2.5	70.2	21.4	5.6	0.3	.0
F	RH	2673	5.7	2673	36.3	2673	5.6	2673	68.5	2.9	0.0	74.3	2673	3.0	75.3	18.1	3.3	0.2	.1
M	LH	3547	6.6	3545	24.5	3546	8.8	3545	70.6	9.0	0.0	88.6	3544	4.0	67.6	23.6	4.5	0.3	.0
F	LH	2677	3.1	2677	20.5	2677	7.0	2677	74.2	7.5	0.1	89.5	2677	4.2	73.3	19.9	2.4	0.1	.1

FREQUENCIES OF THENAR,AXIAL AND HYPOTHENAR TRIRADII :

SEX	HAND	THENAR NO	E1 %	E2 %	E3/4 %	ETOT %	AXIAL NO	1T %	2T %	TOT T %	NO	1T1 %	2T1 %	TOT T1	NO	1T2 %	2T2 %	TOTT2 %	HYPOTHENAR NO	TB %
M	RH	3537	2.5	4.4	0.3	12.2	3504	50.4	0.4	51.2	3505	50.5	1.3	53.1	3540	1.8	0.1	2.0	3540	22.9
F	RH	2674	2.8	4.9	0.2	13.2	2654	43.4	0.7	44.8	2654	56.7	1.4	59.5	2675	2.1	0.0	2.1	2674	23.3
M	LH	3541	5.6	14.0	1.0	36.8	3501	52.2	0.6	53.4	3500	48.2	1.2	50.6	3545	2.0	0.6	2.0	3546	17.1
F	LH	2677	4.7	12.7	0.4	31.2	2652	46.0	0.6	47.2	2652	54.2	1.5	57.2	2678	2.4	0.0	2.4	2678	18.2

TABLE AP.1.1.6 : DISTRIBUTION OF SOME RARE PALMAR PATTERNS AND TRIRADII IN THE KENYA TOTAL SAMPLE BY SEX :

SEX	HAND	NO	II %	NO	III %	NO	IV %	NO	IV %	NO	HR %	NO	TR %
M	RH	3541	0.0	3541	0.3	3541	0.4	3541	0.0	3541	0.3	3541	0.1
F	RH	2675	0.0	2673	0.4	2673	0.3	2673	0.1	2674	0.4	2674	0.05
M	LH	3547	0.0	3547	0.2	3547	0.6	3547	0.1	3546	0.1	3546	0.0
F	LH	2677	0.0	2677	0.3	2677	0.7	2677	0.1	2678	0.1	2678	0.0

TABLE AP.1.2.1 :DISTRIBUTION OF DIGITAL RIDGE COUNTS AND FINGER PATTERN INTENSITY IN KENYAN ETHNIC CATEGORIES (MALES):

	FINGER 1			FINGER 2			FINGER 3			FINGER 4			FINGER 5			TOTAL	
CATEGORY	NO	MEAN	SD.	NO	MEAN	SD.	NO	MEAN	SD.	NO	MEAN	SD.	NO	MEAN	SD.	NO	MEAN	SD.
RADIAL RIDGE COUNTS(RIGHT HAND):																		
CUSHITES	396	16.0	6.0	395	10.3	5.4	597	10.0	4.0	594	13.9	5.4	592	12.3	4.4	570	63.6	20.1
NILOTES	864	14.3	6.1	863	9.4	5.3	861	10.3	4.7	862	12.9	5.3	863	11.4	4.5	845	58.2	20.2
BANTU	1925	14.7	6.5	1921	8.9	5.5	1929	10.3	5.0	1923	13.4	5.4	1926	11.5	4.6	1884	58.7	21.0
RADIAL RIDGE COUNTS(LEFT HAND):																		
CUSHITES	395	15.0	5.9	394	9.3	5.4	591	10.9	5.3	594	13.4	5.6	589	12.1	4.2	570	61.0	21.2
NILOTES	863	12.6	6.2	861	8.3	5.3	863	9.9	5.3	863	12.5	5.3	860	11.0	4.4	845	54.4	21.2
BANTU	1920	12.5	6.3	1905	7.8	5.4	1923	9.8	5.3	1916	12.5	5.3	1924	10.9	4.5	1844	53.3	21.5
ULNAR RIDGE COUNTS(RIGHT HAND):																		
CUSHITES	601	7.1	7.9	598	5.1	6.7	601	2.7	5.6	598	5.7	6.7	597	1.6	3.6	587	22.3	22.2
NILOTES	859	5.2	7.2	861	4.1	6.1	866	2.1	4.8	863	4.7	6.1	862	1.3	3.2	847	17.3	19.6
BANTU	1925	6.4	7.7	1931	4.5	6.2	1933	2.0	4.6	1932	4.3	5.9	1938	1.0	2.0	1905	18.1	19.1
ULNAR RIDGE COUNTS(LEFT HAND):																		
CUSHITES	598	6.1	7.6	600	5.3	6.7	599	3.2	5.9	598	5.1	6.6	597	1.7	3.9	584	21.4	22.3
NILOTES	864	4.4	6.9	859	4.6	6.4	864	2.7	5.5	864	4.4	6.1	868	1.4	3.5	853	17.5	19.9
BANTU	1929	5.7	7.5	1928	4.6	6.5	1941	2.4	5.2	1927	4.2	6.2	1938	1.0	3.0	1896	17.8	20.0
UNILATERAL RIDGE COUNTS(RIGHT HAND):																		
CUSHITES	596	16.4	5.9	595	11.5	5.4	597	11.2	4.9	594	14.1	5.3	592	12.4	4.3	578	65.8	20.9
NILOTES	858	14.7	6.0	861	10.5	5.2	860	10.6	4.7	861	13.1	5.2	861	11.4	4.5	835	60.0	20.9
BANTU	1919	15.1	6.5	1920	10.3	5.3	1927	10.5	5.0	1920	13.5	5.4	1926	11.6	4.5	1876	60.8	21.7
UNILATERAL RIDGE COUNTS(LEFT HAND):																		
CUSHITES	593	15.4	5.8	594	10.7	5.4	590	11.4	5.4	593	13.7	5.5	589	12.2	4.2	566	63.3	22.0
NILOTES	862	13.0	6.3	859	9.8	5.3	863	10.4	5.3	861	12.8	5.1	860	11.1	4.4	842	57.2	21.7
BANTU	1910	13.3	6.4	1900	9.6	5.5	1923	10.1	5.4	1907	12.7	5.2	1922	10.9	4.5	1822	56.4	22.3
ABSOLUTE RIDGE COUNTS(RIGHT HAND):																		
CUSHITES	596	23.2	11.9	595	15.4	9.6	597	13.5	8.4	594	19.6	10.5	592	13.9	6.4	578	86.1	38.2
NILOTES	858	19.5	11.1	861	13.5	8.7	860	12.4	7.6	861	17.7	9.7	861	12.7	6.2	835	75.4	35.2
BANTU	1919	21.1	12.1	1920	13.5	8.9	1927	12.2	7.7	1920	17.7	9.7	1926	12.5	5.9	1876	76.8	36.0
ABSOLUTE RIDGE COUNTS(LEFT HAND):																		
CUSHITES	593	21.1	11.5	594	14.6	9.0	590	14.1	9.2	593	18.6	10.5	589	13.0	6.5	566	82.6	39.4
NILOTES	862	17.0	11.0	859	12.0	9.1	863	12.6	8.6	861	17.0	9.6	860	12.4	6.3	842	71.9	36.2
BANTU	1910	18.2	11.5	1900	12.4	9.1	1923	12.2	8.7	1907	16.7	9.7	1922	11.9	6.0	1822	70.0	37.0
FINGER PATTERN INTENSITY(RIGHT HAND):																		
CUSHITES	604	1.467	.562	603	1.355	.568	603	1.191	.452	602	1.406	.529	599	1.167	.400	595	6.674	1.754
NILOTES	868	1.359	.550	871	1.206	.540	872	1.134	.441	871	1.409	.543	865	1.163	.394	860	6.323	1.757
BANTU	1938	1.397	.599	1940	1.206	.563	1943	1.127	.444	1940	1.388	.519	1945	1.128	.368	1925	6.320	1.753
FINGER PATTERN INTENSITY(LEFT HAND):																		
CUSHITES	604	1.391	.550	603	1.337	.577	603	1.201	.517	604	1.414	.529	603	1.160	.404	600	6.505	1.870
NILOTES	871	1.240	.574	867	1.261	.551	870	1.135	.500	871	1.389	.542	872	1.150	.300	864	6.102	1.005
BANTU	1943	1.332	.611	1936	1.235	.560	1947	1.125	.406	1947	1.346	.520	1949	1.105	.360	1910	6.144	1.025

TABLE AP.1.2.2 :DISTRIBUTION OF DIGITAL RIDGE COUNTS AND FINGER PATTERN INTENSITY IN KENYAN ETHNIC CATEGORIES (FEMALES):

CATEGORY	FINGER 1 NO	MEAN	SD.	FINGER 2 NO	MEAN	SD.	FINGER 3 NO	MEAN	SD.	FINGER 4 NO	MEAN	SD.	FINGER 5 NO	MEAN	SD.	TOTAL NO	MEAN	SD.
RADIAL RIDGE COUNTS(RIGHT HAND):																		
CUSHITES	324	14.5	5.7	320	9.7	5.2	319	10.2	4.6	322	13.0	5.5	322	11.4	4.5	312	58.5	19.6
NILOTES	775	13.1	5.8	773	9.4	5.0	771	10.0	4.6	769	12.4	5.6	774	10.9	4.7	764	55.8	20.3
BANTU	1526	13.2	6.3	1530	8.9	5.2	1537	10.1	4.9	1530	13.0	5.7	1522	10.9	4.7	1488	55.9	21.3
RADIAL RIDGE COUNTS(LEFT HAND):																		
CUSHITES	326	13.3	6.0	325	8.3	5.2	326	9.5	5.4	324	12.5	5.4	323	11.2	4.5	314	54.6	20.9
NILOTES	773	11.0	6.0	765	7.7	5.1	770	9.1	5.4	766	11.7	5.7	771	10.2	4.7	752	49.7	21.7
BANTU	1532	11.2	6.1	1528	7.1	5.2	1535	8.9	5.4	1530	11.6	5.6	1523	10.0	4.6	1492	48.7	21.8
ULNAR RIDGE COUNTS(RIGHT HAND):																		
CUSHITES	325	5.5	6.8	322	4.2	6.4	320	1.8	4.8	322	4.3	6.1	324	1.1	2.7	317	17.0	18.9
NILOTES	775	4.3	6.6	775	3.0	6.2	774	1.6	4.4	772	4.0	6.0	777	0.0	2.6	766	14.3	19.2
BANTU	1534	5.4	7.1	1537	4.0	6.1	1543	1.4	4.1	1535	3.1	5.3	1538	0.6	2.2	1518	14.6	17.7
ULNAR RIDGE COUNTS(LEFT HAND):																		
CUSHITES	327	6.1	7.2	327	4.9	6.5	328	2.9	5.8	326	4.4	6.1	326	1.3	3.4	323	19.6	20.3
NILOTES	775	4.3	6.6	773	4.7	6.6	773	2.7	5.6	774	4.4	6.3	775	1.3	3.4	766	17.4	21.0
BANTU	1533	6.0	7.4	1532	5.1	6.8	1540	2.4	5.2	1539	3.9	5.9	1536	1.1	3.1	1514	18.2	19.9
UNILATERAL RIDGE COUNTS(RIGHT HAND):																		
CUSHITES	324	14.0	5.6	319	10.9	5.3	319	10.5	4.0	322	13.2	5.3	322	11.5	4.4	311	60.4	20.4
NILOTES	774	13.5	5.7	772	10.3	5.2	771	10.2	4.0	768	12.2	5.5	774	10.9	4.7	761	57.3	21.0
BANTU	1523	13.7	6.3	1529	10.0	5.2	1537	10.2	5.0	1525	13.1	5.6	1522	10.9	4.7	1484	57.7	22.0
UNILATERAL RIDGE COUNTS(LEFT HAND):																		
CUSHITES	326	13.9	5.9	325	9.9	5.4	326	9.9	5.6	324	12.0	5.3	323	11.3	4.4	314	57.6	21.4
NILOTES	773	11.6	6.1	765	9.4	5.5	769	9.5	5.6	766	12.1	5.5	771	10.3	4.6	751	53.0	22.5
BANTU	1526	12.3	6.1	1520	9.1	5.7	1534	9.3	5.5	1526	11.0	5.5	1519	10.1	4.6	1476	52.4	22.0
ABSOLUTE RIDGE COUNTS(RIGHT HAND):																		
CUSHITES	324	20.0	10.5	319	13.9	9.0	319	12.0	7.5	322	17.3	9.9	322	12.5	5.0	311	75.5	34.5
NILOTES	774	17.5	10.3	772	13.2	9.0	771	11.6	7.5	768	16.4	9.9	774	11.7	5.9	761	70.0	35.2
BANTU	1523	10.6	11.3	1529	12.9	0.9	1537	11.6	7.2	1525	16.1	9.2	1522	11.5	5.7	1403	70.4	34.7
ABSOLUTE RIDGE COUNTS(LEFT HAND):																		
CUSHITES	326	19.3	10.9	326	13.2	9.3	326	12.4	9.4	324	16.9	9.6	323	12.6	6.1	314	74.3	36.4
NILOTES	773	15.3	10.5	764	12.4	9.5	769	11.0	9.2	766	16.2	10.1	771	11.5	6.5	751	67.3	37.9
BANTU	1526	17.2	11.3	1520	12.2	9.7	1534	11.3	0.0	1526	15.5	9.7	1519	11.1	6.1	1476	66.9	37.3
FINGER PATTERN INTENSITY(RIGHT HAND):																		
CUSHITES	326	1.407	.562	325	1.255	.561	323	1.110	.423	325	1.305	.506	327	1.141	.390	320	6.306	1.756
NILOTES	777	1.270	.563	776	1.244	.527	776	1.006	.430	775	1.330	.520	777	1.005	.360	773	6.017	1.756
BANTU	1543	1.344	.602	1546	1.240	.572	1547	1.066	.425	1546	1.209	.511	1549	1.072	.331	1530	6.009	1.745
FINGER PATTERN INTENSITY(LEFT HAND):																		
CUSHITES	320	1.409	.590	320	1.305	.573	329	1.140	.520	327	1.302	.540	320	1.143	.392	325	6.379	1.001
NILOTES	777	1.230	.622	774	1.239	.570	777	1.129	.517	776	1.353	.551	777	1.113	.406	771	6.060	1.946
BANTU	1542	1.337	.634	1542	1.234	.610	1547	1.094	.511	1546	1.311	.547	1547	1.109	.375	1534	6.009	1.945

TABLE AP.1.2.3 :DISTRIBUTION OF DIGITAL PATTERNS IN KENYAN ETHNIC CATEGORIES (MALES):

CATEGORY	NO.	RIGHT HAND A %	AT %	UL %	RL %	CW %	DL %	UCP %	RCP %	ACC %	NO.	LEFT HAND A %	AT %	UL %	RL %	CW %	DL %	UCP %	RCP %	ACC %
FINGER 1:																				
CUSHITES	605	3.3	0.0	46.1	0.5	27.1	20.8	1.7	0.5	.0	605	3.6	0.0	53.2	0.5	19.4	22.1	0.7	0.3	.2
NILOTES	868	4.1	0.0	56.1	0.7	14.9	23.6	0.9	0.1	.1	871	7.1	0.0	60.3	0.7	12.9	18.6	0.3	0.1	.0
BANTU	1938	5.9	0.0	47.9	0.5	18.6	25.6	1.1	0.4	.4	1943	7.6	0.0	58.9	0.0	11.6	20.3	0.1	0.7	.0
FINGER 2:																				
CUSHITES	604	4.3	0.3	51.8	4.1	26.2	8.8	2.3	1.8	.4	604	5.1	1.0	48.7	6.8	23.7	10.3	1.2	2.6	.8
NILOTES	871	4.9	0.3	56.6	5.1	20.1	9.5	1.0	1.6	.0	867	5.5	0.0	52.5	9.5	20.0	8.0	0.7	2.2	.0
BANTU	1940	5.8	0.4	52.8	7.2	19.6	10.5	1.6	1.5	.2	1936	6.7	1.1	50.4	11.6	16.1	11.1	0.8	1.0	.4
FINGER 3:																				
CUSHITES	604	2.5	0.0	74.0	1.2	15.2	3.0	2.6	0.7	.0	604	5.3	0.5	67.7	1.2	16.9	5.1	2.5	0.0	.0
NILOTES	872	3.9	0.2	77.0	0.0	11.6	3.0	2.4	0.3	.0	870	6.7	0.0	71.0	2.1	12.1	3.6	1.0	0.9	.0
BANTU	1943	4.3	0.1	70.1	0.5	10.7	4.2	1.7	0.4	.0	1947	6.3	0.4	72.4	2.0	12.0	5.1	1.3	0.4	.1
FINGER 4:																				
CUSHITES	602	1.5	0.0	47.0	0.5	36.7	5.3	0.1	0.0	.0	605	1.0	0.0	54.0	0.0	31.4	5.0	5.6	0.5	.0
NILOTES	871	2.6	0.1	52.9	0.0	32.3	3.3	7.7	0.2	.0	871	2.0	0.1	54.2	1.3	30.0	4.2	7.3	0.1	.0
BANTU	1940	1.6	0.0	57.6	0.4	26.9	6.6	6.0	0.2	.0	1947	2.2	0.1	59.6	1.3	23.0	7.0	4.6	0.6	.1
FINGER 5:																				
CUSHITES	600	1.3	0.0	00.2	0.5	10.7	3.2	4.0	0.2	.0	604	1.2	0.3	00.5	0.2	9.9	4.5	3.3	0.2	.0
NILOTES	865	0.9	0.0	01.7	0.1	0.7	3.4	5.0	0.2	.0	872	1.3	0.0	02.1	0.5	0.4	3.0	4.0	0.0	.0
BANTU	1945	1.2	0.0	04.7	0.2	5.4	4.0	4.5	0.1	.0	1949	1.0	0.1	05.7	0.2	5.4	4.6	2.1	0.1	.0
TOTAL FINGERS:																				
CUSHITES	3010	2.6	0.1	60.1	1.4	23.2	0.2	3.0	0.6	.1	3017	3.4	0.4	60.0	1.9	20.0	0.0	2.7	0.9	.1
NILOTES	4347	3.3	0.1	65.0	1.5	17.5	0.4	3.6	0.5	.0	4351	4.6	0.2	64.1	2.0	17.0	7.6	3.0	0.7	.0
BANTU	9706	3.0	0.1	64.3	1.7	16.2	10.3	3.1	0.5	.0	9722	4.9	0.3	63.0	3.2	13.0	11.4	1.0	0.7	.2

TOTAL PATTERNS ON ALL FINGERS:

CATEGORY	NO	RIGHT HAND ARCHES %	LOOPS %	UWORLS %	NO	LEFT HAND ARCHES %	LOOPS %	UWORLS %
CUSHITES	3010	2.7	61.5	35.0	3017	3.0	62.7	33.5
NILOTES	4347	3.5	66.5	30.0	4351	4.0	66.9	20.3
BANTU	9706	3.9	66.0	30.2	9722	5.2	67.0	27.9

TABLE AP.1.2.4 : DISTRIBUTION OF DIGITAL PATTERNS IN KENYAN ETHNIC CATEGORIES (FEMALES):

ATTRIBUTE	NO.	RIGHT HAND A %	AT %	UL %	RL %	CW %	DL %	UCP %	RCP %	ACC %	NO	LEFT HAND A %	AT %	UL %	RL %	CW %	DL %	UCP %	RCP %	ACC %
FINGER 1:																				
CUSHITES	326	3.7	0.0	52.1	0.0	22.7	19.3	1.8	0.3	.0	328	5.8	0.0	47.3	0.3	21.3	23.2	0.9	1.2	.0
NILOTES	777	5.8	0.0	60.0	0.6	14.3	18.1	0.9	0.3	.0	777	10.4	0.0	55.2	0.9	11.1	20.0	0.4	1.2	.0
BANTU	1543	6.8	0.0	51.1	0.0	14.0	25.5	0.5	0.4	.0	1542	8.9	0.0	46.2	2.3	13.0	28.3	0.2	1.1	.0
FINGER 2:																				
CUSHITES	323	6.2	0.0	58.2	4.0	20.0	8.6	1.0	1.2	.0	328	5.8	1.2	49.7	7.0	21.3	11.3	1.5	2.1	.9
NILOTES	776	4.6	0.1	62.4	3.9	19.1	6.7	1.9	1.3	.0	774	7.1	1.2	51.4	9.3	18.5	7.0	1.0	3.7	.0
BANTU	1546	7.2	0.5	56.0	4.3	18.0	9.0	1.6	1.0	.0	1542	9.6	0.0	45.0	11.0	19.4	0.9	1.0	3.3	.3
FINGER 3:																				
CUSHITES	323	3.7	0.0	80.5	0.3	9.3	3.1	3.1	0.0	.0	329	7.9	0.3	69.0	0.9	17.0	3.6	1.2	0.0	.0
NILOTES	776	5.3	0.0	80.7	0.1	9.0	2.3	2.4	0.1	.0	777	7.7	0.4	69.5	1.0	14.3	4.2	1.7	0.4	.0
BANTU	1547	5.9	0.3	80.9	0.3	7.6	3.7	1.1	0.1	.1	1547	8.0	0.0	70.1	2.0	12.6	3.7	1.3	0.6	.0
FINGER 4:																				
CUSHITES	325	0.9	0.0	58.0	0.9	29.0	4.3	4.9	0.3	.0	327	2.0	0.0	55.7	0.6	27.5	5.0	7.0	0.6	.0
NILOTES	775	2.0	0.1	60.0	1.2	24.3	3.6	7.2	0.6	.1	776	3.7	0.3	55.2	1.0	27.2	3.0	7.3	1.5	.0
BANTU	1546	2.0	0.0	65.1	0.5	19.5	4.9	6.9	0.3	.1	1546	4.2	0.1	59.1	1.3	24.1	6.0	4.5	0.0	.0
FINGER 5:																				
CUSHITES	327	1.5	0.3	82.3	0.3	7.3	2.1	5.0	0.3	.0	328	1.5	0.3	82.3	0.0	9.1	3.0	3.7	0.0	.0
NILOTES	777	2.6	0.0	86.2	0.1	4.0	1.0	4.4	0.0	.1	777	3.2	0.0	81.2	1.0	7.6	2.7	3.9	0.4	.0
BANTU	1549	2.1	0.0	80.0	0.1	3.6	2.0	3.6	0.1	.0	1547	2.2	0.1	84.1	0.5	6.6	3.2	2.0	0.4	.0
TOTAL FINGERS:																				
CUSHITES	1626	3.2	0.1	66.4	1.1	17.0	7.5	3.5	0.4	.0	1640	4.0	0.4	60.0	1.0	19.3	9.4	2.9	0.0	.0
NILOTES	3881	4.2	0.1	69.9	1.2	14.3	6.5	3.4	0.5	.1	3881	6.4	0.4	62.5	3.0	15.7	7.5	3.0	1.4	.0
BANTU	7731	5.0	0.1	60.5	1.2	12.9	9.2	2.0	0.4	.0	7724	6.7	0.4	61.1	3.4	15.1	10.0	2.0	1.2	.0

TOTAL PATTERNS ON ALL FINGERS:

CATEGORY	NO	RIGHT HAND ARCHES %	LOOPS %	WHORLS %	NO	LEFT HAND ARCHES %	LOOPS %	WHORLS %
CUSHITES	1626	3.3	67.5	29.3	1640	5.1	62.6	32.3
NILOTES	3881	4.3	71.0	24.7	3881	6.0	65.5	27.7
BANTU	7731	5.1	69.7	25.2	7724	7.1	64.5	28.4

TABLE AP.1.2.5 : DISTRIBUTION OF PALMAR RIDGE COUNTS IN KENYAN ETHNIC CATEGORIES.

	AB			BC			CD			TOTAL		
CATEGORY	NO	MEAN	SD.	NO	MEAN	SD.	NO	MEAN	SD.	NO	MEAN	SD.
RIGHT HAND MALES:												
CUSHITES	572	35.8	5.8	533	25.2	5.6	531	35.5	5.4	549	95.4	12.8
NILOTES	821	37.0	5.5	788	26.3	5.5	780	36.1	5.4	808	98.5	12.7
BANTU	1883	36.2	5.7	1739	26.4	5.3	1740	35.5	5.4	1787	97.2	12.5
LEFT HAND MALES:												
CUSHITES	583	36.3	5.8	544	25.5	5.8	537	35.5	6.2	566	96.2	13.7
NILOTES	841	37.7	5.3	777	26.2	5.6	777	35.7	6.0	827	98.5	13.1
BANTU	1920	36.9	5.4	1726	26.6	5.2	1736	35.5	6.3	1857	97.8	12.9
RIGHT HAND FEMALES:												
CUSHITES	318	36.2	4.8	305	25.2	5.1	305	35.6	5.6	315	96.6	11.0
NILOTES	761	37.2	5.4	713	26.3	5.5	709	36.6	5.7	747	99.3	12.0
BANTU	1486	36.8	5.4	1376	26.5	4.9	1369	35.8	5.4	1437	98.3	11.7
LEFT HAND FEMALES:												
CUSHITES	323	36.5	5.1	304	25.8	5.1	291	35.4	6.1	307	96.6	12.1
NILOTES	756	37.5	5.2	686	26.6	5.3	680	36.8	6.0	748	99.5	12.4
BANTU	1502	37.4	5.4	1357	27.0	4.9	1343	36.3	5.8	1472	99.2	12.5

TABLE AP.1.2.6 : DISTRIBUTION OF PALMAR INDICES OF TRIRADIAL INTENSITY & THE ATD ANGLE IN KENYAN ETHNIC CATEGORIES.

	INTERDIGITAL			HYPOTHENAR			TOTAL PALMAR			ATD ANGLE		
CATEGORY	NO	MEAN	SD.	NO	MEAN	SD.	NO	MEAN	SD.	NO	MEAN	SD.
RIGHT HAND MALES:												
CUSHITES	602	4.244	.620	601	1.310	.517	600	5.637	0.894	589	36.9	4.7
NILOTES	873	4.283	.594	860	1.304	.504	856	5.716	0.913	852	38.4	4.8
BANTU	1985	4.343	.643	1963	1.281	.489	1962	5.751	0.947	1911	38.8	5.0
LEFT HAND MALES:												
CUSHITES	602	4.256	.617	603	1.265	.478	599	5.731	0.991	588	37.3	4.9
NILOTES	873	4.300	.605	859	1.211	.425	857	5.913	1.162	864	38.3	5.1
BANTU	1998	4.305	.643	1960	1.232	.466	1958	5.942	1.176	1946	38.9	5.2
RIGHT HAND FEMALES:												
CUSHITES	328	4.195	.557	337	1.327	.495	326	5.592	0.832	323	39.0	4.7
NILOTES	778	4.218	.564	771	1.323	.528	771	5.695	0.984	765	39.5	5.3
BANTU	1553	4.242	.575	1542	1.282	.486	1542	5.653	0.983	1514	40.4	5.2
LEFT HAND FEMALES:												
CUSHITES	331	4.178	.546	329	1.295	.513	329	5.599	0.825	323	39.2	4.8
NILOTES	778	4.219	.568	771	1.250	.463	769	5.819	1.068	769	39.5	5.1
BANTU	1554	4.216	.566	1538	1.243	.457	1538	5.797	1.048	1527	40.6	5.3

TABLE AP.1.2.7 : DISTRIBUTION OF PALMAR PATTERNS IN KENYAN ETHNIC CATEGORIES.

		RIGHT HAND									LEFT HAND								
	NO	I %	IR %	II %	III %	IIIT %	IV %	H %	H %		NO	I %	IR %	II %	III %	IIIT %	IV %	H %	H %
MALES:																			
CUSHITES	688	3.5	4.8	10.0	43.4	7.7	61.5	5.0	25.9		345	9.8	11.3	5.6	23.6	8.7	85.7	4.8	21.5
NILOTES	875	6.2	6.3	8.8	47.5	7.6	63.3	5.8	24.6		875	19.9	20.0	5.0	23.5	10.2	98.0	5.3	15.5
BANTU	1991	5.7	6.9	12.7	46.2	5.8	69.2	5.0	22.0		1991	18.7	21.4	7.5	25.1	8.3	88.7	6.1	16.9
FEMALES:																			
CUSHITES	334	3.0	3.7	4.6	36.3	5.2	71.3	7.0	24.6		334	5.7	6.6	1.8	22.1	5.7	86.1	6.6	22.1
NILOTES	779	7.5	8.9	5.5	35.3	6.3	73.3	6.5	25.6		779	17.0	18.0	3.1	20.0	8.0	89.6	6.4	18.5
BANTU	1557	5.9	7.5	6.1	36.4	5.3	75.7	5.7	21.8		1557	16.1	17.8	3.3	20.3	6.7	90.0	6.2	18.0

TABLE AP.1.2.8 : DISTRIBUTION OF PALMAR TRIRADII IN KENYAN ETHNIC CATEGORIES.

		RIGHT HAND						LEFT HAND					
	NO	E %	T %	T' %	T'' %	TB %		NO	E %	T %	T' %	T'' %	TB %
MALES:													
CUSHITES	688	8.3	58.2	45.7	1.5	25.7		688	21.1	59.9	43.5	1.7	21.5
NILOTES	875	12.5	58.1	54.7	1.8	23.8		875	39.8	52.8	58.9	1.9	15.2
BANTU	1991	12.6	49.2	55.0	2.4	21.6		1991	40.0	51.9	52.4	2.4	16.4
FEMALES:													
CUSHITES	334	6.7	53.2	52.6	0.9	25.8		334	12.4	55.9	49.5	1.2	22.7
NILOTES	779	16.3	43.5	62.1	2.2	24.6		779	35.0	48.0	57.3	1.9	17.8
BANTU	1557	13.3	43.6	59.9	2.4	22.0		1557	33.8	44.7	59.0	3.1	17.5

TABLE AP.1.2.9 : THE FREQUENCY OF INTERDIGITAL TRIRADII IN KENYAN ETHNIC CATEGORIES.

		RIGHT HAND						LEFT HAND					
	NO	3 %	4 %	5 %	6 %	7 %	8+ %	NO	3 %	4 %	5 %	6 %	7 %	8+ %
MALES:														
CUSHITES	682	2.8	76.4	15.0	5.1	0.7	.0	682	3.7	72.6	18.6	4.9	0.3	.0
NILOTES	873	2.5	71.4	21.6	4.2	0.2	.0	873	3.3	67.6	25.1	3.8	0.2	.0
BANTU	1985	2.5	67.6	23.3	6.5	0.2	.0	1990	4.5	65.0	24.6	4.8	0.3	.0
FEMALES:														
CUSHITES	328	3.0	78.4	15.2	2.7	0.6	.0	331	4.5	75.0	17.2	2.1	0.3	.0
NILOTES	778	3.9	74.7	18.4	3.0	0.0	.1	778	4.0	73.3	20.1	2.4	0.1	.1
BANTU	1553	2.6	75.0	18.5	3.6	0.3	.1	1554	4.2	72.0	20.2	2.5	0.1	.1

Table AP. 1.3.1 : Distribution of digital ridge counts in Kenyan ethnic group samples (males).

		POPULATION	FINGER ONE			FINGER TWO			FINGER THREE			FINGER FOUR			FINGER FIVE		
			NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD
Radial	Right	SOMALI	369	16.0	5.8	368	10.5	5.4	370	10.9	4.7	369	13.9	5.3	366	12.2	4.4
		CUSHITIC	217	16.2	6.6	217	10.0	5.5	217	10.7	5.0	215	14.0	5.5	216	12.6	4.4
		MAASAI	185	14.7	6.4	183	10.3	5.5	184	10.3	4.9	183	12.9	5.5	184	11.5	4.5
		DORDBO	79	17.0	5.9	79	11.2	6.0	78	11.9	4.4	79	14.2	5.6	79	12.4	4.9
		KALENJIN	395	14.1	5.9	394	9.2	5.1	393	10.4	4.4	393	12.8	5.1	396	11.3	4.4
		KARIMOJONG	114	13.7	6.4	117	8.7	5.8	116	9.6	5.3	117	12.6	5.9	114	11.1	4.7
		LUO	169	14.5	5.7	168	9.5	5.1	167	10.4	4.7	168	13.6	5.2	168	11.7	4.5
		LUYIA	421	14.4	6.5	421	8.9	5.6	420	10.6	4.9	418	13.6	5.4	419	11.7	4.5
		CENTRAL BANTU	973	15.0	6.4	969	8.9	5.4	974	10.1	4.9	971	13.1	5.5	973	11.3	4.5
		POKOMO	132	14.4	6.4	131	9.3	5.9	132	10.5	5.2	131	13.7	5.1	133	12.2	4.7
		MJI KENDA	273	14.6	6.7	274	9.1	5.3	275	10.7	5.0	276	14.6	5.1	275	12.2	4.5
		TAITA	111	13.6	7.0	111	8.3	5.4	113	9.2	5.2	112	11.9	5.6	111	10.6	4.8
Radial	Left	SOMALI	368	15.2	5.6	366	9.7	5.4	365	11.3	5.1	368	13.5	5.5	364	12.0	4.2
		CUSHITIC	217	14.6	6.4	219	8.7	5.5	218	10.4	5.5	216	13.5	5.7	215	12.4	4.2
		MAASAI	184	13.0	6.5	183	9.0	5.2	183	9.8	5.5	184	12.2	5.8	181	11.3	4.6
		DORDBO	77	15.5	5.6	78	10.4	5.7	76	12.0	4.9	78	13.6	5.3	78	11.5	5.3
		KALENJIN	395	12.6	6.0	392	8.0	5.3	393	10.1	5.2	395	12.5	4.9	394	11.0	4.3
		KARIMOJONG	115	12.0	6.4	116	7.8	5.4	117	9.1	5.7	114	12.3	5.5	115	10.7	4.2
		LUO	168	12.6	6.2	169	8.5	5.4	169	10.2	5.2	169	13.1	5.3	169	11.1	4.6
		LUYIA	422	12.3	6.4	421	8.2	5.4	425	10.0	5.2	421	12.9	5.1	424	11.1	4.3
		CENTRAL BANTU	971	12.9	6.3	965	7.6	5.4	973	9.5	5.4	964	12.1	5.4	969	10.7	4.6
		POKOMO	133	12.3	5.8	131	7.9	5.5	131	9.6	5.5	133	12.7	5.2	134	11.4	4.5
		MJI KENDA	270	12.0	6.5	266	8.0	5.4	273	10.8	4.8	274	13.4	4.9	272	11.1	4.1
		TAITA	109	12.1	6.8	107	7.2	5.5	106	9.1	5.2	109	11.4	5.3	110	10.1	5.1
Ulnar	Right	SOMALI	372	7.2	7.8	370	5.3	6.5	373	2.8	5.6	371	5.9	6.8	370	1.6	3.6
		CUSHITIC	218	7.2	8.1	217	4.9	7.0	217	2.6	5.5	216	5.5	6.6	216	1.7	3.7
		MAASAI	183	5.6	7.2	183	4.1	6.4	185	2.2	5.1	184	4.8	6.3	184	1.5	3.4
		DORDBO	79	5.6	7.8	79	6.7	6.7	79	2.7	5.4	79	5.9	6.6	79	1.4	3.4
		KALENJIN	392	4.2	6.7	393	4.3	6.0	395	1.9	4.7	394	4.6	6.3	395	1.3	3.2
		KARIMOJONG	116	6.8	7.7	117	4.0	5.5	117	2.2	4.6	117	5.0	5.9	115	1.2	2.8
		LUO	168	6.1	7.6	168	3.8	6.2	169	2.2	4.9	168	4.3	5.8	167	1.2	3.2
		LUYIA	420	6.0	7.6	421	5.0	6.4	422	2.1	4.7	422	4.5	5.9	423	1.0	2.7
		CENTRAL BANTU	971	6.3	7.5	976	4.2	6.0	975	1.8	4.5	974	4.1	5.8	978	1.0	2.9
		POKOMO	132	5.3	7.2	131	4.5	6.4	132	2.1	4.9	132	4.8	6.4	133	1.7	3.6
		MJI KENDA	275	8.2	8.3	276	5.4	6.8	276	2.5	5.1	276	4.9	6.1	276	0.9	2.8
		TAITA	112	5.5	7.8	112	3.5	5.4	113	1.3	3.9	113	3.0	5.1	113	0.5	1.9
Ulnar	Left	SOMALI	370	6.4	7.6	371	5.3	6.6	370	2.9	5.8	371	5.3	6.7	370	1.6	3.8
		CUSHITIC	217	5.8	7.7	218	5.4	6.8	218	3.6	6.1	216	5.0	6.6	217	1.8	4.1
		MAASAI	184	4.7	7.0	183	4.7	6.5	184	2.4	5.4	184	4.7	6.4	185	1.7	3.9
		DORDBO	77	6.7	7.9	78	6.0	7.2	78	4.0	6.9	78	6.2	7.0	78	2.1	4.3
		KALENJIN	395	3.6	6.5	391	4.6	6.4	394	2.8	5.5	394	4.6	6.1	396	1.2	3.2
		KARIMOJONG	116	5.6	7.7	116	3.2	5.3	117	2.1	4.6	117	4.3	5.9	117	1.7	3.9
		LUO	169	5.0	7.2	169	5.3	6.8	169	3.1	5.9	169	3.9	5.7	169	1.2	3.2
		LUYIA	421	4.6	7.2	422	4.8	6.6	425	2.2	5.0	422	4.2	6.2	425	0.9	2.8
		CENTRAL BANTU	975	5.7	7.4	978	4.5	6.3	980	2.5	5.2	972	4.3	6.1	977	1.1	3.1
		POKOMO	133	5.0	7.1	133	5.1	6.9	134	2.5	5.6	134	3.7	6.2	133	1.2	3.4
		MJI KENDA	272	7.7	8.1	270	5.0	7.0	276	2.7	5.6	271	4.5	6.3	275	1.0	3.0
		TAITA	113	5.5	7.7	110	3.2	5.5	111	1.8	4.6	113	3.0	5.6	113	0.5	2.1
Unilateral	Right	SOMALI	369	16.3	5.6	368	11.8	5.1	370	11.4	4.9	369	14.1	5.2	366	12.3	4.3
		CUSHITIC	217	16.6	6.4	217	11.0	5.8	217	11.1	5.0	215	14.2	5.4	216	12.7	4.3
		MAASAI	183	15.0	6.3	183	11.3	5.5	184	10.4	5.0	183	13.1	5.4	184	11.5	4.5
		DORDBO	79	17.3	5.7	79	12.5	5.5	78	12.4	4.2	79	14.4	5.6	79	12.4	4.9
		KALENJIN	392	14.4	5.9	392	10.3	4.9	392	10.8	4.5	392	13.0	5.0	395	11.4	4.4
		KARIMOJONG	114	14.3	6.3	117	9.8	5.5	116	10.3	5.0	117	12.8	5.6	114	11.1	4.7
		LUO	168	15.0	5.8	168	10.7	5.1	167	10.6	4.6	168	13.6	5.1	167	11.7	4.5
		LUYIA	420	14.8	6.4	421	10.7	5.2	420	10.8	4.9	418	13.8	5.4	419	11.8	4.5
		CENTRAL BANTU	968	15.4	6.4	968	10.2	5.2	972	10.3	4.9	968	13.2	5.4	973	11.3	4.5
		POKOMO	132	14.6	6.4	131	10.5	5.8	132	10.8	5.2	131	13.8	5.2	133	12.3	4.6
		MJI KENDA	273	15.3	6.6	274	10.5	5.5	275	11.0	5.0	276	14.7	5.1	275	12.2	4.5
		TAITA	111	14.2	7.0	111	9.6	5.3	113	9.6	5.1	112	12.1	5.6	111	10.7	4.8
Unilateral	Left	SOMALI	366	15.5	5.5	366	11.0	5.2	364	11.7	5.3	368	13.7	5.4	364	12.1	4.2
		CUSHITIC	217	15.1	6.4	218	10.1	5.8	216	10.9	5.5	215	13.7	5.7	215	12.4	4.2
		MAASAI	184	13.4	6.5	183	10.1	5.3	183	10.1	5.7	183	12.5	5.7	181	11.4	4.6
		DORDBO	77	16.1	5.3	78	12.2	5.5	76	12.7	5.2	78	14.1	5.2	78	11.8	5.1
		KALENJIN	394	13.0	6.0	390	9.7	5.3	393	10.6	5.2	394	12.8	4.8	394	11.0	4.3
		KARIMOJONG	115	12.6	6.7	116	8.7	5.4	117	9.6	5.4	114	12.6	5.3	115	10.9	4.3
		LUO	168	13.0	6.3	169	10.7	5.1	169	10.8	5.1	169	13.2	5.1	169	11.2	4.5
		LUYIA	420	12.9	6.5	421	10.1	5.4	425	10.3	5.2	419	13.1	5.1	424	11.1	4.3
		CENTRAL BANTU	965	13.5	6.4	964	9.4	5.4	973	9.9	5.4	960	12.4	5.3	968	10.7	4.6
		POKOMO	133	13.0	5.7	131	9.8	5.6	131	10.1	5.7	133	12.9	5.1	133	11.4	4.5
		MJI KENDA	268	13.5	6.5	262	9.8	5.8	273	11.0	5.0	271	13.5	4.8	272	11.1	4.1
		TAITA	109	13.3	6.7	107	8.8	5.3	106	9.3	5.3	109	11.6	5.3	110	10.1	5.1
Absolute	Right	SOMALI	369	23.3	11.6	368	15.8	9.1	370	13.7	8.2	369	19.8	10.4	366	13.8	6.2
		CUSHITIC	217	23.4	12.5	217	14.9	10.3	217	13.3	8.8	215	19.6	10.5	216	14.3	6.6
		MAASAI	183	20.3	11.4	183	14.4	9.3	184	12.5	8.5	183	17.8	10.2	184	13.0	6.5
		DORDBO	79	23.6	11.2	79	17.9	10.3	78	14.7	7.2	79	20.1	10.6	79	13.8	6.7
		KALENJIN	392	18.3	10.5	392	13.4	8.6	392	12.3	7.1	392	17.6	9.6	395	12.5	6.0
		KARIMOJONG	114	20.3	12.0	117	12.8	8.7	116	11.9	7.4	117	17.6	9.8	114	12.4	6.3
		LUO	168	20.6	11.3	168	13.3	8.4	167	12.6	7.9	168	17.8	9.2	167	12.8	6.2
		LUYIA	420	20.5	11.8	421	13.9	8.7	420	12.7	7.7	419	18.1	9.5	419	12.7	5.5
		CENTRAL BANTU	968	21.3	11.9	968	13.1	8.7	972	11.9	7.6	968	17.2	9.7	973	12.3	6.0
		POKOMO	132	19.6	11.2	131	13.8	9.6	132	12.7	8.1	131	18.5	9.8	133	13.9	6.8
		MJI KENDA	273	22.8	13.0	274	14.5	9.8	275	13.2	8.2	276	19.5	9.7	275	13.1	5.8
		TAITA	111	19.2	12.5	111	11.9	8.7	113	10.4	6.6	112	15.0	9.0	111	11.1	5.3
Absolute	Left	SOMALI	366	21.7	11.3	366	15.0	9.6	364	14.2	8.9	368	18.8	10.4	364	13.6	6.3
		CUSHITIC	217	20.4	11.9	218	14.0	10.2	216	14.0	9.7	215	18.5	10.9	215	14.2	5.8
		MAASAI	184	17.7	11.5	183	13.7	9.6	183	12.3	9.1	183	15.9	10.5	181	13.1	6.8
		DORDBO	77	22.1	10.8	78	16.4	9.8	76	15.7	9.1	78	19.8	10.1	78	13.6	7.5
		KALENJIN	394	16.2	10.2	390	12.6	9.0	393	12.9	8.6	394	17.1	9.3	394	12.2	6.0
		KARIMOJONG	115	17.6	12.2	116	11.0	8.3	117	11.1	7.7	114	16.7	9.6	115	12.4	6.6
		LUO	168	17.6	11.4	169	13.8	9.0	169	13.3	8.8	169	17.0	9.1	169	12.3	6.0
		LUYIA	420	16.9	11.3	421	13.0	9.0	425	12.2	8.2	419	17.1	9.6	424	12.0	5.6
		CENTRAL BANTU	965	18.6	11.6	964	12.2	8.9	973	12.0	8.7	960	16.4	9.8	968	11.8	6.2
		POKOMO	133	17.4	10.4	131	12.9	9.5	131	12.2	9.2	133	16.4	9.6	133	12.6	6.5
		MJI KENDA	268	19.7	12.2	262	12.9	9.8	273	13.5	8.9	271	17.9	9.5	272	12.0	5.9
		TAITA	109	17.7	11.7	107	10.5	8.0	106	11.0	7.9	109	14.5	9.2	110	10.6	6.1

Table AP. 1.3.2. : Distribution of digital ridge counts in Kenyan ethnic group samples (females).

Radial Right

POPULATION	FINGER ONE			FINGER TWO			FINGER THREE			FINGER FOUR			FINGER FIVE		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD
SOMALI	148	14.7	5.5	147	10.3	4.8	145	10.4	4.4	147	13.0	5.4	146	11.5	4.2
CUSHITIC	174	14.4	5.8	171	9.1	5.5	172	10.1	4.8	173	13.0	5.5	174	11.4	4.7
MAASAI	192	13.2	5.8	193	9.7	5.3	191	10.0	4.9	192	12.8	6.0	192	11.1	5.0
KALENJIN	377	13.1	5.8	377	9.0	4.8	376	9.7	4.5	372	11.9	5.3	376	10.4	4.5
KARIMOJONG	90	13.8	5.5	87	10.1	5.5	88	10.9	4.6	89	12.8	5.7	90	11.6	4.8
LUO	107	12.6	5.9	107	9.6	4.8	107	10.4	4.4	107	13.3	5.6	107	11.4	4.9
LUYIA	362	12.8	5.9	359	8.4	5.0	364	9.9	4.8	361	13.3	5.4	361	11.3	4.6
CENTRAL BANTU	800	13.6	6.3	805	9.1	5.1	807	10.1	4.9	802	12.4	5.7	798	10.5	4.8
POKOMO	90	11.7	6.9	89	8.4	5.3	90	9.8	5.1	90	13.9	6.3	89	12.1	5.0
MJI KENDA	173	13.1	6.9	174	9.3	5.4	173	11.1	4.8	174	14.7	5.4	172	11.6	4.5
TAITA	91	12.4	6.3	93	9.1	5.4	93	10.0	5.1	93	12.4	5.5	92	10.4	4.2

Radial Left

POPULATION	FINGER ONE			FINGER TWO			FINGER THREE			FINGER FOUR			FINGER FIVE		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD
SOMALI	149	13.9	5.6	149	9.6	4.9	147	10.0	5.0	147	12.8	5.1	146	11.4	4.4
CUSHITIC	175	12.7	6.3	174	7.2	5.2	177	9.0	5.6	175	12.3	5.5	175	11.1	4.6
MAASAI	195	10.9	5.9	191	8.0	5.6	193	9.0	5.9	191	12.0	6.1	192	10.7	4.9
KALENJIN	373	11.2	6.1	368	7.2	5.0	371	8.7	5.1	369	11.2	5.5	374	9.6	4.7
KARIMOJONG	89	10.5	5.8	90	8.1	5.2	90	10.1	5.4	90	11.8	5.2	89	10.2	4.5
LUO	107	10.7	6.2	107	8.2	5.1	107	9.9	4.9	107	12.7	5.7	107	11.1	4.4
LUYIA	361	10.8	6.0	362	6.9	5.3	364	8.5	5.5	362	11.7	5.4	362	10.2	4.5
CENTRAL BANTU	805	11.7	5.9	804	7.0	5.2	805	8.8	5.4	802	11.1	5.6	797	9.8	4.7
POKOMO	90	9.7	6.3	88	6.9	5.6	90	9.2	5.7	90	12.4	6.5	89	10.9	5.1
MJI KENDA	174	10.9	7.0	171	8.0	4.8	173	10.3	5.3	173	13.5	5.2	174	10.5	4.3
TAITA	92	10.3	5.9	93	6.9	5.0	93	8.8	5.3	93	11.0	5.4	91	9.5	4.7

Ulnar Right

POPULATION	FINGER ONE			FINGER TWO			FINGER THREE			FINGER FOUR			FINGER FIVE		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD
SOMALI	148	6.5	7.2	147	4.2	6.7	146	1.9	5.0	147	4.6	6.1	147	1.2	2.7
CUSHITIC	175	4.7	6.4	173	4.3	6.3	172	1.8	4.6	173	4.1	6.0	175	1.0	2.7
MAASAI	193	5.0	6.8	194	4.5	6.6	194	1.6	4.3	194	4.1	6.1	194	1.0	3.0
KALENJIN	377	3.7	6.2	376	2.9	5.4	376	1.1	3.7	374	3.5	5.5	377	0.6	2.1
KARIMOJONG	89	5.4	7.1	89	4.4	6.5	88	2.3	5.6	89	4.3	6.1	90	0.9	3.0
LUO	107	4.1	7.1	107	4.8	6.9	107	2.4	5.5	106	4.9	6.9	107	1.2	3.1
LUYIA	363	5.0	7.3	361	4.0	6.1	365	1.5	4.4	365	3.0	5.4	365	0.7	2.3
CENTRAL BANTU	806	5.2	6.9	809	3.6	5.7	811	1.1	3.5	803	2.8	4.9	808	0.5	2.0
POKOMO	90	5.3	7.0	90	3.8	6.2	90	1.5	4.3	90	4.0	5.8	90	0.5	1.9
MJI KENDA	174	7.7	7.9	174	6.3	7.1	174	2.8	5.5	174	4.6	5.8	173	0.9	2.7
TAITA	91	5.1	6.5	93	3.8	6.3	93	1.4	3.9	93	3.4	5.4	92	0.8	2.6

Ulnar Left

POPULATION	FINGER ONE			FINGER TWO			FINGER THREE			FINGER FOUR			FINGER FIVE		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD
SOMALI	149	6.9	7.3	149	4.5	6.4	149	2.9	5.6	148	4.5	6.1	148	1.2	3.2
CUSHITIC	176	5.3	7.0	176	5.4	6.7	177	3.0	6.0	176	4.3	6.2	176	1.4	3.5
MAASAI	196	5.0	7.0	193	5.6	7.2	194	3.1	5.9	194	4.2	6.2	195	1.6	3.8
KALENJIN	374	3.5	5.7	374	3.8	6.0	373	2.3	5.0	374	4.5	6.2	374	1.1	3.1
KARIMOJONG	89	4.9	7.4	90	5.1	6.5	90	2.8	6.1	90	4.7	6.5	90	1.3	3.5
LUO	107	5.4	7.4	107	5.7	7.3	107	3.2	6.4	107	4.4	6.6	107	1.3	3.6
LUYIA	363	5.3	7.1	363	4.7	6.8	364	2.3	5.3	365	3.6	6.0	364	1.0	2.9
CENTRAL BANTU	806	5.8	7.3	804	4.8	6.8	809	2.1	4.9	808	3.9	5.8	806	1.1	3.2
POKOMO	89	6.1	7.7	89	4.6	6.5	90	2.6	5.8	90	3.7	6.0	90	0.9	2.7
MJI KENDA	173	8.2	7.9	173	7.1	7.1	174	3.6	6.0	173	4.8	6.3	174	1.0	3.1
TAITA	92	6.8	7.4	93	5.5	7.0	93	2.4	4.9	93	3.8	5.9	92	1.0	3.0

Unilateral Right

POPULATION	FINGER ONE			FINGER TWO			FINGER THREE			FINGER FOUR			FINGER FIVE		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD
SOMALI	148	15.0	5.5	147	11.5	4.9	145	10.7	4.6	147	13.3	5.2	146	11.6	4.1
CUSHITIC	174	14.6	5.7	170	10.4	5.5	172	10.3	4.9	173	13.1	5.4	174	11.4	4.7
MAASAI	192	13.8	5.7	193	10.7	5.4	191	10.1	5.0	192	13.0	5.9	192	11.2	5.0
KALENJIN	377	13.4	5.8	376	9.6	4.9	376	9.9	4.6	372	12.1	5.1	376	10.4	4.5
KARIMOJONG	89	14.5	5.0	87	11.2	5.2	88	11.2	4.9	89	13.1	5.4	90	11.6	4.8
LUO	107	12.9	6.0	107	10.8	5.1	107	10.6	4.8	106	13.7	5.5	107	11.5	4.7
LUYIA	361	13.4	6.0	359	9.8	5.0	364	10.1	4.9	361	13.4	5.4	361	11.3	4.6
CENTRAL BANTU	798	13.9	6.2	804	9.9	5.2	807	10.2	5.0	797	12.5	5.5	798	10.6	4.8
POKOMO	90	12.4	6.7	89	9.8	5.4	90	9.9	5.2	90	14.1	6.1	89	12.1	5.0
MJI KENDA	173	14.1	6.6	174	10.9	5.6	173	11.3	5.0	174	14.7	5.3	172	11.6	4.5
TAITA	91	12.9	6.1	93	9.8	5.6	93	10.2	5.0	93	12.4	5.5	92	10.4	4.2

Unilateral Left

POPULATION	FINGER ONE			FINGER TWO			FINGER THREE			FINGER FOUR			FINGER FIVE		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD
SOMALI	149	14.5	5.6	149	10.5	5.0	147	10.3	5.2	147	13.1	5.0	146	11.5	4.3
CUSHITIC	175	13.4	6.1	174	9.3	5.6	177	9.5	5.9	175	12.5	5.6	175	11.1	4.6
MAASAI	195	11.7	6.0	191	10.2	6.0	193	9.3	6.1	191	12.4	5.9	192	10.8	4.8
KALENJIN	373	11.5	6.1	368	8.6	5.2	370	9.1	5.1	369	11.7	5.3	374	9.8	4.6
KARIMOJONG	89	11.9	5.7	90	9.8	5.0	90	10.6	5.8	90	12.1	5.2	89	10.2	4.5
LUO	107	11.6	6.5	107	10.1	5.6	107	10.3	5.4	107	13.0	5.8	107	11.3	4.3
LUYIA	361	11.8	6.0	362	8.8	5.8	364	8.9	5.6	362	12.0	5.3	362	10.3	4.5
CENTRAL BANTU	801	12.6	6.0	798	9.0	5.7	804	9.2	5.5	799	11.4	5.5	793	9.9	4.6
POKOMO	89	11.1	6.7	87	8.4	5.9	90	9.5	5.7	90	12.5	6.4	89	11.0	5.1
MJI KENDA	173	12.7	6.8	170	10.4	5.3	173	10.6	5.4	172	13.5	5.2	174	10.6	4.3
TAITA	92	12.1	5.7	93	9.2	5.5	93	9.3	5.2	93	11.2	5.3	91	9.6	4.6

Absolute Right

POPULATION	FINGER ONE			FINGER TWO			FINGER THREE			FINGER FOUR			FINGER FIVE		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD
SOMALI	148	21.1	10.8	147	14.5	8.7	145	12.2	7.4	147	17.6	9.7	146	12.7	5.3
CUSHITIC	174	19.1	10.2	170	13.5	9.2	172	11.9	7.7	173	17.1	9.9	174	12.3	6.2
MAASAI	192	18.2	10.6	193	14.3	9.7	191	11.5	7.5	192	16.9	10.4	192	12.2	6.3
KALENJIN	377	16.9	9.8	376	11.9	8.1	376	10.9	6.7	372	15.4	9.1	376	11.0	5.4
KARIMOJONG	89	19.2	10.0	87	14.6	9.2	88	13.2	8.3	89	17.0	10.1	90	12.4	6.4
LUO	107	16.6	11.2	107	14.3	9.4	107	12.8	8.5	106	18.3	10.6	107	12.6	6.2
LUYIA	361	17.8	11.0	359	12.4	8.6	364	11.4	7.4	361	16.3	9.2	361	11.9	5.5
CENTRAL BANTU	798	18.8	11.1	804	12.7	8.5	807	11.2	6.6	797	15.2	8.9	798	11.1	5.6
POKOMO	90	17.0	11.3	89	12.2	8.8	90	11.3	7.8	90	17.9	10.1	89	12.5	5.7
MJI KENDA	173	20.8	12.8	174	15.6	10.3	173	13.9	8.5	174	19.3	9.6	172	12.5	5.9
TAITA	91	17.5	10.3	93	12.9	9.9	93	11.5	7.1	93	15.7	9.2	92	11.2	5.8

Absolute Left

POPULATION	FINGER ONE			FINGER TWO			FINGER THREE			FINGER FOUR			FINGER FIVE		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD
SOMALI	149	20.8	10.7	149	14.1	9.3	147	12.9	8.9	147	17.4	9.2	146	12.7	5.7
CUSHITIC	175	18.0	10.9	174	12.5	9.3	177	12.0	9.7	175	16.6	9.9	175	12.5	6.5
MAASAI	195	15.9	10.8	191	13.7	10.1	193	12.1	10.2	191	16.3	10.2	192	12.3	7.1
KALENJIN	373	14.7	9.9	368	11.1	8.8	370	10.9	8.3	369	15.7	9.8	374	10.7	6.0
KARIMOJONG	89	15.5	10.6	90	13.2	9.2	90	12.9	9.5	90	16.5	10.1	89	11.5	6.5
LUO	107	16.1	11.7	107	13.9	10.3	107	13.1	9.8	107	17.1	10.6	107	12.5	6.2
LUYIA	361	16.1	10.8	362	11.6	9.9	364	10.8	8.9	362	15.3	9.5	362	11.2	5.9
CENTRAL BANTU	801	17.5	11.1	798	11.9	9.3	804	10.9	8.4	799	15.0	9.6	793	10.9	6.3
POKOMO	89	15.7	11.6	87	11.4	9.9	90	11.8	9.4	90	16.1	10.6	89	11.8	6.4
MJI KENDA	173	19.1	13.0	170	15.2	10.0	173	13.9	9.7	172	18.2	9.9	174	11.5	5.8
TAITA	92	17.2	10.6	93	12.4	9.6	93	11.1	8.1	93	14.8	9.8	91	10.5	6.3

Table AP. 1.3.3 : Distribution of total finger ridge counts and palmar ridge counts in Kenyan ethnic group samples. (males and females)

Males

Right Hand

POPULATION	TOTAL RADIAL			TOTAL ULNAR			TOTAL UNILATERAL			TOTAL ABSOLUTE		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD.
SOMALI	356	63.7	19.3	363	22.9	21.7	356	66.1	20.1	356	86.9	36.7
CUSHITIC	212	63.7	21.8	213	21.9	23.3	212	65.6	22.5	212	85.7	40.9
MAASAI	180	59.6	21.3	181	18.1	20.6	179	61.2	21.9	179	77.7	37.3
DORO80	78	66.5	20.9	79	23.3	20.2	78	68.7	21.1	78	90.0	36.7
KALENJIN	388	57.7	19.1	387	16.4	19.4	381	59.5	20.1	381	73.8	34.1
KARIMOJONG	111	55.7	23.2	115	19.1	17.6	111	58.3	23.2	111	75.3	36.7
LUO	165	59.5	19.1	164	17.5	20.0	163	61.3	19.8	163	76.8	34.7
LUYIA	412	59.4	20.5	416	18.5	18.3	411	62.0	21.2	411	77.9	34.5
CENTRAL BANTU	949	58.2	20.8	958	17.3	18.8	942	60.1	21.3	942	75.5	35.6
POKOMO	129	59.9	21.7	130	18.3	19.9	129	61.9	22.3	129	78.4	36.9
MJI KENDA	271	61.3	21.2	275	21.9	21.0	271	63.7	22.1	271	83.1	38.7
TAITA	108	53.6	22.7	111	13.8	16.9	108	55.5	23.1	108	67.7	35.3

Left Hand

POPULATION	TOTAL RADIAL			TOTAL ULNAR			TOTAL UNILATERAL			TOTAL ABSOLUTE		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD.
SOMALI	348	62.0	20.5	358	21.7	21.6	345	64.3	21.2	345	86.1	37.9
CUSHITIC	212	59.5	22.4	215	21.3	23.4	211	62.2	23.4	211	81.2	41.9
MAASAI	181	55.0	22.3	182	18.3	20.7	180	57.0	23.0	180	73.4	38.9
DORO80	75	62.8	21.3	77	24.6	22.0	75	66.6	21.8	75	87.3	37.5
KALENJIN	385	54.4	20.3	387	16.8	19.7	383	57.3	21.0	383	71.2	35.1
KARIMOJONG	110	51.5	23.2	115	16.9	17.6	110	54.0	23.3	110	68.4	36.6
LUO	168	55.5	20.5	169	18.6	20.8	168	58.9	20.8	168	73.9	35.8
LUYIA	415	54.5	20.5	418	16.7	19.3	411	57.4	21.3	411	71.1	34.9
CENTRAL BANTU	931	52.9	22.0	957	16.0	19.8	921	55.9	22.6	921	70.8	37.6
POKOMO	128	53.3	20.5	131	17.3	20.6	127	56.7	21.5	127	70.3	36.5
MJI KENDA	256	54.5	20.9	261	21.1	21.8	249	58.0	22.0	249	74.6	35.5
TAITA	99	49.8	22.9	108	14.0	19.4	99	53.1	23.7	99	64.7	36.9

Right Hand

POPULATION	AB RIDGE COUNT			BC RIDGE COUNT			CD RIDGE COUNT			TOTAL PALMAR RC		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD.
SOMALI	359	35.9	5.9	328	24.9	5.6	330	35.3	5.1	345	95.0	12.6
CUSHITIC	205	35.7	5.5	197	25.5	5.6	193	35.9	5.9	197	96.3	12.9
MAASAI	176	37.0	6.3	169	25.2	5.6	163	36.3	5.9	170	97.4	14.4
DORO80	73	35.9	5.1	76	25.3	5.1	75	35.7	6.3	71	96.3	9.3
KALENJIN	377	37.2	5.3	366	26.3	5.4	364	36.0	5.6	373	98.9	12.7
KARIMOJONG	112	36.3	5.5	108	26.5	5.2	107	36.1	4.7	110	98.0	11.0
LUO	155	36.7	4.9	144	27.4	5.7	145	36.0	4.7	154	99.1	11.8
LUYIA	413	36.7	5.3	374	26.9	5.3	370	36.1	5.7	396	99.6	12.2
CENTRAL BANTU	932	36.3	6.0	863	26.4	5.4	867	35.7	5.4	891	97.4	13.1
POKOMO	130	35.6	6.1	140	25.8	4.7	139	34.9	5.1	141	95.7	12.0
MJI KENDA	259	35.3	5.1	252	26.4	4.9	254	35.0	4.9	251	95.9	10.9
TAITA	104	36.5	5.9	95	25.7	5.4	95	34.0	5.9	93	95.9	12.2

Left Hand

POPULATION	AB RIDGE COUNT			BC RIDGE COUNT			CD RIDGE COUNT			TOTAL PALMAR RC		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD.
SOMALI	360	36.2	6.2	336	25.4	5.7	330	35.4	6.1	352	95.7	14.1
CUSHITIC	214	36.5	5.1	199	25.8	5.9	198	35.8	6.4	205	97.5	13.0
MAASAI	179	37.1	5.9	163	24.9	5.6	162	35.9	6.5	174	96.7	13.6
DORO80	76	36.8	5.2	72	25.1	5.1	71	36.8	5.6	73	98.0	10.7
KALENJIN	389	37.9	5.3	367	26.4	5.6	368	35.4	6.1	384	98.9	13.3
KARIMOJONG	116	37.4	5.2	106	26.9	4.9	107	35.8	5.0	113	98.7	11.4
LUO	156	37.9	4.4	140	26.9	5.9	139	36.1	5.6	155	99.2	13.0
LUYIA	415	37.2	4.8	369	27.0	5.3	388	35.4	6.6	407	98.1	12.5
CENTRAL BANTU	954	37.1	5.5	866	26.5	5.4	863	35.7	6.4	922	97.9	13.7
POKOMO	151	36.2	6.3	138	26.4	4.7	139	35.4	5.7	142	96.7	12.2
MJI KENDA	278	36.4	4.9	252	26.8	4.9	261	35.3	5.6	269	97.5	11.7
TAITA	107	37.1	5.2	93	26.4	5.6	97	35.1	6.1	102	97.9	11.5

Females

Right Hand

POPULATION	TOTAL RADIAL			TOTAL ULNAR			TOTAL UNILATERAL			TOTAL ABSOLUTE		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD.
SOMALI	144	59.6	17.7	146	18.3	18.9	144	61.8	18.7	144	77.9	32.5
CUSHITIC	166	57.6	21.0	169	15.1	19.0	165	59.4	21.5	165	73.8	36.1
MAASAI	191	56.7	22.1	193	16.2	19.1	191	58.6	22.5	191	73.0	36.8
KALENJIN	372	54.0	19.4	373	11.7	16.5	371	55.1	20.0	371	65.6	31.8
KARIMOJONG	85	59.0	20.0	85	16.3	21.5	84	61.0	20.2	84	75.2	37.1
LUO	107	57.3	19.5	106	17.4	23.7	106	59.4	21.3	106	76.7	39.4
LUYIA	354	55.7	19.6	359	14.1	18.6	354	57.9	20.5	354	69.9	33.8
CENTRAL BANTU	775	55.5	21.6	795	13.0	15.7	770	56.7	22.1	770	68.3	33.0
POKOMO	88	55.5	22.4	90	15.1	17.2	88	58.0	23.2	88	70.3	35.6
MJI KENDA	170	59.9	21.8	173	22.4	21.9	170	62.8	22.8	170	82.3	40.0
TAITA	91	54.2	21.5	91	14.5	18.5	91	55.7	21.7	91	68.7	35.7

Left Hand

POPULATION	TOTAL RADIAL			TOTAL ULNAR			TOTAL UNILATERAL			TOTAL ABSOLUTE		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD.
SOMALI	143	58.1	19.3	147	19.9	19.7	143	60.3	19.6	143	78.3	34.3
CUSHITIC	169	51.8	21.7	174	19.4	20.9	169	55.5	22.6	169	71.2	37.9
MAASAI	187	50.6	23.5	191	19.3	21.5	187	54.4	24.0	187	70.0	40.1
KALENJIN	361	48.2	21.1	370	15.1	18.5	360	50.8	21.6	360	63.4	35.1
KARIMOJONG	88	50.4	20.6	89	18.9	23.5	88	54.4	21.9	88	69.5	39.6
LUO	107	52.6	20.9	107	20.1	24.0	107	56.1	22.7	107	72.7	40.7
LUYIA	353	48.2	21.2	359	17.0	20.3	353	51.7	22.1	353	65.0	36.9
CENTRAL BANTU	782	48.3	21.6	794	17.5	19.8	770	51.9	22.7	770	65.8	36.0
POKOMO	87	48.7	24.1	88	17.2	19.7	86	51.8	24.6	86	65.3	39.4
MJI KENDA	169	53.5	21.8	171	24.5	22.5	166	57.9	23.0	166	79.2	40.8
TAITA	91	46.6	21.6	92	19.6	20.5	91	51.4	22.2	91	66.3	37.8

Right Hand

POPULATION	AB RIDGE COUNT			BC RIDGE COUNT			CD RIDGE COUNT			TOTAL PALMAR RC		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD.
SOMALI	143	36.2	4.5	135	24.8	5.2	136	35.5	5.6	141	95.8	11.1
CUSHITIC	173	36.3	5.0	168	25.6	5.0	167	35.8	5.5	172	97.2	10.9
MAASAI	193	37.4	5.6	174	26.8	5.8	175	37.5	5.8	189	100.3	12.8
KALENJIN	365	37.7	5.2	353	26.0	5.3	351	36.2	5.4	359	99.2	11.6
KARIMOJONG	87	35.9	5.6	78	26.1	5.9	76	36.6	5.3	84	97.5	12.1
LUO	107	36.4	5.1	99	26.6	5.3	98	36.9	6.0	106	99.3	11.7
LUYIA	360	37.0	5.2	322	27.0	5.1	319	36.4	5.6	351	99.5	11.7
CENTRAL BANTU	772	36.7	5.7	721	26.3	4.9	718	35.7	5.3	743	98.0	12.1
POKOMO	87	35.7	5.1	86	25.9	4.3	85	36.6	5.6	86	97.5	11.5
MJI KENDA	168	37.0	4.8	153	26.8	4.9	154	35.1	5.3	162	98.2	11.0
TAITA	90	37.1	4.7	86	26.1	4.9	85	35.2	4.9	88	97.7	9.3

Left Hand

POPULATION	AB RIDGE COUNT			BC RIDGE COUNT			CD RIDGE COUNT			TOTAL PALMAR RC		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD.
SOMALI	145	36.3	5.4	136	25.4	5.4	132	35.1	5.9	139	95.6	11.9
CUSHITIC	176	36.8	4.9	166	26.0	5.0	158	35.6	6.3	167	97.4	12.2
MAASAI	189	37.2	5.2	166	26.7	5.9	163	37.2	6.1	180	99.5	12.9
KALENJIN	368	37.9	5.2	336	26.4	5.1	334	36.6	5.9	363	99.6	12.3
KARIMOJONG	84	37.3	5.4	80	26.3	5.0	79	36.9	6.0	82	100.1	11.9
LUO	106	36.4	4.4	98	27.3	5.3	98	36.4	6.1	106	98.4	11.8
LUYIA	362	37.8	4.9	312	27.7	5.0	310	36.6	6.0	357	100.3	12.3
CENTRAL BANTU	778	37.3	5.7	712	25.8	4.8	706	36.2	5.7	761	99.0	12.9
POKOMO	89	36.8	5.4	82	26.1	5.0	81	37.0	5.6	87	98.4	12.7
MJI KENDA	173	37.1	5.0	160	26.7	4.9	156	35.8	6.0	168	98.3	11.8
TAITA	90	37.6	4.9	85	27.1	4.6	84	36.8	6.2	89	99.5	10.9

Table AP. 1.3.4 : Distribution of digital patterns in Kenyan ethnic group samples (males).

Ulnar Loops

POPULATION	NO	RIGHT HAND ONE %	TWO %	THREE %	FOUR %	FINGER FIVE %	LEFT HAND ONE %	TWO %	THREE %	FOUR %	FIVE %
SOMALI	377	45.2	50.5	73.6	47.1	80.4	52.4	49.1	68.5	53.2	91.3
CUSHITIC	219	45.9	52.5	75.1	46.8	79.3	53.2	46.8	66.1	55.5	78.4
MAASAI	187	51.9	59.1	76.9	54.1	81.1	57.1	51.1	74.7	53.8	79.6
DORDBO	79	51.9	40.5	73.4	48.1	83.5	48.7	47.4	67.9	47.4	78.2
KALENJIN	399	63.0	55.2	79.3	54.2	80.6	66.1	53.4	70.4	54.3	93.1
KARIMOJONG	118	44.9	50.4	74.6	45.8	81.3	52.5	54.7	70.3	51.7	79.7
LUO	170	52.1	61.8	77.1	54.1	85.6	55.3	50.6	69.4	56.5	94.7
LUYIA	425	51.3	51.1	77.0	54.7	83.2	57.2	52.0	74.8	61.2	87.0
CENTRAL BANTU	991	47.8	54.6	79.4	59.4	84.9	50.2	49.7	71.2	58.2	95.1
POKOMO	155	52.6	53.0	78.0	59.1	79.7	56.0	48.1	70.9	67.9	82.8
MJI KENDA	291	39.1	48.2	74.6	52.9	85.9	40.0	47.6	74.3	54.5	87.0
TAITA	114	50.9	52.6	80.7	53.2	92.1	52.7	58.9	74.1	70.2	96.8

Radial Loops

POPULATION	NO	RIGHT HAND ONE %	TWO %	THREE %	FOUR %	FINGER FIVE %	LEFT HAND ONE %	TWO %	THREE %	FOUR %	FIVE %
SOMALI	377	0.5	4.8	1.1	0.3	0.5	0.5	6.4	0.8	1.1	0.3
CUSHITIC	219	0.5	3.2	1.4	0.5	0.5	0.5	7.8	1.8	0.5	0.0
MAASAI	187	0.5	4.8	0.0	0.5	0.0	1.1	6.0	0.0	1.1	0.0
DORDBO	79	0.0	6.3	1.3	0.0	0.0	1.3	7.7	0.0	0.0	1.3
KALENJIN	399	0.5	4.5	0.5	1.0	0.3	0.5	10.1	1.8	1.5	0.8
KARIMOJONG	118	0.8	6.0	3.4	1.7	0.0	0.0	9.4	5.1	1.7	0.8
LUO	170	1.2	5.9	3.6	0.0	0.0	1.2	11.8	2.9	0.6	0.0
LUYIA	425	0.2	5.6	0.2	0.0	0.2	0.5	12.5	1.6	0.9	0.2
CENTRAL BANTU	991	0.4	7.3	0.5	0.5	0.1	0.5	11.9	2.5	1.5	0.1
POKOMO	155	0.8	5.1	3.8	0.0	0.0	0.7	11.3	3.7	2.2	0.0
MJI KENDA	291	1.1	6.5	0.4	0.7	0.0	1.8	10.6	0.4	0.4	0.4
TAITA	114	0.0	4.4	1.8	0.0	0.0	1.8	9.8	0.0	0.9	0.0

Concentric Whorls

POPULATION	NO	RIGHT HAND ONE %	TWO %	THREE %	FOUR %	FINGER FIVE %	LEFT HAND ONE %	TWO %	THREE %	FOUR %	FIVE %
SOMALI	377	32.2	28.2	14.9	38.8	10.9	25.8	25.1	18.0	32.7	9.3
CUSHITIC	219	19.7	23.0	16.1	34.1	11.1	16.5	22.0	18.8	29.4	11.5
MAASAI	187	19.5	19.9	13.4	33.0	10.3	16.3	24.5	12.4	33.3	10.8
DORDBO	79	29.1	30.4	13.9	40.5	5.9	21.8	25.6	17.9	34.6	11.5
KALENJIN	399	11.4	20.7	10.1	31.7	7.6	10.8	19.2	14.9	30.3	7.1
KARIMOJONG	118	20.3	23.9	12.7	33.9	8.6	13.6	17.9	12.7	28.8	9.3
LUO	170	14.2	15.9	12.4	31.2	9.6	13.5	18.2	13.5	25.9	8.2
LUYIA	425	18.8	20.4	11.9	25.3	4.5	11.6	16.5	11.3	24.0	4.7
CENTRAL BANTU	991	19.3	18.6	9.9	26.8	5.7	12.1	16.1	11.7	25.1	6.5
POKOMO	155	12.0	19.7	11.4	29.5	9.8	6.7	15.8	11.9	20.9	6.0
MJI KENDA	291	24.3	20.7	14.1	29.7	5.4	12.7	17.2	14.9	24.0	4.3
TAITA	114	13.4	23.7	8.4	21.9	2.6	12.5	10.7	9.9	16.7	0.9

Double Loops

POPULATION	NO	RIGHT HAND ONE %	TWO %	THREE %	FOUR %	FINGER FIVE %	LEFT HAND ONE %	TWO %	THREE %	FOUR %	FIVE %
SOMALI	377	17.3	9.3	3.7	4.0	2.2	17.3	9.6	4.5	5.9	4.3
CUSHITIC	219	27.1	8.3	1.8	7.4	4.6	23.4	11.9	6.0	6.0	5.0
MAASAI	187	22.7	7.0	2.2	2.7	4.3	18.5	6.0	2.7	3.8	3.2
DORDBO	79	16.5	17.7	6.3	5.1	5.1	23.1	11.5	6.4	7.7	5.4
KALENJIN	399	20.0	11.6	3.5	3.3	3.5	15.3	9.9	3.5	4.0	2.8
KARIMOJONG	118	25.4	6.0	2.5	4.2	5.2	24.6	7.7	0.8	4.2	4.2
LUO	170	29.0	10.0	2.9	3.5	0.6	22.4	10.0	6.5	5.3	2.4
LUYIA	425	21.4	10.7	4.3	7.3	5.0	21.7	10.4	3.8	7.3	4.7
CENTRAL BANTU	991	27.1	10.6	4.6	6.1	4.0	30.0	11.1	6.0	7.8	4.9
POKOMO	155	27.1	10.6	3.8	6.1	5.3	28.4	14.3	3.7	5.2	5.2
MJI KENDA	291	28.6	14.1	4.3	7.6	3.3	38.3	12.8	5.1	11.3	4.7
TAITA	114	22.3	8.8	1.8	5.3	0.9	22.3	6.3	5.4	3.5	1.8

Arches

POPULATION	NO	RIGHT HAND ONE %	TWO %	THREE %	FOUR %	FINGER FIVE %	LEFT HAND ONE %	TWO %	THREE %	FOUR %	FIVE %
SOMALI	377	2.9	2.7	2.4	1.6	1.3	2.7	5.3	5.9	1.6	1.6
CUSHITIC	219	4.1	8.3	2.8	1.4	1.4	5.5	7.3	5.5	1.8	1.4
MAASAI	187	4.9	5.4	4.3	2.2	0.0	6.5	7.6	6.5	3.2	0.5
DORDBO	79	2.5	3.8	2.5	1.3	0.0	3.8	5.1	5.1	0.0	2.6
KALENJIN	399	3.5	5.3	4.0	2.3	1.5	7.0	5.6	6.6	2.5	1.5
KARIMOJONG	118	6.8	9.4	5.1	5.1	0.9	7.6	9.4	10.2	4.2	0.8
LUO	170	3.0	2.4	3.5	2.9	0.6	7.6	4.7	4.7	2.4	1.2
LUYIA	425	6.2	5.2	4.0	1.4	1.4	8.5	5.7	6.6	1.2	1.4
CENTRAL BANTU	991	5.2	5.9	4.1	1.5	1.1	6.9	7.8	6.6	2.5	1.5
POKOMO	155	5.3	7.6	3.8	0.8	0.8	6.0	9.0	8.2	2.2	2.2
MJI KENDA	291	6.2	5.8	4.0	1.1	0.4	8.0	8.8	4.3	2.2	1.1
TAITA	114	9.8	10.5	8.8	3.5	2.6	8.9	11.6	10.7	3.5	7.0

Total Loops

POPULATION	NO	RIGHT HAND ONE %	TWO %	THREE %	FOUR %	FINGER FIVE %	LEFT HAND ONE %	TWO %	THREE %	FOUR %	FIVE %
SOMALI	377	45.7	55.3	74.7	47.3	80.9	52.9	55.5	69.3	54.3	81.6
CUSHITIC	219	46.3	55.8	77.5	49.3	79.7	53.7	54.6	67.9	56.0	78.4
MAASAI	187	52.4	64.0	76.9	54.6	81.1	58.2	57.1	74.7	54.8	79.6
DORDBO	79	51.9	46.8	74.7	48.1	83.5	50.0	55.1	67.9	47.4	79.5
KALENJIN	399	63.5	59.7	79.8	55.2	80.8	66.6	63.5	72.2	55.8	83.9
KARIMOJONG	118	45.8	56.4	78.0	47.5	81.0	52.5	64.1	75.4	53.4	80.6
LUO	170	53.3	67.6	77.6	54.1	85.6	56.5	62.4	72.4	57.1	84.7
LUYIA	425	51.5	59.6	77.3	54.7	83.5	57.7	64.5	76.5	62.1	87.3
CENTRAL BANTU	991	48.2	61.9	79.9	59.9	85.0	50.7	61.6	73.7	59.8	85.2
POKOMO	155	53.4	59.1	78.8	59.1	79.7	56.7	59.4	74.6	70.1	82.8
MJI KENDA	291	40.2	54.7	75.0	53.6	85.9	41.8	58.2	74.6	54.9	87.3
TAITA	114	50.9	57.0	82.5	63.2	92.1	54.5	68.8	74.1	71.1	96.8

Total Whorls

POPULATION	NO	RIGHT HAND ONE %	TWO %	THREE %	FOUR %	FINGER FIVE %	LEFT HAND ONE %	TWO %	THREE %	FOUR %	FIVE %
SOMALI	377	51.3	42.0	22.9	51.1	17.7	44.4	39.2	24.8	44.1	16.9
CUSHITIC	219	49.5	35.9	19.7	49.3	18.9	40.8	38.1	26.6	42.2	20.2
MAASAI	187	42.7	30.6	18.8	43.2	18.9	35.3	35.3	18.8	41.9	19.9
DORDBO	79	45.6	49.4	22.8	50.6	16.5	46.2	39.7	26.9	52.6	17.9
KALENJIN	399	32.9	35.0	16.1	42.6	17.7	25.4	30.9	21.3	41.7	14.6
KARIMOJONG	118	47.5	34.2	16.9	47.5	18.1	39.8	26.5	14.4	42.4	18.6
LUO	170	43.8	30.0	18.8	42.9	13.8	35.9	32.9	22.9	40.6	14.1
LUYIA	425	42.3	35.2	18.7	43.8	15.1	33.8	29.8	16.9	36.7	11.3
CENTRAL BANTU	991	46.6	32.2	16.1	38.5	13.9	42.4	30.6	19.7	37.7	13.3
POKOMO	155	41.4	33.1	17.4	40.2	19.5	37.3	31.6	17.2	27.6	14.9
MJI KENDA	291	53.6	39.5	21.0	45.3	13.8	50.2	33.0	21.0	42.9	11.6
TAITA	114	39.3	32.5	8.9	33.3	5.3	36.6	19.6	15.2	25.4	6.1

Table AP. 1.3.5 : Distribution of digital patterns in Kenyan ethnic group samples (females).

Ulnar Loops

POPULATION	NO	RIGHT HAND ONE %	TWO %	THREE %	FINGER FOUR %	FIVE %	LEFT HAND ONE %	TWO %	THREE %	FOUR %	FIVE %
SOMALI	149	49.3	60.5	82.2	55.8	79.7	41.9	55.7	67.8	55.7	83.9
CUSHITIC	180	54.0	56.3	79.4	50.8	84.2	51.7	44.6	70.2	55.7	81.4
MAASAI	196	54.1	56.2	79.9	60.8	81.4	51.5	46.1	62.1	55.7	76.9
KALENJIN	378	63.1	68.2	84.4	61.2	89.1	58.2	54.9	72.1	54.5	91.9
KARIMOJONG	90	56.7	58.4	74.2	60.7	90.0	57.3	51.1	73.3	55.6	95.6
LUO	107	64.5	56.9	75.7	54.2	80.4	50.5	49.5	71.0	55.1	93.2
LUYIA	367	58.1	60.4	81.7	58.6	89.6	50.5	49.0	70.8	64.6	95.2
CENTRAL BANTU	818	52.3	58.2	83.6	57.3	88.8	48.8	46.2	71.7	57.3	83.0
POKOMO	90	44.4	55.6	90.0	50.0	90.0	38.9	44.4	68.9	62.2	93.3
MJI KENDA	179	36.2	42.0	69.0	53.4	85.9	31.0	37.0	62.3	54.3	97.1
TAITA	93	50.0	61.3	79.6	53.2	87.1	42.4	48.2	69.9	57.0	83.9

Radial Loops

POPULATION	NO	RIGHT HAND ONE %	TWO %	THREE %	FINGER FOUR %	FIVE %	LEFT HAND ONE %	TWO %	THREE %	FOUR %	FIVE %
SOMALI	149	0.0	4.1	0.0	1.4	0.7	0.0	2.7	0.7	0.7	0.0
CUSHITIC	180	0.0	4.0	0.6	0.6	0.0	0.6	10.7	1.1	0.6	0.0
MAASAI	196	0.5	4.1	0.0	1.0	0.0	1.0	10.4	2.6	2.1	1.0
KALENJIN	378	0.5	2.7	0.3	1.3	0.0	0.0	8.5	2.1	2.1	1.3
KARIMOJONG	90	2.2	7.9	0.0	1.1	0.0	4.5	11.1	1.1	1.1	1.1
LUO	107	0.0	4.7	0.0	0.9	0.9	0.9	8.4	0.0	0.9	3.0
LUYIA	367	0.5	6.0	0.5	0.0	0.0	2.5	12.8	2.5	1.6	0.5
CENTRAL BANTU	818	0.6	3.6	0.1	0.7	0.1	1.5	11.1	1.7	1.5	0.5
POKOMO	90	1.1	5.6	0.0	1.1	0.0	2.2	12.2	1.1	1.1	0.0
MJI KENDA	179	2.3	4.6	0.0	0.6	0.0	5.2	8.1	2.3	0.0	0.6
TAITA	93	1.1	2.2	2.2	0.0	0.0	4.3	8.6	3.2	1.1	1.1

Concentric Whorls

POPULATION	NO	RIGHT HAND ONE %	TWO %	THREE %	FINGER FOUR %	FIVE %	LEFT HAND ONE %	TWO %	THREE %	FOUR %	FIVE %
SOMALI	149	29.1	19.0	8.2	29.9	8.8	25.7	19.5	18.8	28.9	8.1
CUSHITIC	180	17.6	21.0	10.3	30.1	5.2	17.4	23.2	15.7	26.7	10.2
MAASAI	196	20.6	22.2	8.2	26.3	4.6	15.3	18.1	14.4	24.7	6.2
KALENJIN	378	10.9	14.3	6.4	21.3	4.0	9.3	16.3	12.8	28.5	7.7
KARIMOJONG	90	17.8	21.3	15.7	25.8	4.4	9.0	22.2	15.6	28.9	4.4
LUO	107	10.3	26.2	13.1	29.0	8.4	11.2	23.4	17.8	26.2	9.3
LUYIA	367	11.8	16.9	8.2	18.9	4.4	10.2	16.7	11.2	21.5	9.7
CENTRAL BANTU	818	14.4	18.1	5.5	17.5	3.4	13.1	17.6	11.6	23.8	7.0
POKOMO	90	16.7	13.3	7.8	25.6	3.3	16.7	21.1	16.7	21.1	4.4
MJI KENDA	179	20.7	28.2	15.5	26.4	2.3	16.1	31.8	18.3	31.4	6.7
TAITA	93	15.2	19.4	8.6	21.5	3.2	13.0	20.4	12.9	26.9	8.6

Double Loops

POPULATION	NO	RIGHT HAND ONE %	TWO %	THREE %	FINGER FOUR %	FIVE %	LEFT HAND ONE %	TWO %	THREE %	FOUR %	FIVE %
SOMALI	149	16.2	8.8	2.7	4.8	2.0	25.0	12.1	2.7	6.3	1.3
CUSHITIC	180	22.2	8.5	3.4	4.0	2.3	21.9	10.7	4.5	5.7	4.0
MAASAI	196	18.6	6.2	2.6	3.1	3.1	18.4	9.8	8.2	3.1	3.6
KALENJIN	378	18.0	8.0	1.9	4.3	1.1	21.3	6.7	3.2	3.2	2.4
KARIMOJONG	90	17.8	2.2	1.1	2.2	2.2	15.7	3.3	1.1	2.2	3.3
LUO	107	17.8	7.5	4.7	3.7	1.9	26.2	6.5	3.7	2.8	0.9
LUYIA	367	22.7	5.7	2.7	2.7	2.5	25.8	7.1	3.0	3.8	3.0
CENTRAL BANTU	818	25.7	10.3	3.9	4.9	1.4	28.4	9.7	3.8	6.5	3.7
POKOMO	90	20.0	7.8	3.3	4.4	1.1	22.2	6.7	1.1	7.8	3.3
MJI KENDA	179	32.8	14.4	6.3	8.6	3.4	36.8	11.0	7.4	9.0	2.8
TAITA	93	25.3	3.2	1.1	7.5	4.3	29.3	8.6	2.2	4.3	1.1

Arches

POPULATION	NO	RIGHT HAND ONE %	TWO %	THREE %	FINGER FOUR %	FIVE %	LEFT HAND ONE %	TWO %	THREE %	FOUR %	FIVE %
SOMALI	149	2.7	4.8	2.1	0.0	2.0	4.7	4.7	7.4	1.3	0.7
CUSHITIC	180	4.5	6.8	4.6	1.7	1.7	6.7	8.5	8.4	3.4	2.8
MAASAI	196	4.1	5.2	6.7	3.6	4.1	11.2	9.3	11.8	5.7	4.6
KALENJIN	378	6.9	5.0	5.0	2.4	2.1	10.4	8.8	7.4	2.7	2.7
KARIMOJONG	90	3.3	5.6	5.6	2.2	2.2	9.0	7.8	5.6	5.6	3.3
LUO	107	6.5	1.9	3.7	4.7	1.9	11.2	4.7	5.6	4.7	1.9
LUYIA	367	6.0	6.3	6.0	2.5	1.6	9.3	9.6	10.4	4.1	1.6
CENTRAL BANTU	818	6.3	7.3	5.5	2.8	2.2	7.5	10.6	9.7	4.6	2.5
POKOMO	90	13.3	12.2	8.9	4.4	2.2	16.7	14.4	10.0	4.4	4.4
MJI KENDA	179	7.5	8.0	7.5	1.1	2.3	10.3	7.5	8.0	2.3	1.1
TAITA	93	4.3	9.7	8.5	3.2	2.2	8.5	10.8	7.5	5.4	3.2

Total Loops

POPULATION	NO	RIGHT HAND ONE %	TWO %	THREE %	FINGER FOUR %	FIVE %	LEFT HAND ONE %	TWO %	THREE %	FOUR %	FIVE %
SOMALI	149	49.3	64.6	82.2	57.1	80.4	41.9	58.4	68.5	56.4	83.9
CUSHITIC	180	54.0	60.2	80.0	61.4	84.2	52.2	55.4	71.3	56.3	81.4
MAASAI	196	54.6	60.3	79.9	61.9	81.4	52.6	56.5	64.6	57.7	77.9
KALENJIN	378	63.7	70.8	84.6	62.5	89.1	58.2	63.7	74.2	55.6	83.2
KARIMOJONG	90	58.9	66.3	74.2	61.8	90.0	61.8	62.2	74.4	56.7	86.7
LUO	107	64.5	63.6	75.7	55.1	81.3	51.4	57.9	71.0	56.1	83.2
LUYIA	367	58.6	66.4	82.3	68.6	89.6	53.0	61.6	73.3	66.2	85.8
CENTRAL BANTU	818	53.0	61.7	83.8	68.0	88.9	50.2	57.3	73.4	58.8	83.5
POKOMO	90	45.6	61.1	80.0	61.1	90.0	41.1	56.7	70.0	63.3	83.3
MJI KENDA	179	38.5	46.6	69.0	54.0	85.9	36.2	45.1	64.6	54.3	87.6
TAITA	93	51.1	63.4	81.7	60.2	87.1	46.7	54.8	73.1	58.1	84.9

Total Whorls

POPULATION	NO	RIGHT HAND ONE %	TWO %	THREE %	FINGER FOUR %	FIVE %	LEFT HAND ONE %	TWO %	THREE %	FOUR %	FIVE %
SOMALI	149	48.0	30.6	15.8	42.9	17.6	53.4	36.9	24.2	42.3	15.4
CUSHITIC	180	41.5	33.0	15.4	36.9	14.1	41.0	36.2	20.2	40.3	15.8
MAASAI	196	41.2	34.5	13.4	36.5	14.4	36.2	34.2	23.6	36.6	17.4
KALENJIN	378	29.4	24.1	10.3	35.1	8.8	31.4	27.5	18.4	40.7	14.1
KARIMOJONG	90	37.8	28.1	20.2	36.0	7.8	29.2	30.0	20.0	37.8	10.0
LUO	107	29.0	34.6	20.6	40.2	16.8	37.4	37.4	23.4	39.3	15.0
LUYIA	367	35.3	27.3	11.7	29.0	8.7	37.6	28.8	16.3	29.7	12.6
CENTRAL BANTU	818	40.8	31.0	10.7	29.2	8.9	42.2	32.1	16.9	36.6	14.1
POKOMO	90	41.1	26.7	11.1	34.4	7.8	42.2	28.9	20.0	32.2	12.2
MJI KENDA	179	54.0	45.4	23.6	44.8	11.9	53.4	47.4	27.4	43.4	11.2
TAITA	93	44.6	26.9	11.8	36.6	10.8	46.7	34.4	19.4	36.6	11.8

TABLE AP1.3.6: DISTRIBUTION OF BASIC TOTAL DIGITAL PATTERNS IN KENYAN ETHNIC GROUP SAMPLES (MALES AND FEMALES).

POPULATION	RIGHT HAND NOF	A %	AT %	UL %	RL %	CW %	DL %	UCP %	RCP %	ACC %	LEFT HAND NOF	A %	AT %	UL %	RL %	CW %	DL %	UCP %	RCP %	ACC %
MALES:																				
SOMALI	1868	2.2	.0	39.3	1.4	24.9	7.3	4.1	0.6	.1	1872	2.9	.5	60.9	1.0	21.0	8.3	2.9	0.0	.1
CUSHITIC	1142	3.2	.2	61.5	1.2	20.2	9.7	3.2	0.6	.1	1145	4.2	.2	60.7	2.0	19.2	10.1	2.3	1.0	.3
DOROBO	395	1.8	.3	59.5	1.5	24.6	10.1	2.0	0.3	.0	390	3.3	.0	57.9	2.1	22.3	11.0	2.6	0.8	.0
MAASAI	927	3.3	.0	64.6	1.2	19.2	7.0	3.0	0.1	.0	926	4.6	.2	63.3	1.6	19.4	6.0	3.2	0.0	.0
KALENJIN	1987	3.2	.1	66.4	1.4	16.4	0.4	3.7	0.5	.1	1986	4.4	.2	65.5	3.0	16.5	7.1	2.0	0.6	.0
KARIMOJONG	587	5.1	.3	59.3	2.4	19.9	0.7	3.7	0.5	.0	589	6.5	.0	61.0	3.4	16.5	0.3	3.2	0.3	.0
LUO	846	2.2	.2	66.1	1.5	16.7	9.2	3.0	1.1	.0	850	3.9	.2	63.3	3.3	15.9	9.3	3.2	0.9	.0
LUYIA	2109	3.7	.0	63.5	1.0	16.4	9.7	4.1	0.0	.0	2120	4.4	.3	66.5	3.2	13.6	9.6	1.7	0.7	.1
CENTRAL BANTU	4987	3.6	.1	65.3	1.0	15.0	10.4	2.7	0.3	.0	4994	4.0	.4	62.9	3.3	14.3	11.9	1.7	0.2	.1
POKOMO	662	3.5	.2	64.5	1.5	16.5	10.6	2.7	0.6	.0	669	5.4	.1	65.2	3.6	12.3	11.4	1.2	0.6	.3
NJI KENDA	1380	3.4	.1	60.1	1.7	10.0	11.6	3.6	0.6	.0	1375	4.7	.1	60.7	2.7	14.6	13.0	2.5	0.7	.1
TAITA	560	7.0	.0	60.0	1.2	13.2	7.7	2.3	0.5	.0	564	0.2	.2	60.6	2.5	9.9	7.0	2.0	2.0	.1
FEMALES:																				
SOMALI	736	2.2	.1	65.5	1.2	19.0	6.9	4.6	0.4	.0	744	3.5	.3	61.0	0.0	20.2	9.4	3.9	0.9	.0
CUSHITES	890	4.0	.0	67.1	1.0	16.9	0.0	2.6	0.4	.0	896	5.0	.4	60.6	2.6	10.5	9.4	2.0	0.7	.0
MAASAI	1015	4.7	.0	66.1	1.1	16.0	6.6	3.0	0.0	.0	1010	0.4	.0	50.5	3.2	16.1	0.7	3.1	1.0	.0
KALENJIN	1004	4.2	.1	73.2	1.0	11.4	6.6	3.1	0.4	.1	1079	5.7	.6	64.3	2.9	14.9	7.3	2.9	1.3	.0
KARIMOJONG	447	3.0	.0	60.0	2.2	17.0	5.1	3.1	0.7	.0	449	5.0	.4	64.6	3.0	16.0	5.1	2.9	1.3	.0
LUO	535	3.7	.0	66.7	1.3	17.4	7.1	3.6	0.0	.2	535	5.6	.0	61.9	2.1	17.6	0.0	3.4	1.5	.0
LUYIA	1031	4.5	.0	71.7	1.4	12.0	7.9	2.0	0.5	.0	1029	6.5	.5	64.1	3.9	13.1	0.5	2.2	1.2	.0
CENTRAL BANTU	4113	4.9	.1	69.0	1.0	11.9	9.1	2.0	0.3	.1	4106	6.0	.4	61.4	3.2	14.6	10.3	2.0	1.2	.1
POKOMO	450	0.2	.0	66.0	1.6	13.3	7.3	2.4	1.1	.0	450	9.0	.2	59.6	3.3	16.0	0.2	1.0	1.1	.0
NJI KENDA	073	4.0	.5	57.4	1.5	10.6	13.1	4.0	0.2	.0	075	5.7	.1	54.5	3.2	20.0	13.1	1.6	0.9	.0
TAITA	464	4.7	.4	67.7	1.1	13.6	0.0	3.4	2.4	.0	464	0.5	.2	59.9	3.7	16.4	9.1	1.9	2.4	.0

NOF=NUMBER OF FINGERS.
LATERAL POCKET LOOPS ARE RARE, AND AMALGAMATED WITH CWHORLS.

TABLE AP1.3.7: DISTRIBUTION OF TOTAL SUMMARY FINGER PATTERNS IN KENYAN ETHNIC GROUP SAMPLES:(MALES AND FEMALES)

POPULATION	RIGHT HAND NOF	ARCHES %	LOOPS %	WHORLS %	LEFT HAND NOF	ARCHES %	LOOPS %	WHORLS %
MALES:								
SOMALI	1868	2.2	60.0	37.0	1872	3.4	62.7	33.9
CUSHITES	1142	3.4	62.7	33.9	1145	4.4	62.7	32.9
DOROBO	395	2.0	61.0	37.0	390	3.3	60.0	36.7
MAASAI	927	3.3	65.0	30.9	926	4.9	64.9	30.2
KALENJIN	1987	3.3	67.0	28.9	1986	4.6	60.4	26.9
KARIMOJONG	587	5.5	61.7	32.9	589	6.5	65.2	20.4
LUO	846	2.5	67.6	29.9	850	4.1	66.6	29.3
LUYIA	2109	3.7	65.3	31.0	2120	4.7	69.6	25.7
CENTRAL BANTU	4987	3.7	67.0	29.3	4994	5.2	66.2	20.6
POKOMO	662	3.6	66.0	30.4	669	5.5	60.0	25.7
NJI KENDA	1380	3.5	61.9	34.6	1375	4.9	63.4	31.7
TAITA	560	7.0	69.2	23.0	564	0.3	71.1	20.6
FEMALES:								
SOMALI	736	2.3	66.7	31.0	744	3.0	61.0	34.4
CUSHITES	890	4.0	60.1	27.9	896	6.3	63.2	30.6
MAASAI	1015	4.7	67.2	20.1	1010	0.4	61.0	29.0
KALENJIN	1004	4.3	74.2	21.5	1079	6.4	67.2	26.4
KARIMOJONG	447	3.0	70.2	26.0	449	6.2	60.4	25.4
LUO	535	3.7	60.0	20.2	535	5.6	63.9	30.5
LUYIA	1031	4.5	73.1	22.4	1029	7.0	60.0	25.0
CENTRAL BANTU	4113	5.0	70.0	24.1	4106	7.2	64.6	20.2
POKOMO	450	0.2	67.6	24.2	450	10.0	62.9	27.1
NJI KENDA	073	5.3	50.9	35.9	075	5.0	57.7	36.5
TAITA	464	5.2	60.0	26.1	464	0.7	63.6	29.7

NOF=NUMBER OF FINGERS.

Table AP. 1.3.8 : Distribution of finger and palmar indices of triradial intensity and the atd angle in Kenyan ethnic group samples (males)

Right Hand

POPULATION	FINGER ONE			FINGER TWO			FINGER THREE			FINGER FOUR			FINGER FIVE		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD
SOMALI	376	1.484	0.556	376	1.396	0.546	375	1.205	0.460	374	1.495	0.532	372	1.164	0.405
CUSHITIC	218	1.454	0.576	217	1.290	0.604	218	1.170	0.444	217	1.479	0.528	217	1.175	0.416
MAASAI	185	1.378	0.578	186	1.253	0.546	186	1.145	0.460	185	1.411	0.536	185	1.189	0.393
DORDBO	79	1.430	0.547	79	1.468	0.551	79	1.203	0.464	79	1.494	0.528	79	1.165	0.373
KALENJIN	395	1.294	0.528	397	1.300	0.550	397	1.123	0.429	397	1.403	0.535	396	1.162	0.408
KARIMOJONG	118	1.407	0.617	117	1.265	0.593	118	1.119	0.456	118	1.424	0.591	116	1.172	0.402
LUO	169	1.408	0.550	170	1.276	0.499	170	1.159	0.440	170	1.406	0.538	167	1.132	0.357
LUYIA	421	1.361	0.596	421	1.299	0.561	422	1.147	0.454	422	1.424	0.523	423	1.137	0.383
CENTRAL BANTU	981	1.414	0.589	982	1.270	0.553	984	1.121	0.431	981	1.370	0.514	984	1.128	0.366
POKOMO	133	1.361	0.582	132	1.265	0.578	132	1.136	0.442	132	1.394	0.506	133	1.188	0.411
MJI KENDA	276	1.475	0.611	276	1.341	0.578	276	1.170	0.471	276	1.442	0.519	276	1.134	0.352
TAITA	112	1.295	0.639	114	1.219	0.621	114	1.000	0.421	114	1.298	0.531	114	1.026	0.281

Left Hand

POPULATION	FINGER ONE			FINGER TWO			FINGER THREE			FINGER FOUR			FINGER FIVE		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD
SOMALI	376	1.418	0.545	375	1.349	0.560	375	1.197	0.510	376	1.426	0.526	375	1.157	0.393
CUSHITIC	218	1.353	0.583	218	1.326	0.607	218	1.211	0.527	218	1.404	0.528	218	1.188	0.426
MAASAI	184	1.288	0.581	184	1.288	0.581	186	1.124	0.489	186	1.387	0.551	186	1.194	0.410
DORDBO	78	1.423	0.570	78	1.346	0.577	78	1.218	0.526	78	1.526	0.503	78	1.154	0.429
KALENJIN	398	1.193	0.545	395	1.261	0.538	395	1.147	0.508	396	1.394	0.534	397	1.131	0.380
KARIMOJONG	118	1.322	0.612	117	1.171	0.577	118	1.042	0.496	118	1.381	0.569	118	1.178	0.406
LUO	170	1.282	0.598	170	1.294	0.529	170	1.182	0.495	170	1.382	0.534	170	1.129	0.370
LUYIA	423	1.253	0.600	423	1.248	0.535	425	1.111	0.465	425	1.355	0.503	424	1.099	0.343
CENTRAL BANTU	984	1.355	0.606	980	1.244	0.563	985	1.137	0.492	984	1.354	0.525	986	1.119	0.365
POKOMO	134	1.313	0.581	133	1.241	0.605	134	1.097	0.518	134	1.254	0.486	134	1.127	0.396
MJI KENDA	275	1.422	0.637	273	1.253	0.599	276	1.167	0.476	275	1.407	0.535	276	1.105	0.341
TAITA	112	1.277	0.618	112	1.089	0.546	112	1.045	0.509	114	1.219	0.493	114	0.991	0.364

Right Hand

POPULATION	INTERDIGITAL			HYPOTHENAR			TOTAL PALMAR			TOTAL FINGER.			ATD ANGLE.		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD.
SOMALI	374	4.257	0.654	375	1.309	0.528	374	5.626	0.890	370	6.765	1.746	366	36.6	4.7
CUSHITIC	218	4.229	0.570	216	1.306	0.500	216	5.644	0.898	215	6.558	1.066	213	37.4	4.6
MAASAI	186	4.237	0.577	186	1.312	0.519	186	5.608	0.820	184	6.359	1.829	179	37.7	4.8
DORDBO	79	4.203	0.490	79	1.253	0.466	79	5.747	1.056	79	6.759	1.587	78	38.6	4.4
KALENJIN	399	4.208	0.530	390	1.262	0.463	387	5.636	0.896	394	6.282	1.741	388	37.9	4.1
KARIMOJONG	117	4.368	0.638	113	1.354	0.566	112	5.857	0.967	115	6.357	1.846	116	38.8	5.1
LUO	170	4.453	0.680	170	1.359	0.528	170	5.929	0.970	166	6.355	1.662	168	39.9	5.5
LUYIA	425	4.360	0.662	423	1.286	0.488	423	5.726	0.908	417	6.360	1.732	418	37.9	4.9
CENTRAL BANTU	989	4.286	0.614	973	1.256	0.468	972	5.679	0.928	973	6.307	1.702	943	39.0	5.0
POKOMO	154	4.370	0.594	153	1.333	0.500	153	5.797	0.861	132	6.341	1.824	152	40.0	5.3
MJI KENDA	291	4.457	0.705	291	1.268	0.495	291	5.907	1.058	276	6.562	1.803	276	38.9	5.1
TAITA	111	4.432	0.683	108	1.454	0.602	108	6.028	0.981	112	5.821	1.866	107	38.3	4.5

Left Hand

POPULATION	INTERDIGITAL			HYPOTHENAR			TOTAL PALMAR			TOTAL FINGER.			ATD ANGLE.		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD.
SOMALI	374	4.254	0.610	376	1.269	0.484	372	5.723	0.980	372	6.540	1.802	363	36.9	5.0
CUSHITIC	218	4.257	0.628	217	1.258	0.469	217	5.724	0.994	218	6.482	1.982	215	38.0	4.7
MAASAI	186	4.226	0.581	185	1.211	0.435	185	5.432	0.947	184	6.283	1.807	183	37.6	4.7
DORDBO	79	4.291	0.558	78	1.269	0.446	78	5.962	1.145	78	6.667	1.748	76	37.8	4.1
KALENJIN	399	4.216	0.524	393	1.173	0.379	391	5.806	1.073	392	6.125	1.761	394	37.8	4.4
KARIMOJONG	118	4.432	0.634	111	1.297	0.497	111	6.171	1.306	117	6.085	1.910	118	39.1	6.2
LUO	169	4.491	0.725	169	1.243	0.457	169	6.302	1.340	170	6.271	1.839	168	40.0	5.6
LUYIA	425	4.344	0.655	424	1.210	0.452	424	5.983	1.176	420	6.057	1.673	423	38.1	4.7
CENTRAL BANTU	990	4.278	0.624	964	1.216	0.459	962	5.976	1.152	972	6.212	1.846	960	38.9	5.2
POKOMO	155	4.297	0.646	154	1.286	0.495	154	5.903	1.119	132	6.030	1.934	153	40.6	6.2
MJI KENDA	291	4.385	0.677	289	1.263	0.471	289	6.118	1.277	271	6.369	1.821	287	38.8	5.0
TAITA	114	4.289	0.662	114	1.316	0.521	114	6.044	1.155	108	5.611	1.917	108	39.8	4.4

Table AP. 1.3.9 : Distribution of finger and palmar indices of triradial intensity and the atd angle in Kenyan ethnic group samples (females)

Right Hand

POPULATION	FINGER ONE			FINGER TWO			FINGER THREE			FINGER FOUR			FINGER FIVE		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD
SOMALI	148	1.453	0.551	147	1.259	0.537	146	1.137	0.401	147	1.429	0.497	148	1.162	0.405
CUSHITIC	176	1.169	0.571	176	1.261	0.576	175	1.109	0.435	176	1.352	0.514	177	1.124	0.379
MAASAI	194	1.371	0.563	194	1.294	0.559	194	1.067	0.444	194	1.309	0.536	194	1.103	0.419
KALENJIN	377	1.225	0.560	377	1.194	0.502	377	1.053	0.389	376	1.110	0.514	377	1.066	0.323
KARIMOJONG	90	1.344	0.544	89	1.225	0.518	89	1.146	0.490	89	1.337	0.521	90	1.056	0.313
LUO	107	1.224	0.555	107	1.327	0.510	107	1.168	0.466	107	1.355	0.571	107	1.150	0.408
LUYIA	365	1.293	0.573	366	1.210	0.541	367	1.057	0.418	366	1.265	0.495	367	1.071	0.314
CENTRAL BANTU	812	1.345	0.593	813	1.242	0.565	813	1.053	0.398	813	1.264	0.504	812	1.067	0.326
POKOMO	90	1.278	0.687	90	1.144	0.610	90	1.022	0.449	90	1.300	0.550	90	1.056	0.313
MIJI KENDA	174	1.466	0.633	174	1.385	0.614	174	1.172	0.520	174	1.437	0.520	177	1.096	0.364
TAITA	92	1.402	0.575	93	1.183	0.570	93	1.065	0.412	91	1.333	0.538	93	1.086	0.351

Left Hand

POPULATION	FINGER ONE			FINGER TWO			FINGER THREE			FINGER FOUR			FINGER FIVE		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD
SOMALI	148	1.486	0.589	149	1.336	0.548	149	1.168	0.538	149	1.409	0.528	149	1.148	0.374
CUSHITIC	178	1.343	0.602	177	1.288	0.595	178	1.124	0.517	176	1.369	0.550	177	1.136	0.404
MAASAI	196	1.250	0.644	193	1.249	0.613	195	1.118	0.585	194	1.309	0.573	195	1.128	0.453
KALENJIN	376	1.210	0.612	375	1.208	0.547	376	1.117	0.487	376	1.383	0.534	376	1.114	0.394
KARIMOJONG	89	1.202	0.587	90	1.233	0.562	90	1.144	0.487	90	1.333	0.561	90	1.067	0.361
LUO	107	1.262	0.649	107	1.327	0.563	107	1.178	0.511	107	1.346	0.568	107	1.131	0.391
LUYIA	364	1.283	0.625	365	1.200	0.580	367	1.079	0.492	367	1.256	0.523	366	1.109	0.361
CENTRAL BANTU	812	1.347	0.614	811	1.227	0.611	812	1.079	0.503	811	1.322	0.554	810	1.117	0.388
POKOMO	90	1.256	0.728	90	1.144	0.646	90	1.100	0.542	90	1.278	0.541	90	1.089	0.386
MIJI KENDA	174	1.411	0.674	173	1.399	0.626	175	1.194	0.564	175	1.417	0.528	178	1.101	0.338
TAITA	92	1.402	0.612	93	1.247	0.620	93	1.118	0.508	91	1.312	0.571	93	1.086	0.380

Right Hand

POPULATION	INTERDIGITAL			HYPOTHENAR			TOTAL PALMAR			TOTAL FINGER.			ATD ANGLE.		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD.
SOMALI	147	4.184	0.562	148	1.365	0.510	147	5.585	0.766	146	6.445	1.636	145	38.4	4.7
CUSHITIC	179	4.207	0.558	177	1.294	0.481	177	5.599	0.887	172	6.215	1.840	176	39.5	4.8
MAASAI	195	4.210	0.565	195	1.344	0.565	195	5.662	0.913	194	6.144	1.888	195	38.6	5.5
KALENJIN	378	4.156	0.509	371	1.305	0.521	371	5.660	1.034	376	5.862	1.612	369	39.4	4.9
KARIMOJONG	89	4.247	0.549	89	1.348	0.546	89	5.663	0.797	87	6.080	1.881	85	39.7	6.0
LUO	107	4.374	0.694	107	1.336	0.475	107	5.935	1.066	107	6.224	1.850	107	41.4	5.3
LUYIA	367	4.275	0.626	367	1.278	0.500	367	5.692	0.932	364	5.898	1.654	359	39.1	5.2
CENTRAL BANTU	815	4.191	0.522	806	1.258	0.463	806	5.571	0.835	809	5.965	1.673	792	40.6	5.2
POKOMO	90	4.278	0.581	89	1.281	0.476	89	5.719	1.011	90	5.800	1.915	88	42.0	5.2
MIJI KENDA	179	4.313	0.611	178	1.318	0.501	178	5.803	0.998	173	6.566	1.927	174	40.9	5.6
TAITA	92	4.348	0.670	92	1.413	0.558	92	5.826	0.998	92	6.076	1.799	91	40.2	4.9

Left Hand

POPULATION	INTERDIGITAL			HYPOTHENAR			TOTAL PALMAR			TOTAL FINGER.			ATD ANGLE.		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD.
SOMALI	149	4.235	0.619	147	1.306	0.544	147	5.646	0.859	148	6.554	1.747	145	38.7	5.1
CUSHITIC	180	4.139	0.470	180	1.289	0.490	180	5.572	0.791	175	6.251	1.975	177	39.6	4.5
MAASAI	196	4.250	0.619	196	1.276	0.470	196	5.770	1.004	191	6.037	2.141	190	38.4	5.4
KALENJIN	376	4.168	0.543	369	1.217	0.444	367	5.777	1.094	375	6.029	1.826	374	39.4	4.8
KARIMOJONG	90	4.289	0.525	90	1.344	0.548	90	5.967	1.022	89	5.989	1.957	89	39.7	5.5
LUO	107	4.299	0.602	107	1.262	0.442	107	5.991	1.137	107	6.243	1.999	107	41.3	5.0
LUYIA	367	4.256	0.609	367	1.237	0.469	367	5.801	0.979	361	5.936	1.879	362	39.9	5.1
CENTRAL BANTU	815	4.180	0.523	799	1.229	0.446	799	5.725	0.997	808	6.092	1.892	799	40.5	5.1
POKOMO	90	4.256	0.419	90	1.233	0.425	90	5.889	1.043	90	5.867	2.142	89	42.3	5.2
MIJI KENDA	179	4.263	0.621	179	1.279	0.474	179	6.056	1.266	173	6.555	2.033	175	40.7	5.6
TAITA	93	4.280	0.713	93	1.333	0.496	93	5.860	1.194	92	6.174	2.063	92	42.0	4.7

Table AP. 1.3.10 : Distribution of common palmar patterns and triradii in Kenyan ethnic group samples (males).

Right Hand

POPULATION	NO	PALMAR PATTERNS AND TRIRADII PT %	RT %	P2 %	P3 %	P3T %	P4 %	PH %	CH %	TEF %	T %	T1 %	T2 %	TB %
SOMALI	377	2.4	3.5	10.9	43.6	7.8	61.3	5.6	25.3	5.9	57.6	47.3	1.3	24.8
CUSHITIC	219	4.6	6.4	8.3	41.9	7.8	63.1	3.7	26.6	11.0	58.8	43.1	1.8	27.1
MAASAI	187	3.2	2.7	8.1	52.7	8.1	53.2	7.5	23.7	5.9	54.3	53.2	1.6	22.0
DOROBO	79	13.9	15.2	8.9	44.3	10.1	57.0	1.3	24.1	29.1	55.7	45.6	0.0	24.1
KALENJIN	399	7.8	8.6	6.5	46.4	6.3	61.3	5.0	21.1	16.4	52.1	52.1	1.3	20.8
KARIMOJONG	118	6.9	4.3	8.5	47.0	8.5	71.8	6.0	29.9	11.2	37.2	66.4	2.6	29.9
LUO	170	5.3	6.5	15.3	45.3	9.4	72.9	5.9	30.6	11.8	49.4	54.7	2.9	28.8
LUYIA	425	4.0	4.5	14.8	47.6	6.6	66.7	6.4	22.2	8.5	47.0	58.3	1.9	21.5
CENTRAL BANTU	991	6.0	7.5	10.7	42.8	6.5	68.1	5.7	19.8	13.4	54.9	49.3	1.9	19.5
POKOMO	155	4.5	4.5	9.1	50.0	4.5	72.7	5.8	26.6	9.1	42.5	60.1	3.2	27.3
MJI KENDA	291	8.2	10.0	16.8	49.0	4.8	75.5	3.8	22.3	18.2	40.5	61.2	3.8	21.3
TAITA	114	6.3	6.3	17.0	55.0	1.8	68.5	9.9	34.2	12.6	40.7	67.6	3.6	34.2

Left Hand

POPULATION	NO	PALMAR PATTERNS AND TRIRADII PT %	RT %	P2 %	P3 %	P3T %	P4 %	PH %	CH %	TEF %	T %	T1 %	T2 %	TB %
SOMALI	377	9.4	10.4	0.1	24.6	8.5	84.5	4.3	22.1	19.8	58.0	46.3	1.1	21.5
CUSHITIC	219	9.6	11.9	0.1	21.6	7.8	88.5	5.5	20.6	21.6	62.7	38.7	2.8	21.6
MAASAI	187	9.7	9.7	0.0	20.4	14.5	84.9	5.9	15.1	19.4	57.8	45.9	2.7	15.1
DOROBO	79	19.2	21.8	0.1	27.8	8.9	86.1	6.4	20.5	41.0	47.4	59.0	0.0	20.5
KALENJIN	399	20.9	20.4	0.0	21.8	7.5	88.2	3.3	13.8	41.3	54.3	47.1	1.8	13.8
KARIMOJONG	118	22.9	20.3	0.1	28.0	10.2	97.5	6.8	21.2	43.2	40.5	64.0	3.4	20.3
LUO	170	26.6	30.2	0.1	27.8	11.8	94.7	8.3	16.0	56.8	51.5	56.8	0.6	15.4
LUYIA	425	19.5	23.3	0.1	20.5	11.5	93.6	6.6	14.4	42.8	51.7	52.8	2.8	13.6
CENTRAL BANTU	991	17.7	20.5	0.1	25.3	7.8	86.4	6.3	15.1	38.2	55.1	49.4	2.3	14.6
POKOMO	155	16.8	17.4	0.1	27.1	9.0	86.5	5.8	22.6	32.9	47.4	57.1	1.9	21.9
MJI KENDA	291	21.3	25.1	0.1	28.5	5.5	93.8	4.5	21.3	46.4	47.8	55.4	2.4	21.0
TAITA	114	23.7	20.2	0.1	26.3	7.9	85.1	7.9	23.7	43.9	44.7	61.4	1.8	23.7

Table AP. 1.3.11 : Distribution of common palmar patterns and triradii in Kenyan ethnic group samples (females).

Right Hand

POPULATION	NO	PALMAR PATTERNS AND TRIRADII												
		PT	RT	P2	P3	P3T	P4	PH	CH	TEF	T	T1	T2	TB
		%	%	%	%	%	%	%	%	%	%	%	%	%
SOMALI	149	1.4	2.0	4.8	38.8	6.8	66.0	10.8	25.0	3.4	52.0	57.4	2.0	25.0
CUSHITIC	180	4.5	5.0	4.5	34.1	3.9	76.0	3.4	24.6	9.5	53.7	48.6	0.0	26.8
MAASAI	196	4.6	6.2	5.6	34.9	5.6	74.4	8.7	25.1	10.8	49.2	59.0	2.6	23.6
KALENJIN	378	9.0	11.1	4.0	35.4	7.4	68.0	6.1	24.3	20.1	42.3	62.8	2.6	22.8
KARIMOJONG	90	3.4	3.4	5.6	32.6	3.4	83.1	9.0	25.8	6.7	47.2	60.7	0.0	27.0
LUO	107	11.2	11.2	11.2	40.2	6.5	79.4	2.8	30.8	22.4	34.6	66.4	1.9	30.8
LUYIA	367	6.3	7.6	7.4	36.8	5.2	77.7	6.3	21.0	13.9	37.9	65.9	2.2	21.8
CENTRAL BANTU	818	5.5	7.5	5.3	34.8	5.3	73.4	5.0	19.9	12.9	49.5	53.7	2.5	20.0
POKOMO	90	7.8	7.8	3.3	43.3	7.8	72.2	6.7	21.1	15.6	37.1	65.2	3.3	22.2
MJI KENDA	179	7.8	9.5	6.1	37.4	2.2	84.4	6.1	25.1	17.3	39.3	65.2	1.7	25.1
TAITA	93	3.3	3.3	9.8	39.1	10.9	73.9	7.6	33.7	6.5	31.5	72.8	3.3	33.7

Left Hand

POPULATION	NO	PALMAR PATTERNS AND TRIRADII												
		PT	RT	P2	P3	P3T	P4	PH	CH	TEF	T	T1	T2	TB
		%	%	%	%	%	%	%	%	%	%	%	%	%
SOMALI	149	4.7	5.4	0.0	21.5	7.4	88.6	10.1	19.5	10.1	57.8	49.7	2.7	20.1
CUSHITIC	180	6.7	7.8	0.0	22.2	4.4	85.0	3.9	24.4	14.4	53.9	50.0	0.0	25.0
MAASAI	196	10.2	14.3	0.0	20.4	7.1	92.3	10.2	16.8	24.5	50.5	57.7	2.0	17.3
KALENJIN	378	19.5	19.7	0.0	20.2	8.0	85.4	4.2	17.5	39.1	47.7	56.4	1.6	16.2
KARIMOJONG	90	17.8	15.6	0.0	18.9	11.1	95.6	10.0	24.4	33.3	52.2	54.4	3.3	24.4
LUO	107	21.5	21.5	0.1	21.5	7.5	93.5	4.7	21.5	43.0	42.1	61.7	1.9	20.6
LUYIA	367	14.4	16.3	0.0	17.2	8.7	94.8	6.8	16.9	30.8	40.6	64.9	1.9	16.3
CENTRAL BANTU	818	15.5	16.6	0.0	19.0	7.0	88.5	6.4	16.2	31.8	48.4	54.9	3.7	15.7
POKOMO	90	20.0	20.0	0.0	31.1	4.4	85.6	4.4	18.9	40.0	45.6	56.7	2.2	18.9
MJI KENDA	179	22.9	28.5	0.0	25.1	4.5	91.6	6.1	21.2	51.4	45.3	57.0	3.9	21.8
TAITA	93	12.9	11.8	0.0	25.8	3.2	93.5	3.2	31.2	24.7	29.0	73.1	2.2	29.0

TABLE AP.1.3.12 : FREQUENCIES OF THE NUMBER OF INTERDIGITAL TRIRADII IN KENYAN ETHNIC GROUP SAMPLES (MALES AND FEMALES).

	RIGHT HAND						LEFT HAND					
	NO	3 %	4 %	5 %	6 %	7+ %	NO	3 %	4 %	5 %	6 %	7+ %
MALES:												
SOMALI	373	3.8	74.0	15.8	5.6	0.8	373	4.0	71.3	20.1	4.3	0.3
CUSHITES	229	1.3	80.3	13.5	4.4	0.4	229	3.1	74.7	16.2	5.7	0.4
DOROBO	79	2.5	75.9	20.3	1.3	0.0	79	1.3	72.2	22.8	3.8	0.0
MAASAI	186	3.8	72.6	19.9	3.8	0.0	186	6.5	66.1	25.8	1.6	0.0
KALENJIN	400	2.8	76.5	18.3	2.3	0.3	400	3.3	74.0	20.8	2.0	0.0
KARIMOJONG	117	0.9	68.4	24.8	5.1	0.9	118	0.8	61.9	30.5	6.8	0.0
LUO	170	1.8	60.0	29.4	8.8	0.0	169	1.8	58.0	30.8	8.3	1.2
LUYIA	425	3.1	64.9	25.2	6.6	0.2	425	4.7	61.4	28.9	4.7	0.2
CENTRAL BANTU	1004	2.7	71.5	20.3	5.3	0.2	1005	4.9	68.1	22.7	4.2	0.2
POKOMO	154	1.3	64.9	29.2	4.5	0.0	155	5.2	65.2	24.5	5.2	0.0
MJI KENDA	291	2.4	59.5	28.2	10.0	0.0	291	2.7	63.9	25.8	7.2	0.3
TAITA	111	0.0	67.6	21.6	10.8	0.0	114	4.4	68.4	21.9	4.4	0.9
FEMALES:												
SOMALI	147	4.1	76.9	16.3	2.0	0.7	149	4.0	73.8	17.4	4.0	0.7
CUSHITES	181	2.2	79.6	14.4	3.3	0.6	182	4.9	77.5	17.0	0.5	0.0
MAASAI	204	4.9	73.0	18.6	3.4	0.0	205	4.9	70.7	20.0	4.4	0.0
KALENJIN	378	3.2	80.4	14.6	1.6	0.3	376	4.3	77.1	17.0	1.1	0.6
KARIMOJONG	89	3.4	70.8	23.6	2.2	0.0	90	1.1	71.1	25.6	2.2	0.0
LUO	107	4.7	60.7	27.1	7.5	0.0	107	3.7	66.4	26.2	3.7	0.0
LUYIA	367	3.0	69.8	22.1	4.1	0.3	367	5.2	67.6	24.0	3.0	0.3
CENTRAL BANTU	825	2.7	78.3	16.0	2.9	0.1	825	4.1	76.4	17.2	2.3	0.0
POKOMO	90	1.1	74.4	21.1	2.2	1.1	90	0.0	74.4	25.6	0.0	0.0
MJI KENDA	188	0.5	75.0	18.6	5.3	0.5	188	3.2	72.9	20.7	2.7	0.5
TAITA	92	2.2	68.5	22.8	5.4	1.1	93	7.5	63.4	23.7	4.3	1.1

TABLE AP.1.3.13 : SIGNIFICANCE OF ETHNIC GROUP VARIATION FOR A RANGE OF DERMATOGLYPHIC ATTRIBUTES:
A: ANALYSIS OF VARIANCE:

ATTRIBUTE	MALES RIGHT HAND F	MALES RIGHT HAND P	MALES LEFT HAND F	MALES LEFT HAND P	FEMALES RIGHT HAND F	FEMALES RIGHT HAND P	FEMALES LEFT HAND F	FEMALES LEFT HAND P
RFR1	4.26	.000	8.61	.000	2.91	.001	5.52	.000
FR2	4.70	.000	5.88	.000	2.58	.004	4.76	.000
FR3	2.62	.003	5.23	.000	1.64	.090	3.12	.001
FR4	4.05	.000	3.81	.000	4.39	.000	4.68	.000
FR5	3.62	.000	4.13	.000	2.98	.001	4.24	.000
TRADRC	5.05	.000	6.95	.000	2.09	.022	4.30	.000
FU1	5.36	.000	6.16	.000	4.85	.000	6.87	.000
FU2	2.94	.001	2.14	.015	4.47	.000	3.64	.000
FU3	1.81	.047	1.90	.035	3.75	.000	2.01	.029
FU4	3.79	.000	2.31	.008	4.33	.000	1.01	.436
FU5	2.86	.001	3.09	.000	2.07	.024	.83	.596
TULNRC	4.51	.000	3.31	.000	6.02	.000	3.28	.000
F1	4.00	.000	6.07	.000	2.43	.007	4.43	.000
F2	5.06	.000	4.91	.000	3.28	.000	3.71	.000
F3	2.94	.001	5.36	.000	1.99	.031	2.76	.002
F4	4.00	.000	3.62	.000	4.53	.000	4.07	.000
F5	3.02	.000	4.37	.000	3.10	.000	4.15	.000
TRC	5.12	.000	6.07	.000	2.89	.002	3.88	.000
ABS1	5.27	.000	6.64	.000	3.55	.000	5.36	.000
ABS2	4.82	.000	5.03	.000	4.16	.000	4.17	.000
ABS3	3.26	.000	3.97	.000	3.72	.000	3.39	.000
ABS4	4.29	.000	3.18	.000	4.70	.000	2.85	.002
ABS5	4.20	.000	5.19	.000	3.40	.000	3.18	.000
TABSRC	5.66	.000	5.68	.000	4.56	.000	4.17	.000
D1	3.15	.000	4.59	.000	4.00	.000	3.99	.000
D2	2.61	.003	2.57	.003	2.70	.003	2.76	.002
D3	2.57	.003	2.15	.015	2.91	.001	1.46	.114
D4	2.61	.003	2.90	.001	3.23	.000	2.12	.020
D5	1.96	.029	3.14	.000	1.95	.035	.52	.879
TFPI	3.89	.000	3.66	.000	4.14	.000	2.70	.003
AB	2.80	.001	2.97	.001	2.49	.006	1.97	.033
BC	4.09	.000	3.47	.000	2.75	.002	2.83	.002
CD	2.17	.014	.67	.771	2.96	.001	1.74	.067
TPRC	3.09	.000	1.52	.115	2.27	.012	1.95	.034
TD	5.39	.000	4.18	.000	2.91	.001	1.99	.031
TOTHI	3.18	.000	3.05	.000	2.75	.002	2.28	.012
TPLHI	4.02	.000	5.27	.000	3.53	.005	3.32	.000
ATD	11.26	.000	10.55	.000	7.18	.000	8.14	.000

CHI SQUARE PROBABILITIES FOR MAJOR PALMAR PATTERNS AND TRIRADII:

HAND ATTRIBUTE	MALES R P	MALES L P	FEMALES R P	FEMALES L P
1	.014	.000	.053	.000
1R	.000	.000	.000	.000
11	.000	.010	.000	.010
111	.209	.229	.209	.229
1111	.303	.044	.302	.044
1V	.001	.048	.001	.048
H	.542	.794	.542	.794
H	.041	.052	.041	.052
TEF	.001	.000	.001	.000
T	.000	.005	.000	.005
T1	.000	.000	.000	.000
T2	.374	.986	.374	.986
TB	.003	.001	.003	.001

Table AP. 1.4.1 : Distribution of radial ridge counts in Kenyan minimal ethnic population samples (right hand males).

POPULATION	FINGER ONE			FINGER TWO			FINGER THREE			FINGER FOUR			FINGER FIVE		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD
SOMALI	218	16.0	6.2	218	10.3	5.4	219	10.6	4.6	219	13.9	5.7	219	12.2	4.6
RENDILLE	151	16.0	5.2	150	10.6	5.5	151	11.3	4.8	150	13.8	4.5	147	12.2	3.9
GABBRA	27	16.1	6.1	27	10.7	4.6	27	10.0	3.9	26	14.5	5.0	27	12.9	3.5
BORAN	127	15.8	6.6	126	9.7	5.6	126	10.7	5.2	125	14.1	5.7	125	12.7	4.5
BORJI	63	17.0	6.8	64	10.2	5.6	64	11.2	5.1	64	13.7	5.3	64	12.3	4.6
SAMBURU	86	15.3	5.8	84	10.5	5.3	86	10.2	4.9	84	13.1	5.3	85	11.7	4.1
KADJIADO MAASAI	63	14.6	6.8	63	10.1	6.1	63	11.1	4.8	63	13.3	5.8	63	11.4	5.3
NAROK MAASAI	36	13.6	6.8	36	10.3	5.1	35	9.1	5.1	36	12.1	6.0	36	11.2	4.3
NGABEI	41	16.1	6.1	41	10.9	5.9	40	12.4	4.1	41	14.6	5.3	41	12.4	4.4
NUKOGODO	38	17.9	5.6	38	11.5	6.2	38	11.3	4.7	38	13.8	5.9	38	12.4	5.4
KONY	37	11.0	6.5	37	6.7	4.5	37	8.0	4.6	37	10.7	6.2	37	8.9	4.8
NANDI	52	14.6	5.3	52	9.7	4.9	52	10.7	3.8	52	12.2	5.0	52	11.4	3.7
KIPSIGIS	54	15.3	6.7	54	10.7	5.5	55	11.7	4.3	54	13.6	5.1	55	12.8	4.1
TUGEN	107	14.1	5.9	107	8.6	5.3	105	9.9	4.7	107	12.9	5.0	107	11.6	4.5
KEYO	50	14.1	5.1	49	9.4	4.5	49	11.0	3.9	49	13.0	5.3	50	11.2	4.2
MARAKWET	50	15.5	5.1	50	9.5	5.3	50	11.4	4.2	50	13.5	4.6	50	11.7	4.7
POKOT	45	13.1	6.2	45	10.1	4.2	45	10.0	4.3	44	12.8	4.4	45	10.0	4.4
TESO	52	13.0	6.9	52	8.1	5.7	51	9.2	5.7	52	12.3	5.3	52	10.7	4.3
TURKANA	62	14.3	6.0	65	9.3	5.8	65	10.0	5.0	65	12.8	6.3	62	11.5	5.1
LUO	169	14.8	5.7	168	9.5	5.1	167	10.4	4.7	168	13.6	5.2	168	11.7	4.5
GUSII	50	15.6	6.7	49	9.2	5.7	49	10.4	4.9	49	13.8	5.7	49	12.3	4.6
TIRIKI	26	12.8	7.6	26	7.8	6.0	26	10.2	5.4	26	13.2	5.4	26	12.2	4.2
MARAGOLI	26	12.8	6.7	26	7.6	5.6	26	10.0	4.6	26	12.4	5.1	26	11.2	4.5
BUNYORE	30	15.2	5.4	30	9.5	5.2	30	11.6	3.8	29	16.1	4.6	30	13.0	3.6
IDAKHO	39	14.1	6.9	39	11.3	5.6	39	11.5	5.1	39	13.3	4.6	39	11.7	3.6
MARAMA	25	15.4	6.8	25	9.6	4.8	25	12.2	3.9	25	15.6	5.1	25	13.4	4.5
WANGA	25	16.8	6.4	25	8.2	6.3	25	10.4	4.9	25	14.1	4.4	25	11.5	4.2
MARACH	25	15.4	7.0	25	9.3	6.3	25	11.0	5.3	25	13.6	6.3	25	11.6	5.0
BUKHAYO	22	13.3	6.8	22	8.8	5.7	22	10.4	4.3	22	12.5	5.8	22	10.5	4.5
SAMIA	24	13.8	5.7	24	7.4	5.5	24	10.1	5.5	24	15.1	6.7	24	13.2	5.8
BUTSOTSO	20	15.8	4.7	20	10.2	4.9	20	12.3	4.1	20	16.1	4.2	20	13.1	3.2
BUNYALA	25	14.5	6.3	25	8.2	6.9	25	9.3	5.5	25	13.3	6.6	25	10.8	5.7
KABRAS	26	14.0	6.3	25	9.5	4.9	24	12.1	4.8	25	14.4	4.2	26	12.2	3.5
BUKUSU	58	13.3	6.0	60	8.3	4.7	60	9.1	4.9	58	10.8	5.0	58	9.8	4.7
KIAMBU KIKUYU	64	16.9	7.2	64	11.0	6.5	63	11.4	5.0	64	14.0	5.5	64	11.9	5.2
MURANGA KIKUYU	55	15.4	7.2	54	9.1	5.9	55	10.7	5.3	55	13.6	6.1	55	11.6	4.9
NYERI KIKUYU	49	14.0	7.1	48	9.0	5.4	48	9.0	5.6	49	11.9	6.0	49	10.6	4.4
NDIA	55	14.6	6.1	56	8.9	5.5	56	10.2	3.8	56	13.2	5.4	56	11.3	4.8
KAMBA	73	15.2	6.2	73	8.9	5.8	75	10.6	4.4	74	13.4	5.5	71	11.3	4.0
EMBU	87	15.1	7.2	86	8.6	4.7	87	9.8	5.2	85	12.8	5.5	87	11.0	4.4
MBERE	63	14.5	6.6	62	9.3	5.7	63	11.4	4.9	63	14.0	5.0	63	11.8	4.5
CHUKA	73	15.5	5.5	71	8.9	5.0	73	9.8	4.8	73	12.8	4.7	73	10.9	4.2
MUTHAMBI	76	14.9	6.1	75	8.6	5.9	76	9.5	4.9	76	13.0	5.3	76	11.2	4.6
MWIMBI	60	15.2	5.6	60	9.1	4.9	59	8.8	4.9	60	11.4	5.7	60	10.8	4.2
IGOJI	77	15.7	6.3	76	9.4	5.9	77	10.6	5.4	76	13.9	6.2	77	10.9	5.4
IMENTI	61	13.7	6.2	61	8.9	5.1	60	9.9	4.5	59	12.8	4.7	60	11.7	4.0
TIGANIA	64	14.1	6.6	64	8.1	4.9	64	9.7	4.6	64	12.6	5.5	64	10.7	4.5
IGEMBE	62	16.0	5.3	64	8.3	5.2	64	9.7	4.8	63	13.0	5.2	64	11.7	4.3
THARAKA	54	14.4	7.1	53	9.3	5.9	54	10.8	5.3	54	13.6	5.5	54	11.6	4.7
POKOMO	92	13.9	6.6	92	8.9	6.0	93	10.4	5.5	92	13.8	5.5	93	12.4	4.8
MALAKOTE	40	15.5	5.6	39	10.3	5.4	39	10.8	4.5	39	13.3	4.1	40	11.8	4.3
GIRIAMA	49	13.5	7.2	49	8.1	5.2	49	9.6	5.2	49	14.6	4.7	49	11.7	3.7
CHONYI	78	13.7	6.9	78	8.1	5.7	78	10.5	5.1	77	13.8	5.5	79	11.6	4.7
MID MJI KENDA	32	15.4	5.9	32	9.0	5.0	32	10.4	5.4	32	13.7	5.6	32	11.8	4.5
DIGO	114	15.4	6.5	115	10.2	5.1	116	11.5	4.8	116	15.5	4.9	115	12.9	4.6
TAITA	54	14.2	7.3	55	9.1	5.4	55	9.3	5.4	54	12.3	5.3	53	10.3	4.2
TAVETA	57	13.1	6.7	56	7.6	5.3	58	9.0	5.2	58	11.7	5.9	58	10.9	5.3

Table AP. 1.4.2 : Distribution of radial ridge counts in Kenyan minimal ethnic population samples (left hand males).

POPULATION	FINGER ONE			FINGER TWO			FINGER THREE			FINGER FOUR			FINGER FIVE		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD
SOMALI	218	15.2	5.9	221	9.7	5.4	221	11.3	5.1	221	13.4	6.1	216	12.2	4.6
RENDILLE	150	15.3	5.2	145	9.7	5.4	144	11.3	5.2	147	13.5	4.4	148	11.8	3.6
GABBRA	27	14.3	5.7	27	9.3	5.0	27	10.4	5.0	27	13.3	4.8	27	12.0	3.2
BORAN	126	14.3	6.7	127	8.3	5.7	126	10.3	5.7	125	13.6	6.0	124	12.6	4.1
BURJI	64	15.4	6.2	64	9.1	5.4	61	10.5	5.4	64	13.4	5.7	64	12.2	4.7
SAMBURU	85	14.0	5.8	84	8.7	5.5	84	9.5	5.2	85	12.2	5.6	82	11.5	4.2
KAJIADO MAASAI	63	12.8	7.3	63	9.4	5.0	61	10.6	5.5	61	12.2	6.1	63	11.3	5.1
NAROK MAASAI	36	11.3	6.1	36	8.9	5.0	36	9.1	6.0	36	12.1	5.5	36	10.8	4.8
NGWESI	39	14.9	5.9	40	10.5	5.5	39	12.2	4.4	40	13.1	4.6	40	11.0	4.6
MUKOGODO	38	16.0	5.3	38	10.4	6.0	37	11.7	5.5	38	14.0	6.0	38	12.0	5.9
KONY	37	9.6	5.8	37	5.9	5.2	37	7.6	5.6	37	10.1	5.5	37	8.8	4.4
NANDI	52	13.9	5.2	52	8.9	4.9	52	10.6	4.8	52	12.4	4.4	52	11.8	4.1
KIPSIGIS	55	13.7	6.9	55	8.3	5.3	55	10.8	4.7	55	13.3	5.5	55	11.9	4.0
TUGEN	106	12.6	6.0	104	7.6	5.5	106	9.7	5.4	107	12.8	5.0	106	11.0	4.7
KEYO	50	12.4	5.2	50	7.9	5.7	49	10.6	5.5	50	13.3	4.8	49	11.0	3.6
MARAKWET	50	12.9	5.9	50	8.9	4.9	50	10.6	5.5	50	12.9	3.9	50	11.2	4.1
POKOT	45	12.5	6.3	44	8.5	5.4	44	10.4	4.5	44	11.8	5.1	45	10.4	4.4
ITESO	52	10.8	7.1	52	7.5	5.3	52	8.6	5.9	51	11.7	5.1	52	10.4	4.1
TURKANA	63	13.0	5.8	64	8.1	5.5	65	9.4	5.5	63	12.7	5.8	63	11.0	4.3
LUO	168	12.6	6.2	169	8.5	5.4	169	10.2	5.2	169	13.1	5.3	169	11.1	4.6
GUSII	50	12.9	5.9	50	8.1	5.7	50	10.1	5.1	50	13.0	5.3	50	12.0	4.2
TIRIKI	26	11.7	8.4	26	8.3	5.7	26	9.4	5.6	26	13.1	4.5	26	10.9	3.1
MARAGOLI	26	10.9	6.9	26	8.1	5.1	26	9.2	5.2	26	11.7	5.4	26	10.3	3.8
BUNYORE	30	13.6	5.6	28	9.9	4.3	30	11.7	4.1	30	15.0	3.3	30	12.3	2.9
IDAKHO	39	12.4	7.2	39	7.8	5.2	39	10.0	5.0	38	13.8	4.4	39	11.2	3.6
MARAMA	25	12.7	6.2	25	9.7	4.5	25	12.6	4.3	25	15.0	4.1	25	12.9	4.4
WANGA	25	13.1	5.3	24	5.9	5.3	25	7.5	5.7	25	11.4	5.7	25	10.0	5.1
MARACH	25	13.6	6.4	25	9.2	5.8	25	11.1	5.6	25	13.4	5.8	25	11.0	5.1
BUKHAYO	23	11.5	5.7	23	8.5	6.1	23	10.7	5.5	23	11.6	5.1	23	9.3	4.6
SAMIA	24	12.1	5.6	24	7.6	5.7	24	10.5	5.1	24	14.2	5.4	24	11.7	4.5
BUTSOTSO	20	13.5	5.7	20	8.6	5.9	20	12.0	4.8	20	14.8	4.4	20	13.1	3.7
BUNYALA	25	13.4	6.3	25	7.6	6.0	25	9.8	5.4	25	12.2	6.5	25	10.8	5.3
KABRAS	26	11.5	7.1	26	9.9	5.8	26	10.7	5.7	26	13.7	5.2	26	12.1	4.1
BUKUSU	58	10.8	6.2	60	6.8	4.8	61	8.1	5.0	58	10.6	4.6	60	9.2	4.3
KIAMBU KIKUYU	63	15.0	6.1	63	9.7	5.9	64	11.2	5.3	63	13.3	5.2	63	11.0	5.0
MURANGA KIKUYU	56	14.5	7.1	56	8.3	5.8	56	9.7	5.7	56	12.3	5.8	56	11.3	4.9
NYERI KIKUYU	49	11.8	6.9	48	6.9	6.0	49	8.1	6.0	48	11.0	5.9	49	9.7	4.7
NDIA	53	12.1	6.1	53	6.7	5.9	55	9.2	5.0	52	11.9	4.6	56	11.0	4.6
KAMBA	73	13.9	6.5	75	8.1	5.4	74	9.5	5.6	72	12.2	5.1	71	11.0	4.1
EMBU	87	12.1	6.6	86	6.7	5.4	87	9.1	5.7	86	11.2	6.0	87	10.4	4.7
MBERE	62	12.8	6.9	63	9.7	4.9	62	11.2	5.4	63	13.8	5.3	62	11.6	4.6
CHUKA	74	12.6	5.6	73	6.7	4.8	72	8.8	4.6	72	12.2	4.9	73	10.3	4.3
MUTHAMBI	75	12.3	6.0	75	6.9	5.1	76	8.8	5.3	75	11.3	5.0	74	10.4	4.1
MWIMBI	61	12.1	5.6	60	7.4	4.9	61	8.4	5.1	60	11.2	4.7	61	9.8	4.4
IGOJE	75	12.9	6.0	73	8.2	5.7	76	10.1	5.4	75	12.5	6.2	76	10.8	5.2
IMENTI	60	11.4	6.3	61	6.9	4.8	59	9.1	4.7	60	11.2	5.2	59	10.3	4.4
TIGANIA	64	13.1	5.7	64	7.5	5.6	64	9.9	5.0	64	12.4	5.6	64	10.7	4.4
IGEMBE	65	13.0	6.1	63	7.0	5.1	65	9.0	5.1	65	12.1	4.9	64	10.9	4.3
THARAKA	54	13.2	6.8	52	8.1	5.4	53	10.7	6.3	53	13.4	5.5	54	11.7	5.1
POKOMO	92	11.7	6.2	90	7.2	5.7	90	9.4	5.7	92	12.8	5.6	93	11.7	4.7
MALAKOTE	41	13.8	4.2	41	9.2	5.0	41	10.1	4.9	41	12.5	4.3	41	10.7	4.2
GIRIAMA	48	10.9	7.0	46	6.1	5.4	48	9.7	4.8	49	12.3	4.4	49	10.7	3.9
CHONYI	77	11.8	6.8	74	7.5	5.2	78	10.3	4.9	78	13.2	5.4	77	11.0	4.3
MID MIJI KENDA	31	12.8	5.9	31	7.3	5.7	31	10.3	5.4	32	13.0	5.0	31	10.7	4.5
DIGO	114	12.5	6.2	115	9.2	5.1	116	11.8	4.5	115	14.2	4.6	115	11.4	4.0
TAITA	55	13.3	7.0	52	8.0	5.7	54	9.7	5.3	54	11.6	5.1	54	9.6	4.5
TAVETA	54	10.9	6.4	55	6.5	5.2	52	8.4	5.1	55	11.2	5.5	56	10.6	5.6

Table AP. 1.4.3 : Distribution of radial ridge counts in Kenyan minimal ethnic population samples (right hand females).

POPULATION	FINGER ONE			FINGER TWO			FINGER THREE			FINGER FOUR			FINGER FIVE		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD
SOMALI	103	14.2	5.6	103	10.0	4.6	103	10.1	4.1	103	12.7	5.6	103	11.2	4.4
RENDILLE	45	15.8	5.1	44	11.0	5.2	42	11.0	4.8	44	13.7	5.1	43	12.2	3.7
GABBRA	63	15.4	5.0	61	10.3	5.2	61	11.5	4.1	62	13.7	5.3	62	11.7	4.4
BORAN	56	14.5	6.1	56	9.1	5.8	56	9.2	5.0	55	13.4	5.0	57	11.2	4.7
BURJI	55	13.2	6.2	54	7.8	5.3	55	9.4	4.9	56	11.9	6.1	55	11.2	5.1
SAMBURU	42	13.7	4.8	43	10.0	5.7	42	10.1	5.3	42	13.3	6.3	42	12.1	4.9
KADJIADO MAASAI	150	13.0	6.1	150	9.7	5.2	149	9.9	4.8	150	12.6	6.0	150	10.9	5.0
KONY	23	11.3	5.4	23	7.5	4.3	23	7.9	3.9	23	9.9	5.1	23	8.7	3.8
NANDI	50	11.9	6.1	50	8.9	4.7	50	9.8	4.7	49	13.5	5.3	50	11.1	5.0
KIPSIGIS	43	13.8	6.0	43	9.8	5.4	43	10.1	5.1	43	12.0	5.4	43	11.1	4.7
TUGEN	102	14.5	5.1	102	8.7	4.7	101	10.3	3.9	99	11.9	4.9	101	10.8	4.2
KEYO	50	12.2	6.6	50	8.9	4.9	50	9.3	4.4	50	11.7	5.1	50	9.8	4.9
MARAKWET	56	13.0	5.7	56	8.8	5.5	56	9.3	4.8	56	11.6	5.8	56	10.0	4.2
POKOT	53	12.9	5.6	53	9.7	3.9	53	10.0	4.9	52	11.5	5.3	53	10.1	4.7
ITESO	47	13.6	5.6	47	9.7	5.8	46	10.3	4.7	47	12.6	5.5	47	10.9	4.8
TURKANA	43	14.0	5.4	40	10.5	5.3	42	11.5	4.4	42	12.9	5.8	43	12.1	4.7
LUO	107	12.6	5.9	107	9.6	4.8	107	10.4	4.4	107	13.3	5.6	107	11.4	4.9
GUSII	51	14.5	5.6	50	9.1	5.8	51	10.2	5.1	50	13.5	5.9	51	11.2	5.2
TERIKI	25	14.4	6.0	25	7.9	5.1	25	11.6	4.8	25	14.2	6.1	25	12.9	4.8
MARAGOLI	24	11.8	4.9	24	9.2	4.6	24	10.0	3.7	24	14.6	3.5	24	10.7	4.5
BUNYORE	20	12.5	4.8	20	7.8	4.7	20	8.8	3.8	20	13.3	6.2	20	11.2	4.0
IDAKHO	15	11.9	6.0	15	7.3	5.4	15	8.9	4.4	15	12.0	5.1	15	11.1	4.3
MARAMA	25	13.2	6.0	25	9.1	5.2	25	9.9	5.4	25	14.4	5.5	25	12.8	5.0
WANGA	24	11.2	7.2	23	7.5	5.0	24	10.0	5.1	24	11.8	5.7	24	9.5	4.1
MARACH	24	13.1	7.0	23	8.8	5.3	23	10.5	4.8	23	13.9	5.9	23	10.3	4.3
BUKHAYO	26	12.4	4.2	26	8.4	4.7	26	9.3	4.1	26	13.5	5.0	25	11.1	3.8
SAMIA	26	14.2	5.3	26	10.2	4.2	26	12.0	4.6	26	14.3	5.4	26	13.3	4.6
BUTSOTSO	27	12.0	6.1	27	7.2	4.1	27	8.3	4.8	27	13.3	5.2	27	11.4	4.8
BUNYALA	24	13.8	6.4	25	8.6	5.0	25	8.8	5.2	25	13.0	5.7	25	11.8	4.0
KABRAS	26	12.5	6.5	26	8.3	6.0	26	9.8	5.6	26	13.1	5.2	26	11.3	4.1
BUKUSU	25	10.1	5.6	24	7.1	4.6	27	9.3	4.4	25	11.2	5.2	25	8.9	4.7
KIAMBU KIKUYU	38	14.1	7.2	38	9.2	5.3	38	10.4	5.3	38	12.4	7.2	37	10.7	5.9
MURANGA KIKUYU	45	13.5	6.4	45	8.8	4.8	46	9.3	5.6	45	11.6	6.1	45	9.0	5.2
NYERI KIKUYU	50	13.5	5.9	51	9.3	5.0	51	9.9	4.5	50	11.9	6.0	51	11.0	3.8
NDIA	64	13.3	6.5	66	9.6	5.4	65	10.3	4.8	66	12.4	5.3	66	11.4	4.7
KAMBA	41	14.7	5.1	42	9.1	5.5	42	11.9	4.0	42	15.0	5.6	40	13.1	4.5
EMBU	72	14.4	6.1	72	8.9	5.4	72	9.9	4.8	72	12.6	4.8	72	10.3	4.2
MBERE	66	13.2	5.4	66	9.3	4.9	66	9.4	4.9	66	11.8	5.7	65	9.8	4.3
CHUKA	58	14.7	6.3	58	9.4	5.5	58	10.1	5.3	55	12.3	5.8	55	10.9	4.6
MUTHAMBI	78	13.3	5.7	78	8.8	4.8	80	9.8	4.1	78	11.9	4.5	76	9.7	4.2
MWIMBI	43	12.3	6.6	41	9.0	5.3	43	10.4	4.9	42	13.0	5.9	43	10.8	4.9
IGOJI	92	13.3	6.9	94	9.2	5.6	93	10.2	5.6	94	13.1	5.7	94	10.6	5.1
IMENTI	39	12.2	5.9	39	8.3	4.6	39	9.0	5.1	39	11.6	5.5	39	9.9	5.0
TIGANIA	36	14.2	6.2	36	9.2	5.3	36	10.0	5.1	36	11.6	6.4	36	9.6	5.3
IGEMBE	32	13.5	7.4	33	8.9	5.4	33	10.2	5.4	33	12.6	6.2	33	10.8	5.3
THARAKA	46	14.2	6.7	46	9.1	4.5	46	10.2	4.7	46	12.8	5.3	46	11.2	5.4
POKOMO	90	11.7	6.9	89	8.4	5.3	90	9.8	5.1	90	13.9	6.3	89	12.1	5.0
GIRIAMA	34	11.4	7.5	34	7.3	5.5	34	9.5	5.2	34	13.3	5.6	33	10.4	5.2
CHONYI	13	12.1	7.2	13	7.3	6.0	13	10.2	4.2	13	13.2	6.1	13	10.9	5.3
MID MJI KENDA	27	11.4	6.5	27	8.0	5.0	27	11.0	5.1	27	14.0	5.7	27	11.2	4.1
DIGO	99	14.3	6.7	100	10.6	5.1	99	11.8	4.6	100	15.5	5.1	99	12.3	4.2
TAITA	45	12.4	6.2	45	8.5	5.9	45	10.2	5.1	45	12.6	5.9	45	10.5	4.3
TAVETA	46	12.4	6.6	48	9.7	4.9	48	9.9	5.1	48	12.1	5.2	47	10.3	4.1

Table AP. 1.4.4 : Distribution of radial ridge counts in Kenyan minimal ethnic population samples (left hand females).

POPULATION	FINGER ONE			FINGER TWO			FINGER THREE			FINGER FOUR			FINGER FIVE		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD
SOMALI	103	13.7	5.6	103	9.8	4.9	102	9.8	5.0	102	12.6	5.2	101	11.3	4.5
RENDILLE	46	14.5	5.6	46	9.3	5.1	45	10.4	5.1	45	13.2	4.6	45	11.7	4.1
GABBRA	63	13.6	5.7	61	8.2	5.1	63	10.0	5.4	61	12.7	5.6	62	11.1	4.5
BORAN	57	12.1	6.7	57	6.6	5.3	58	8.6	5.7	58	12.1	5.5	58	11.1	4.3
BURJI	55	12.4	6.6	56	6.6	5.2	56	8.4	5.8	56	12.0	5.6	55	11.1	5.1
SAMBURU	45	11.8	5.3	42	8.7	6.2	43	9.7	6.1	43	12.6	6.8	43	11.3	4.7
KADJIADO MAASAI	150	10.6	6.1	149	7.9	5.5	150	8.8	5.9	148	11.9	5.9	149	10.5	4.9
KONY	23	9.7	4.9	23	5.4	4.2	23	7.0	3.9	23	10.5	4.4	23	8.3	4.2
NANDI	50	10.1	6.3	50	8.0	5.5	50	9.2	5.0	50	12.1	5.8	50	10.7	4.6
KIPSIGIS	43	11.9	6.1	43	9.1	4.7	43	8.9	5.2	43	11.0	5.8	43	9.7	5.3
TUGEN	100	12.1	5.3	94	7.0	5.0	98	8.4	5.0	95	11.0	5.0	101	9.8	4.7
KEYO	50	11.2	6.3	50	6.9	5.1	50	8.2	5.2	50	11.2	5.6	50	8.8	4.5
MARAKWET	56	10.2	7.1	56	5.9	4.7	56	8.5	5.3	56	10.9	5.4	56	9.7	4.2
POKOT	51	11.6	6.1	52	8.1	5.0	51	9.8	5.5	52	11.3	6.3	51	9.4	5.0
ITESO	47	9.9	5.7	47	8.0	5.0	47	9.9	5.0	47	11.9	5.2	47	9.6	4.3
TURKANA	42	11.2	5.9	43	8.2	5.4	43	10.4	5.9	43	11.7	5.2	42	11.0	4.7
LUO	107	10.7	6.2	107	8.2	5.1	107	9.9	4.9	107	12.7	5.7	107	11.1	4.4
GUSII	51	12.1	6.0	51	6.9	5.8	51	8.8	5.8	51	11.7	6.4	50	10.9	5.0
TIRIKI	25	12.8	5.8	25	7.4	5.9	25	10.4	5.6	25	13.1	4.9	25	11.8	4.2
MARAGOLI	24	9.9	4.9	24	6.1	4.8	24	8.4	5.1	24	11.5	4.8	24	9.7	3.7
BUNYORE	20	10.8	5.8	19	6.3	4.7	20	7.1	5.3	20	10.8	5.8	20	9.5	4.0
IDAKHO	15	12.3	5.8	15	7.1	5.8	15	8.7	4.7	15	10.7	5.7	15	10.2	4.3
MARAMA	25	11.1	6.4	25	8.0	5.3	25	9.4	5.6	25	14.0	4.3	25	11.6	4.5
WANGA	24	9.7	6.9	24	5.8	4.9	24	7.2	5.8	24	10.1	4.7	24	8.0	3.8
MARACH	24	10.5	6.4	24	7.2	5.4	24	7.9	6.1	23	12.0	6.1	24	10.0	4.1
BUKHAYO	26	10.5	5.6	26	6.3	4.7	26	8.3	5.4	26	11.1	4.5	26	8.3	3.6
SAMIA	26	12.1	5.8	26	9.8	4.4	26	10.8	5.0	26	13.0	5.5	26	12.7	4.8
BUTSOTSO	26	8.3	5.8	27	5.8	4.6	26	6.7	4.6	26	11.7	5.1	27	10.4	4.8
BUNYALA	25	11.2	6.1	24	7.0	5.9	25	9.5	5.4	25	11.5	7.1	24	10.8	5.0
KABRAS	26	10.7	6.7	26	6.7	5.6	26	7.7	5.8	26	12.4	4.9	26	10.5	4.1
BUKUSU	24	9.1	5.5	26	6.5	5.2	27	6.9	4.8	26	9.8	4.9	26	7.8	4.6
KIAMBU KIKUYU	38	11.8	6.8	38	7.4	5.1	38	9.3	5.7	38	11.9	6.7	38	9.2	5.7
MURANGA KIKUYU	45	11.6	5.9	45	6.8	5.2	45	8.2	6.2	44	9.5	6.7	45	9.0	5.5
NYERI KIKUYU	51	11.3	6.0	51	6.3	5.4	51	8.4	5.8	50	10.8	5.7	50	10.0	4.2
NDIA	65	12.0	5.8	63	7.5	5.3	64	9.6	5.6	66	11.1	5.5	65	10.5	4.7
KAMBA	42	13.4	5.1	42	7.7	4.9	42	10.5	5.0	42	13.0	5.3	42	12.2	4.0
EMBU	72	12.4	6.1	72	7.4	5.2	72	8.7	5.2	72	11.5	5.3	72	9.5	4.5
MBERE	62	10.6	5.3	64	6.6	5.1	64	7.9	5.0	61	9.5	5.4	62	9.1	4.2
CHUKA	60	12.9	5.7	58	7.5	5.3	60	8.9	5.7	60	11.6	4.8	56	9.5	4.3
MUTHAMBI	79	11.3	5.4	79	6.2	4.8	80	8.0	4.9	79	9.8	4.8	78	9.2	4.2
MWIMBI	43	10.5	5.4	43	6.3	5.4	43	8.7	4.9	43	11.3	5.0	43	10.0	4.9
IGOJI	94	11.3	6.2	95	7.6	5.3	92	9.3	5.6	93	11.4	5.8	92	9.8	4.9
IMENTI	39	9.3	5.7	39	5.4	4.8	39	7.8	5.5	39	10.2	5.7	39	9.2	4.4
TIGANIA	36	11.6	6.5	36	7.8	5.8	36	9.0	5.3	36	11.3	6.3	36	9.1	4.3
IGEMBE	33	12.2	6.9	33	6.8	5.1	33	8.8	5.6	33	11.2	6.3	33	9.4	5.2
THARAKA	46	13.0	5.8	46	8.0	5.5	46	9.7	5.2	46	13.1	5.3	46	10.8	5.3
POKOMO	90	9.7	6.3	88	6.9	5.6	90	9.2	5.7	90	12.4	6.5	89	10.9	5.1
GIRIAMA	34	8.7	6.9	34	5.9	5.0	34	8.4	5.4	34	11.7	5.6	34	9.0	4.1
CHONYI	13	9.8	6.1	13	5.8	5.0	13	10.3	5.7	13	12.6	5.3	13	9.2	4.9
MIO MJI KENDA	27	9.7	7.4	26	6.7	4.1	27	9.7	5.3	27	13.0	5.1	27	9.6	5.3
DIGO	100	12.1	6.8	98	9.4	4.5	99	11.2	5.2	99	14.3	5.0	100	11.4	3.9
TAITA	45	10.2	5.6	45	6.1	5.5	45	8.3	5.4	45	11.1	5.6	44	9.2	5.0
TAVETA	47	10.5	6.3	48	7.6	4.5	48	9.2	5.3	48	11.0	5.2	47	9.8	4.3

Table AP. 1.4.5 : Distribution of ulnar ridge counts in Kenyan minimal ethnic population samples (right hand males).

POPULATION	FINGER ONE			FINGER TWO			FINGER THREE			FINGER FOUR			FINGER FIVE		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD
SOMALI	219	7.5	8.1	218	5.2	6.8	221	3.0	6.2	220	6.4	7.1	220	1.9	3.9
RENDILLE	153	6.9	7.4	152	5.3	6.1	152	2.4	4.6	151	5.2	6.2	150	1.1	3.1
GABBRA	27	6.3	7.7	27	4.9	6.5	27	1.6	3.8	26	4.0	5.7	27	1.2	3.1
BORAN	127	6.9	8.0	126	4.9	7.0	126	2.3	5.4	126	5.2	6.4	125	1.4	3.4
BURJI	64	8.0	8.5	64	5.0	7.4	64	3.5	6.2	64	6.7	7.2	64	2.4	4.4
SAMBURU	85	5.8	6.8	84	4.1	6.1	86	2.0	4.8	85	3.9	5.7	85	1.7	3.5
KADJIADO MAASAI	63	5.9	7.8	63	3.8	6.1	63	2.3	5.2	63	6.2	7.0	63	1.6	3.6
NAROK MAASAI	35	4.8	7.0	36	4.8	7.4	36	2.7	5.6	36	4.5	5.9	36	0.8	2.3
NGWESI	41	5.6	7.1	41	5.8	6.3	41	2.5	4.7	41	4.7	6.1	41	1.1	2.9
MUKOGODO	38	7.7	8.5	38	7.6	7.1	38	2.9	6.0	38	7.3	7.0	38	1.7	3.9
KONY	36	2.4	5.6	37	2.9	5.3	37	0.9	3.5	37	3.2	4.9	37	1.0	2.5
NANDI	52	4.8	6.8	52	3.9	5.6	52	2.3	4.4	52	4.2	5.8	51	1.4	3.2
KIPSIGIS	54	5.0	7.2	54	5.0	6.6	55	2.8	5.7	53	5.9	6.8	55	1.7	3.5
TUGEN	105	5.0	7.4	106	4.2	5.9	106	2.2	5.3	107	4.6	6.6	107	1.2	3.3
KEYO	50	3.6	6.6	49	4.7	6.5	50	1.3	4.5	50	5.0	6.1	50	1.0	2.6
MARAKWET	50	4.4	6.1	50	4.8	5.8	50	1.7	3.9	50	6.0	6.8	50	1.3	3.5
POKOT	45	3.0	5.6	45	4.6	6.4	45	1.5	3.8	45	4.3	5.8	45	1.3	3.7
TESO	52	5.5	7.8	52	3.2	5.0	52	1.7	3.9	52	3.1	4.9	52	0.6	2.2
TURKANA	64	7.5	7.5	65	4.7	5.9	65	2.6	5.1	65	6.6	6.2	64	1.6	3.1
LUO	168	6.1	7.6	168	3.8	6.2	169	2.2	4.9	168	4.3	5.8	167	1.2	3.2
GUSII	50	6.1	7.7	49	4.7	6.3	49	1.8	4.1	49	4.0	5.8	49	1.2	3.0
TIRIKI	26	6.6	7.6	26	5.3	6.1	26	2.8	6.0	26	4.1	6.0	26	1.0	2.8
MARAGOLI	26	5.2	7.4	26	4.3	6.6	26	1.8	5.0	26	4.8	6.7	26	0.6	1.7
BUNYORE	30	6.3	7.7	30	6.7	6.6	30	2.9	5.1	29	5.9	6.3	30	0.7	2.4
IDAKHO	39	3.8	7.1	39	3.7	6.4	39	2.0	4.9	39	3.7	6.3	39	0.6	2.3
MARAMA	25	6.9	7.2	25	7.8	6.6	25	4.0	6.2	25	7.1	6.0	25	1.3	2.9
WANGA	25	4.2	6.5	25	5.0	6.7	25	0.1	0.4	25	4.0	5.4	25	0.2	0.9
MARACH	25	4.6	7.8	25	6.8	7.1	25	4.0	6.2	25	5.6	6.4	25	1.6	3.9
BUKHAYO	22	4.9	7.4	22	3.6	5.3	22	0.5	2.3	22	2.4	4.6	22	0.6	1.5
SAMIA	24	7.8	7.7	24	5.5	7.0	24	1.3	3.1	24	3.4	4.6	24	1.3	3.4
BUTSOTSO	20	6.4	7.6	20	4.3	6.9	20	2.3	5.1	20	5.5	6.5	20	1.1	4.0
BUNYALA	25	9.5	9.6	25	5.0	6.8	25	1.8	4.5	25	4.2	6.1	25	1.0	2.1
KABRAS	26	9.5	7.4	25	7.3	6.9	25	2.8	5.8	26	5.4	6.8	26	1.1	2.9
BUKUSU	57	5.1	7.1	60	3.1	5.1	61	1.8	4.1	61	3.9	4.9	61	1.0	2.6
KIAMBU KIKUYU	64	5.2	7.4	64	4.8	6.9	63	2.6	5.6	64	5.0	5.8	64	1.0	3.0
MURANGA KIKUYU	55	7.5	8.0	54	3.8	5.9	55	2.5	5.4	54	5.7	7.0	55	1.1	3.3
NYERI KIKUYU	49	6.2	7.3	48	4.9	6.1	48	2.3	4.7	49	4.3	5.9	49	1.0	2.9
NDIA	56	5.4	7.1	56	3.7	5.7	56	1.0	3.2	56	3.0	5.2	56	0.5	1.9
KAMBA	73	6.1	7.9	75	4.6	6.0	74	2.0	4.7	75	3.7	5.3	74	1.2	3.2
EMBU	86	6.3	7.3	87	4.1	6.0	87	1.7	4.9	87	2.7	5.0	87	0.6	2.1
MBERE	62	7.5	7.9	62	4.1	6.3	63	2.1	4.8	62	5.5	6.2	63	1.0	2.9
CHUKA	72	5.9	6.8	73	4.4	6.0	73	2.1	4.6	73	4.4	6.1	74	0.6	2.3
MUTHAMBI	76	6.9	7.5	76	4.7	5.8	76	1.4	3.8	76	3.5	5.4	76	1.7	3.8
MWIMBI	59	4.4	6.9	60	3.2	5.2	60	1.4	4.0	59	2.2	4.6	60	0.7	2.7
IGOJI	77	7.0	7.8	78	4.5	7.0	78	2.1	5.4	77	4.2	6.4	78	1.1	3.7
IMENTI	61	6.4	7.3	61	3.7	5.4	60	1.2	3.6	60	4.2	5.6	60	1.3	2.9
TIGANIA	64	6.2	7.9	64	4.2	5.8	64	1.2	3.9	64	4.0	5.6	64	0.5	1.5
EGEMBE	63	6.1	7.6	64	3.8	5.7	64	1.2	3.5	64	4.8	5.7	64	1.1	2.9
THARAKA	54	7.2	7.5	54	5.0	6.5	54	2.2	4.9	54	4.6	6.6	54	1.5	3.2
POKOMO	92	5.3	7.3	92	4.6	6.3	93	2.0	4.9	93	4.7	6.5	93	1.5	3.6
MALAKOTE	40	5.2	7.1	39	4.5	6.7	39	2.4	4.9	39	5.2	6.3	40	2.1	3.9
GIRIAMA	49	9.3	9.0	49	5.3	7.2	49	3.1	5.5	49	4.2	6.0	49	0.2	1.2
CHONYI	79	7.9	8.5	79	4.9	6.6	79	1.0	3.6	79	4.5	5.6	79	0.9	2.9
MID MJI KENDA	32	6.7	7.7	32	5.7	6.9	32	3.4	5.5	32	4.4	5.9	32	0.7	2.1
DIGO	115	8.3	8.0	116	5.7	6.7	116	3.0	5.4	116	5.5	6.6	116	1.3	3.2
TAITA	55	4.6	7.2	55	3.1	5.3	55	1.3	3.8	55	3.2	5.5	55	0.2	1.1
TAVETA	57	6.4	8.3	57	3.9	5.5	58	1.3	4.1	58	2.9	4.9	58	0.7	2.5

Table AP. 1.4.6 : Distribution of ulnar ridge counts in Kenyan minimal ethnic population samples (left hand males).

POPULATION	FINGER ONE			FINGER TWO			FINGER THREE			FINGER FOUR			FINGER FIVE		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD
SONALI	218	6.0	7.6	221	5.0	6.7	221	3.0	6.2	222	5.7	6.9	219	1.8	3.9
RENDILLE	152	7.0	7.7	150	5.7	6.5	149	2.7	5.1	149	4.7	6.3	151	1.3	3.6
GABBRA	27	3.9	6.1	27	4.6	5.8	27	3.9	6.5	27	3.1	5.2	27	0.7	2.7
BORAN	126	5.2	7.7	127	5.5	7.2	127	3.1	5.9	126	4.4	6.5	126	1.5	3.7
BURJI	64	7.7	8.0	64	5.4	6.6	64	4.4	6.3	63	7.0	6.9	64	2.8	5.0
SAMBURU	85	4.8	6.6	84	4.9	6.1	85	2.2	5.1	85	4.4	5.9	86	2.1	4.3
KADJIADO MAASAI	63	4.9	7.3	63	3.9	6.2	63	2.5	5.5	63	5.6	7.2	63	2.0	4.3
NAROK MAASAI	36	4.1	7.4	36	5.6	7.9	36	2.9	6.2	36	3.8	6.0	36	0.4	1.6
NGWESI	39	5.9	7.0	40	5.8	7.4	40	4.0	7.0	40	5.7	6.8	40	1.2	3.2
MUKOGODO	38	7.4	8.8	38	6.2	7.1	38	4.0	6.8	38	6.8	7.3	38	3.0	5.1
KONY	37	2.6	5.4	37	2.8	4.9	37	1.2	3.6	37	3.2	4.9	37	1.3	3.4
NANDI	52	3.2	6.8	51	4.9	6.4	52	2.8	5.4	52	3.0	5.9	52	1.1	3.2
KIPSIGIS	55	5.1	7.4	55	5.5	6.7	55	4.2	6.7	55	6.5	7.1	55	1.7	3.9
TUGEN	106	4.2	6.8	104	4.6	6.8	106	2.9	6.0	106	4.2	6.2	107	1.2	3.1
KEYO	50	3.5	6.5	50	5.3	6.9	49	2.4	5.0	50	4.8	6.3	50	1.2	3.2
MARAKWET	50	3.4	6.0	50	3.9	5.8	50	3.2	5.4	50	4.8	6.2	50	1.4	3.4
POKOT	45	2.2	5.2	44	4.5	6.6	45	1.6	4.9	44	3.2	5.1	45	0.6	2.3
ITESO	52	4.4	7.6	52	2.1	4.1	52	1.7	4.1	52	3.1	5.0	52	1.4	3.2
TURKANA	64	6.5	7.7	64	4.1	5.9	65	2.4	5.0	65	5.3	6.4	65	1.9	4.4
LUO	169	8.0	7.2	169	5.3	6.8	169	3.1	5.9	169	3.9	5.7	169	1.2	3.2
GUSII	50	4.6	7.7	50	5.1	6.6	50	1.9	4.6	49	5.4	6.6	50	0.8	2.6
TEHIKI	26	8.3	7.8	26	4.3	7.4	26	3.1	6.0	26	3.3	5.7	26	1.1	4.0
MARAGOLI	26	4.7	7.5	26	5.1	7.1	26	2.8	5.8	26	4.2	6.4	26	0.5	1.8
BUNYORE	30	5.8	7.6	28	5.6	6.9	30	2.2	5.0	30	3.7	5.8	30	0.7	2.9
IDAKHO	39	3.3	6.9	39	3.6	5.8	39	2.3	5.1	39	4.0	6.7	39	0.5	2.2
MARAMA	24	4.2	6.7	25	6.8	7.6	25	3.8	6.1	25	6.4	6.1	25	1.8	4.2
WANGA	25	4.1	6.3	24	4.8	7.2	25	1.0	3.3	25	2.5	4.5	25	0.9	3.1
MARACH	24	2.9	6.5	25	6.4	7.3	25	3.7	5.9	25	4.8	6.9	25	1.2	2.7
BUKHAYO	23	3.6	6.0	23	4.8	6.4	23	0.8	3.1	23	3.8	5.9	23	1.7	3.8
SANIA	24	5.4	7.2	24	5.5	7.3	24	0.7	2.5	24	1.7	4.5	24	0.6	1.7
BUTSOTSO	20	2.4	4.9	20	2.9	5.9	20	2.2	5.5	20	7.0	8.0	20	0.4	1.6
BUNYALA	25	9.4	9.6	25	4.0	5.8	25	2.6	5.7	25	3.3	6.6	25	1.4	3.4
KABRAS	26	7.1	7.2	26	4.6	5.8	26	2.4	5.1	25	3.7	6.2	26	0.6	2.2
BUKUSU	59	3.6	6.2	61	4.5	6.3	61	1.9	4.8	60	4.1	6.0	61	0.8	2.7
KIAMBU KIKUYU	63	4.8	7.4	64	4.9	6.4	64	2.5	5.2	64	5.0	6.6	63	1.3	3.4
MURANGA KIKUYU	56	7.4	8.0	56	5.7	6.8	56	2.1	4.8	56	6.4	7.6	56	1.6	3.8
NYERI KIKUYU	49	5.1	7.5	49	5.1	6.2	49	3.0	5.7	48	4.6	5.9	49	1.0	3.0
NDIA	56	4.7	7.1	55	5.2	6.1	55	2.2	4.2	55	4.1	6.2	56	0.7	2.1
KAMBA	74	6.2	7.8	75	4.5	6.5	74	3.3	6.3	74	4.1	6.0	73	1.7	3.8
EMBU	85	5.8	7.6	87	4.1	6.1	87	2.2	5.2	87	3.1	5.4	87	0.6	2.2
MBERE	63	6.0	7.6	63	4.6	6.8	63	3.4	6.0	63	5.3	6.3	63	1.5	4.1
CHUKA	74	6.2	6.9	74	4.1	6.2	74	2.9	5.7	73	4.0	5.7	74	0.8	2.9
MUTHAMBI	75	6.3	7.6	75	4.2	6.0	75	2.5	5.6	74	3.0	5.2	75	1.2	3.1
MWIMBI	61	5.4	7.3	61	4.1	6.0	61	2.2	5.0	60	2.7	5.0	61	0.7	2.3
IGOJI	76	5.7	7.5	77	4.8	6.7	77	2.8	5.4	77	4.8	6.8	77	1.0	3.2
IMENTI	61	5.8	7.0	61	4.6	5.7	61	2.0	4.4	60	4.5	5.9	61	1.3	3.5
TIGANIA	64	4.5	6.8	64	4.3	6.3	64	1.8	3.8	64	3.7	5.6	64	1.1	3.3
IGEMBE	64	5.1	7.6	64	3.2	5.4	65	2.7	4.9	65	5.0	6.5	64	0.7	2.2
THARAKA	54	6.9	7.2	53	5.1	6.7	54	2.6	5.5	52	4.8	7.1	54	1.4	3.4
POKOMO	92	5.3	7.2	92	6.0	7.2	93	2.7	5.8	93	4.0	6.4	92	1.3	3.7
MALAKOTE	41	4.4	6.8	41	3.0	5.8	41	2.1	5.2	41	2.9	5.7	41	1.0	2.6
GIRIAMA	48	9.0	8.0	48	5.5	7.0	49	1.5	4.2	49	3.9	6.4	49	0.6	2.1
CHONYI	78	6.9	8.4	76	4.0	6.6	79	1.6	4.4	77	4.3	6.2	78	1.0	3.1
MID MJI KENDA	32	7.3	7.7	32	6.5	7.7	32	3.3	5.8	32	4.6	6.1	32	1.4	3.4
DIGO	114	7.9	8.2	114	5.1	7.0	116	3.7	6.6	113	4.9	6.3	116	1.0	3.2
TAITA	55	5.4	7.8	54	2.7	5.3	55	1.8	4.6	55	3.1	5.9	55	0.5	2.3
TAVETA	58	5.6	7.7	56	3.6	5.8	56	1.8	4.6	58	2.9	5.3	58	0.5	1.9

Table AP. 1.4.7 : Distribution of ulnar ridge counts in Kenyan minimal ethnic population samples (right hand females).

POPULATION	FINGER ONE			FINGER TWO			FINGER THREE			FINGER FOUR			FINGER FIVE		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD
SONALI	103	6.2	7.1	103	4.4	6.9	103	1.9	5.1	103	4.5	6.4	103	1.4	3.0
RENDILLE	45	7.2	7.5	44	3.6	6.1	43	1.8	4.7	44	4.8	5.5	44	0.7	2.0
GABBRA	63	4.9	6.3	61	4.4	6.2	61	2.0	4.8	62	5.1	6.1	62	1.5	3.5
BORAN	57	3.9	6.0	56	4.6	6.4	56	1.9	4.6	55	2.7	5.3	57	0.4	1.6
BURJI	55	5.3	6.8	56	3.8	6.3	55	1.6	4.2	56	4.5	6.3	56	1.0	2.6
SAMBURU	43	5.2	7.1	44	3.8	6.2	44	1.7	4.2	44	4.7	6.5	44	0.8	2.4
KADJIADO MAASAI	150	4.9	6.7	150	4.7	6.7	150	1.5	4.3	150	3.9	6.0	150	1.1	3.1
KONY	23	2.8	5.5	23	1.3	3.8	23	0.7	3.0	23	2.7	4.5	23	0.2	0.7
NANDI	50	4.2	6.5	50	3.9	6.0	50	1.0	3.3	50	3.9	5.7	50	0.6	2.2
KIPSIGIS	43	5.1	7.9	43	4.2	6.6	43	1.7	4.7	43	3.6	6.0	43	0.7	2.5
TUGEN	102	4.2	6.0	101	2.7	5.2	101	1.2	3.5	100	3.2	5.3	102	0.6	2.3
KEYO	50	3.0	5.6	50	2.5	5.2	50	0.7	3.8	50	3.4	5.7	50	0.3	1.4
MARAKWET	56	3.3	5.8	56	2.0	4.7	56	0.8	2.7	56	3.8	5.4	56	0.6	2.0
POKOT	53	2.9	5.6	53	3.4	5.4	53	1.8	4.6	52	4.0	5.9	53	0.9	2.6
ITESO	47	5.6	7.0	47	4.6	5.9	46	1.9	4.4	47	3.7	5.4	47	0.7	2.4
TURKANA	42	5.2	7.4	42	4.3	7.1	42	2.8	6.6	42	4.9	6.9	43	1.1	3.5
LUO	107	4.1	7.1	107	4.8	6.9	107	2.4	5.5	106	4.9	6.9	107	1.2	3.1
GUSII	51	6.3	7.7	51	5.0	6.8	51	2.3	5.4	51	3.3	6.1	51	1.0	2.8
TIRIKI	25	4.2	7.0	25	5.9	6.4	25	0.9	2.7	25	3.3	5.7	25	0.6	2.3
NARAGOLI	24	5.2	7.3	24	2.9	5.3	24	2.3	5.3	24	3.2	4.8	24	0.0	0.2
BUNYORE	20	7.4	7.3	20	2.8	5.4	20	1.3	4.2	20	2.5	5.7	20	0.0	0.2
IDAKHO	15	4.9	6.9	15	2.4	4.5	15	1.3	5.2	15	2.5	4.1	15	0.0	0.0
NARAMA	25	6.6	7.9	25	5.0	6.6	25	2.3	5.4	25	4.0	6.2	25	1.2	3.4
WANGA	24	5.1	7.5	23	3.3	5.4	24	1.3	3.1	24	2.2	4.9	24	0.0	0.0
MARACH	24	3.9	6.8	24	5.1	7.9	24	0.5	2.7	24	3.3	5.8	24	0.3	1.6
BUKHAYO	26	3.4	6.2	26	3.2	6.0	26	1.4	4.2	26	2.7	5.0	26	0.9	3.1
SAMIA	26	3.6	6.5	26	6.1	7.6	26	2.5	6.0	26	5.1	6.3	26	1.6	3.5
BUTSOTSO	27	3.8	6.9	27	3.2	5.8	27	0.9	3.2	27	2.3	5.3	27	0.2	1.2
BUNYALA	25	6.5	9.6	25	3.7	6.0	25	2.6	5.7	25	3.0	5.9	25	1.0	2.8
KABRAS	26	5.6	7.5	26	3.1	4.6	26	0.7	2.7	26	1.2	3.4	26	0.2	1.2
BUKUSU	25	2.1	5.0	24	2.0	4.1	27	0.4	1.8	27	2.3	4.1	27	1.3	3.1
KIAMBU KIKUYU	38	4.7	7.7	38	4.4	6.3	38	1.4	3.8	38	4.1	6.0	37	0.9	2.8
MURANGA KIKUYU	45	5.3	7.9	45	2.8	5.3	45	1.2	3.4	45	2.7	5.0	45	0.5	1.6
NYERI KIKUYU	50	3.2	5.6	51	4.0	5.9	51	1.5	3.8	51	1.6	3.7	51	0.3	1.7
NDIA	66	6.0	7.3	66	3.5	6.3	66	1.5	4.5	66	3.1	5.2	66	1.1	3.0
KAMBA	41	6.0	7.5	42	5.1	6.9	42	1.6	4.1	42	3.7	5.9	42	0.1	0.6
EMBU	72	6.2	6.9	72	4.1	5.9	72	0.7	3.0	72	2.6	4.9	72	0.4	1.9
MBERE	66	3.5	5.6	65	2.6	4.9	66	0.3	1.8	64	1.3	3.1	66	0.4	1.5
CHUKA	60	5.9	7.2	59	3.6	5.2	59	1.3	3.8	58	3.0	5.5	59	0.8	2.6
MUTHAMBI	80	5.3	6.4	80	3.5	5.2	80	0.9	3.3	79	3.3	5.0	79	0.8	2.4
MWIMBI	43	6.6	7.8	42	4.2	6.2	43	0.8	2.8	43	2.6	4.9	43	0.7	2.7
IGOJI	92	5.1	6.8	95	3.4	5.5	95	1.4	3.7	92	3.4	5.2	94	0.5	2.1
IMENTI	39	4.9	6.3	39	3.7	5.5	39	1.3	3.8	38	2.5	4.7	39	0.2	0.9
TIGANIA	36	3.7	6.2	36	2.6	4.8	36	0.7	2.5	36	2.0	4.6	36	0.1	0.5
IGEMBE	32	2.9	5.2	33	3.0	5.6	33	0.0	0.0	33	3.1	4.6	33	0.0	0.2
THARAKA	46	7.1	8.0	46	4.0	6.2	46	1.7	4.4	46	2.9	4.9	46	0.4	1.9
POKOMO	90	5.3	7.0	90	3.8	6.2	90	1.5	4.3	90	4.0	5.8	90	0.5	1.9
GIRIAMA	34	5.9	7.8	34	4.6	6.1	34	1.3	4.3	34	2.5	4.7	33	0.7	1.9
CHONYI	13	2.8	4.2	13	3.0	5.7	13	3.2	5.1	13	3.6	5.5	13	0.4	1.4
MID MJI KENDA	27	5.5	7.5	27	5.2	6.3	27	0.7	2.3	27	2.8	4.7	27	0.4	2.1
DIGO	100	9.5	7.9	100	7.6	7.5	100	3.8	6.3	100	5.9	6.2	100	1.1	3.1
TAITA	45	5.1	6.9	45	2.9	6.1	45	1.4	4.2	45	2.8	5.6	45	0.9	2.9
TAVETA	46	5.2	6.1	48	4.6	6.5	48	1.5	3.7	48	3.9	5.3	47	0.8	2.4

Table AP. 1.4.8 : Distribution of ulnar ridge counts in Kenyan minimal ethnic population samples (left hand females).

POPULATION	FINGER ONE			FINGER TWO			FINGER THREE			FINGER FOUR			FINGER FIVE		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD
SOMALI	103	6.9	7.1	103	4.0	6.2	103	2.6	5.7	102	3.8	5.7	102	1.3	3.2
RENDILLE	46	6.9	7.7	46	5.5	6.7	46	3.5	5.4	46	6.1	6.7	46	1.1	3.1
GABBRA	63	5.8	6.5	62	5.6	6.8	63	3.3	6.4	62	5.2	6.3	62	1.7	3.7
BORAN	58	3.9	6.7	58	5.7	7.1	58	2.8	5.8	58	2.9	5.5	58	0.8	3.0
BORJI	55	7.1	7.7	56	4.8	6.2	56	2.9	5.8	56	4.9	6.5	56	1.7	3.8
SAMBURU	46	4.9	7.1	44	4.5	6.4	44	3.0	5.9	45	5.3	6.9	45	1.8	3.7
KADJIADO MAASAI	150	5.0	7.0	149	5.9	7.4	150	3.1	5.9	149	3.8	5.9	150	1.6	3.9
KONY	23	1.2	4.1	23	2.1	4.8	23	0.9	3.3	23	4.3	5.8	23	0.3	1.7
NANDI	50	4.1	6.2	50	4.9	6.4	50	3.3	6.6	50	5.2	6.9	50	1.1	3.2
KIPSIGIS	43	3.9	5.6	43	4.7	7.2	43	3.0	6.4	43	3.8	6.0	43	0.8	2.7
TUGEN	101	4.1	6.0	100	3.4	5.9	99	1.6	3.9	100	4.1	5.9	101	1.2	3.2
KEYO	50	4.1	6.6	50	3.5	5.4	50	2.3	5.1	50	4.1	5.9	50	0.9	2.9
MARAKWET	56	2.6	5.1	56	3.0	5.3	56	1.9	4.3	56	4.7	5.9	56	1.9	3.6
POKOT	51	2.6	4.9	52	4.8	6.3	52	2.9	5.3	52	5.5	6.9	51	1.1	3.0
TESO	47	4.8	7.4	47	5.6	6.3	47	2.4	5.1	47	4.9	6.0	47	1.0	3.2
TURKANA	42	5.1	7.6	43	4.6	6.8	43	3.3	7.0	43	4.4	7.0	43	1.6	3.9
LUO	107	5.4	7.4	107	5.7	7.3	107	3.2	6.4	107	4.4	6.6	107	1.3	3.6
GUSII	51	6.5	8.0	51	5.3	6.9	51	2.6	5.6	51	5.5	7.3	51	1.3	3.4
TIRIKI	25	6.3	7.2	25	5.3	6.8	25	3.3	5.8	25	3.3	5.9	25	0.9	3.3
MARAGOLI	24	7.0	8.0	24	4.7	6.5	24	1.9	4.5	24	3.5	5.3	24	0.5	2.0
BUNYORE	20	6.3	7.6	19	2.9	6.7	20	0.0	0.0	20	0.3	1.3	20	0.0	0.0
IDAKHO	15	5.6	7.9	15	3.1	6.0	15	1.7	5.1	15	3.6	5.9	15	0.6	2.3
MARAMA	25	5.7	6.8	25	5.6	7.0	25	4.1	6.4	25	4.2	6.7	25	2.7	4.9
WANGA	24	5.5	6.8	24	4.8	7.5	24	1.5	3.4	24	3.5	6.5	24	0.5	2.0
MARACH	24	4.7	7.1	24	5.8	7.5	24	2.0	4.9	24	4.4	6.2	24	0.8	2.3
BUKHAYO	26	4.5	7.1	26	3.5	6.1	26	1.7	4.9	26	3.7	5.9	26	1.2	3.1
SANIA	26	3.5	6.0	26	7.5	8.7	26	3.3	6.4	26	4.1	6.0	26	2.0	3.5
NUESOTSO	27	4.1	6.9	27	5.0	6.3	26	3.6	6.9	27	4.4	6.4	27	0.9	2.7
BUNYALA	25	6.5	8.4	24	4.1	6.8	25	2.2	6.2	25	3.6	6.5	25	0.6	1.7
KABRAS	26	3.6	6.0	26	3.1	5.7	26	1.9	5.2	26	2.0	4.3	26	0.3	1.2
BUKUSU	25	3.2	5.5	27	3.4	5.7	27	2.0	4.2	27	1.6	4.2	26	0.6	2.3
KIAMBU KIKUYU	37	4.8	7.3	38	6.7	8.0	38	3.1	6.7	38	3.8	6.4	38	1.5	3.6
MURANGA KIKUYU	45	5.5	7.6	45	4.3	6.9	45	1.1	3.2	45	3.3	5.2	45	0.8	2.7
NYERI KIKUYU	51	3.8	6.2	51	5.2	6.8	51	2.0	4.4	51	3.8	5.3	51	0.8	2.4
NDIA	66	5.0	6.8	65	4.6	7.1	64	2.4	5.4	65	4.5	6.0	66	1.4	3.8
KAMBA	42	6.2	7.8	42	5.2	7.1	42	2.5	4.8	42	4.1	6.1	42	1.0	2.9
EMBU	72	7.1	7.7	72	4.8	6.6	72	1.6	4.7	72	4.3	5.7	72	1.0	3.1
MBERE	64	4.8	7.2	65	4.1	6.1	64	1.2	3.8	64	2.8	5.0	64	0.5	1.9
CHUKA	59	7.8	7.6	60	6.4	6.9	61	3.0	6.3	59	4.6	6.7	59	1.4	3.6
MUTHAMBI	79	4.9	6.6	76	4.8	6.0	80	2.6	5.1	80	3.8	5.6	80	1.2	3.1
MWIMBI	43	6.2	8.1	42	5.5	6.9	43	1.2	4.2	43	3.7	6.3	43	1.3	3.6
IGOJI	94	6.4	7.3	94	4.4	6.3	95	2.5	5.5	95	4.1	6.1	92	1.4	3.8
IMENTI	39	5.6	7.2	39	4.7	5.9	39	1.9	4.3	39	4.2	5.7	39	1.1	3.3
TIGANIA	36	4.3	6.5	36	3.6	6.3	36	2.2	4.9	36	3.9	6.0	36	1.2	3.5
IGEMBE	33	3.7	6.0	33	4.0	6.4	33	1.0	3.7	33	4.1	6.0	33	1.8	3.6
THARAKA	46	9.2	8.4	46	4.1	6.0	46	2.2	4.7	46	3.9	5.4	46	1.0	2.6
POKOMO	89	6.1	7.7	89	4.6	6.5	90	2.6	5.5	90	3.7	6.0	90	0.9	2.7
GIRIAMA	34	7.2	7.7	34	6.3	6.7	34	2.0	4.7	34	2.8	5.5	34	0.5	2.2
CHONYI	13	3.3	5.2	13	6.2	7.4	13	3.2	6.1	13	1.8	4.5	13	0.7	2.5
MID MJE KENYA	27	6.0	7.9	27	5.1	6.5	27	1.4	3.7	27	4.7	5.9	27	1.0	2.9
DIGO	99	9.9	7.9	99	8.1	7.4	100	4.8	6.6	99	5.9	6.6	100	1.2	3.4
TAITA	45	6.8	7.4	45	5.4	7.2	45	1.5	4.1	45	4.0	6.3	45	1.2	3.6
TAVETA	47	6.8	7.5	48	5.6	6.8	48	3.2	5.5	48	3.5	5.5	47	0.9	2.3

Table AP. 1.4.9 : Distribution of unilateral ridge counts in Kenyan minimal ethnic population samples (right hand males).

POPULATION	FINGER ONE			FINGER TWO			FINGER THREE			FINGER FOUR			FINGER FIVE		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD
SOMALI	218	16.4	6.0	218	11.6	5.3	219	11.3	4.9	219	14.2	5.7	219	12.4	4.6
RENDILLE	151	16.2	5.1	150	12.0	4.9	151	11.4	4.8	150	13.9	4.6	147	12.2	3.8
GABBRA	27	16.5	5.6	27	11.3	4.8	27	10.0	3.9	26	14.6	5.0	27	12.9	3.5
BORAN	127	16.1	6.5	126	10.8	6.0	126	11.0	5.3	125	14.3	5.5	125	12.7	4.4
BURJI	63	17.6	6.5	64	11.4	6.0	64	11.6	4.9	64	13.8	5.7	64	12.5	4.3
SAMBURU	85	15.4	5.8	84	11.5	4.9	86	10.3	4.9	84	13.2	5.1	85	11.7	4.1
KADJIADO MAASAI	63	15.2	6.6	63	11.0	6.0	63	11.2	4.9	63	13.5	5.5	63	11.4	5.3
NAROK MAASAI	35	13.9	6.9	36	11.3	5.9	35	9.3	5.3	36	12.2	6.0	36	11.2	4.3
NGWESI	41	16.6	5.8	41	12.3	4.9	40	12.7	4.0	41	14.6	5.3	41	12.4	4.4
MUKOGODO	38	16.0	5.6	38	12.7	6.0	38	12.1	4.6	38	14.1	5.9	38	12.4	5.4
KONY	36	10.6	6.2	37	7.6	4.9	37	8.2	4.5	37	10.8	6.2	37	8.9	4.8
NANDI	52	14.8	5.2	52	10.9	4.6	52	11.1	3.7	52	12.4	4.7	51	11.5	3.7
KIPSIGIS	54	15.6	6.4	54	11.7	5.1	55	12.4	4.3	53	13.9	5.1	55	12.8	4.1
TUGEN	105	15.0	5.7	106	9.6	5.2	104	10.4	4.9	107	13.2	5.1	107	11.7	4.5
KEYO	50	14.4	5.3	48	10.6	4.3	49	11.4	4.2	49	13.5	4.8	50	11.2	4.2
MARAKWET	50	15.5	5.1	50	10.4	5.0	50	11.4	4.2	50	13.7	4.6	50	11.9	4.4
POKOT	45	13.2	6.2	45	10.9	4.4	45	10.0	4.3	44	12.9	4.4	45	10.3	4.3
ITESO	52	13.6	6.8	52	9.1	5.3	51	10.2	4.9	52	12.3	5.3	52	10.7	4.3
TURKANA	62	14.8	5.9	65	10.4	5.6	65	10.3	5.1	65	13.3	5.9	62	11.5	5.1
LUO	168	15.0	5.6	168	10.7	5.1	167	10.6	4.6	168	13.6	5.1	167	11.7	4.5
GUSII	50	15.9	6.6	49	11.0	5.3	49	10.8	4.9	49	13.8	5.7	48	12.4	4.4
TERIKI	26	13.0	7.7	26	9.2	6.0	26	10.8	5.7	26	13.3	5.4	26	12.2	4.2
MARAGOLI	26	13.0	6.6	26	9.5	5.4	26	10.2	4.8	26	12.5	5.2	26	11.2	4.5
BUNYORE	30	15.6	5.1	30	12.0	3.8	30	12.0	3.5	29	16.2	4.5	30	13.0	3.6
IDAKHO	39	14.1	6.9	39	11.9	5.8	39	11.7	4.9	39	13.3	6.5	39	11.7	3.6
MARAMA	25	15.4	6.7	25	12.5	3.6	25	12.4	3.9	25	15.6	5.1	25	13.4	4.5
WANGA	25	16.9	6.4	25	10.8	5.8	25	10.5	4.7	25	14.4	4.4	25	11.5	4.2
MARACH	25	15.7	7.1	25	11.4	5.7	25	11.6	5.3	25	14.0	5.9	25	11.6	5.0
BUKHAYO	22	13.7	7.0	22	9.8	5.2	22	10.4	4.3	22	12.5	5.5	22	10.7	4.0
SAMIA	24	14.3	5.6	24	10.3	5.6	24	10.3	5.3	24	15.1	6.7	24	13.2	5.8
BUTSOTSO	20	16.0	4.6	20	12.4	4.1	20	12.3	4.1	20	16.3	4.3	20	13.1	3.3
BUNYALA	25	16.1	6.7	25	10.6	6.0	25	9.4	5.6	25	13.4	6.6	25	11.0	5.4
KABRAS	26	15.3	5.7	25	12.0	4.1	24	12.1	4.8	25	14.5	4.2	26	12.2	3.5
BUKUSU	57	13.8	5.9	60	8.9	4.7	60	9.2	4.9	58	11.2	4.8	58	9.8	4.7
KIAMBU KIKUYU	64	17.1	7.1	64	11.8	5.5	63	11.7	5.0	64	14.0	5.5	64	11.9	5.2
MURANGA KIKUYU	55	16.4	6.5	54	10.3	5.4	55	11.1	5.1	54	13.8	6.2	55	11.7	4.9
NYERI KIKUYU	49	14.1	7.2	48	10.1	5.4	48	9.1	5.7	49	11.9	6.0	49	10.6	4.4
NDIA	55	14.7	6.1	56	10.1	5.1	56	10.4	3.9	56	13.3	5.4	56	11.3	4.8
KAMBA	73	15.5	6.2	73	10.7	5.2	74	10.8	4.5	74	13.5	5.4	71	11.4	3.8
EMBU	86	15.6	7.1	86	9.7	4.7	87	10.1	5.3	85	12.9	5.5	87	11.0	4.4
MBERE	62	15.0	6.6	61	10.5	5.7	63	11.4	4.9	62	14.0	4.9	63	11.8	4.5
CHUKA	72	15.7	5.4	71	8.7	5.3	72	9.9	4.9	73	13.0	4.6	73	10.9	4.2
MUTHAMBI	76	15.3	5.9	75	10.1	5.2	76	9.6	5.0	76	13.1	5.3	76	11.2	4.6
MWIMBI	59	15.2	5.6	60	10.0	4.5	59	9.2	4.7	59	11.6	5.7	60	10.8	4.2
IGOJI	76	15.8	6.4	78	11.0	6.1	77	10.9	5.3	76	14.1	6.0	77	10.9	5.4
THENTI	61	14.1	6.2	61	9.6	4.9	60	10.0	4.5	59	13.0	4.6	60	11.7	4.0
TIGANIA	64	14.7	6.4	64	9.5	4.7	64	9.7	4.7	64	12.8	5.5	64	10.7	4.5
IGEMBE	62	16.1	5.3	64	9.7	4.9	64	10.0	4.7	63	13.2	5.0	64	11.7	4.3
THARAKA	54	14.9	7.0	53	10.6	5.5	54	11.0	5.1	54	13.7	5.6	54	11.7	4.7
POKOMO	92	14.0	6.7	92	10.2	5.8	93	10.6	5.5	92	14.0	5.6	93	12.4	4.8
MALAKOTE	40	16.0	5.6	39	11.3	5.7	39	10.8	4.5	39	13.4	4.1	40	12.0	4.0
GIRIAMA	49	14.7	7.5	49	9.9	5.9	49	10.2	4.8	49	14.7	4.7	49	11.7	3.7
CHONYI	78	14.9	6.5	78	9.7	5.8	78	10.5	5.2	79	13.8	5.5	79	11.6	4.7
MID MJI KENDA	32	15.4	6.0	32	10.6	5.2	32	10.9	5.5	32	13.7	5.5	32	11.8	4.5
DIGO	114	15.9	6.5	115	11.3	5.0	116	11.7	4.7	116	15.6	4.8	115	12.9	4.6
TAITA	54	14.4	7.2	55	9.6	5.3	55	9.8	5.0	54	12.4	5.2	53	10.3	4.2
TAVETA	57	13.9	6.9	56	8.5	5.3	58	9.5	5.2	58	11.7	5.9	58	11.0	5.2

Table AP. 1.4.10 : Distribution of unilateral ridge counts in Kenyan minimal ethnic population samples (left hand males).

POPULATION	FINGER ONE			FINGER TWO			FINGER THREE			FINGER FOUR			FINGER FIVE		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD
SOMALI	216	15.4	5.8	221	11.0	5.3	221	11.8	5.5	221	13.8	6.0	216	12.3	4.5
RENDILLE	150	15.7	5.0	145	11.1	5.1	143	11.5	5.1	147	13.7	4.5	148	11.8	3.6
GABBRA	27	14.7	5.1	27	10.4	4.9	27	11.8	4.6	27	13.4	4.9	27	12.0	3.2
BORAN	126	14.6	6.6	127	10.0	6.2	126	10.7	5.8	125	13.8	5.8	124	12.6	4.1
BURJI	64	16.3	6.6	64	10.3	5.5	63	10.9	5.3	63	13.7	5.7	64	12.2	4.8
SAMBURU	85	14.2	5.8	84	9.9	5.0	84	9.9	5.6	84	12.5	5.3	82	11.8	4.1
KADJIADO MAASAI	63	13.0	7.2	63	10.2	5.2	63	10.7	5.6	63	12.6	6.5	63	11.3	5.1
NAROK MAASAI	36	11.9	6.3	36	10.3	6.2	36	9.2	6.0	36	12.1	5.5	36	10.8	4.8
NGWESI	39	15.6	5.2	40	12.4	5.3	39	13.0	4.9	40	13.6	4.6	40	11.0	4.6
MUKOGODO	38	16.6	5.5	38	12.0	5.7	37	12.4	5.6	38	14.5	5.8	38	12.5	5.6
KONY	37	9.7	5.9	37	7.3	5.1	37	7.8	5.6	37	10.2	5.3	37	9.0	4.3
NANDI	52	14.2	5.6	51	10.6	4.7	52	11.2	4.7	52	12.4	4.8	52	11.9	4.1
KIPSIGIS	55	14.3	6.5	55	10.4	5.1	55	11.6	4.8	55	13.5	5.5	55	12.5	4.0
TUGEN	105	13.0	5.9	103	9.6	5.6	106	10.4	5.4	108	13.2	4.6	106	11.0	4.6
KEYO	50	12.9	5.5	50	10.3	6.4	49	11.1	4.9	50	13.8	4.5	49	11.0	3.6
MARAKWET	50	13.1	6.0	50	9.4	6.1	50	11.0	5.3	50	13.1	3.9	50	11.3	4.1
POKOT	46	12.5	6.3	44	10.0	5.6	44	10.6	4.7	44	12.1	4.8	45	10.4	4.4
TESO	52	11.2	7.4	52	8.2	6.1	52	9.5	6.5	51	12.0	4.9	52	10.4	4.1
TURKANA	63	13.9	5.8	64	9.1	6.7	65	9.7	5.3	63	13.1	5.7	63	11.3	4.4
LUO	168	13.0	6.3	169	10.7	5.1	169	10.8	5.1	169	13.2	5.1	169	11.2	4.5
GUSII	50	13.5	6.2	50	10.6	5.1	50	10.3	5.2	49	13.3	5.1	50	12.0	4.2
TIRIKI	26	12.7	8.6	26	9.7	6.8	26	9.7	5.9	26	13.1	4.5	26	11.1	3.5
MARAGOLI	26	11.2	7.2	26	9.9	6.3	26	9.4	5.3	26	11.8	5.4	26	10.1	3.8
BUNYORE	30	14.1	5.8	28	11.9	4.0	30	11.8	3.9	30	15.1	3.3	30	12.3	2.9
IDAKHO	39	13.2	7.1	39	9.5	4.7	39	10.6	4.8	38	14.0	4.7	39	11.3	3.6
MARAMA	24	12.6	6.2	25	11.8	4.8	28	12.9	4.3	25	15.0	4.1	25	12.9	4.4
WANGA	25	13.2	5.2	24	8.2	6.5	25	8.5	5.3	25	11.4	5.7	25	10.0	5.1
MARACH	24	13.9	6.8	25	11.6	5.2	26	11.5	5.2	25	13.6	5.9	26	11.2	5.0
BUKHAYO	23	11.8	5.9	23	9.9	5.6	23	10.7	5.5	23	12.4	4.1	23	9.6	4.2
SAMIA	24	12.8	5.9	24	9.5	6.3	24	10.5	5.1	24	14.3	5.4	24	11.7	4.5
BUTSOTSO	20	13.5	5.7	20	10.9	5.2	20	12.2	4.9	20	14.9	4.6	20	13.1	3.7
BUNYALA	25	14.8	7.0	25	9.2	6.2	25	10.2	6.8	25	12.4	6.6	25	10.8	5.3
KABRAS	26	12.7	7.2	26	11.5	5.1	26	10.7	5.7	25	13.4	5.1	26	12.1	4.1
BUKUSU	58	11.4	6.1	60	8.5	5.0	61	8.5	5.0	58	11.0	4.8	60	9.2	4.3
KIAMBU KIKUYU	63	15.3	6.4	63	10.8	5.7	64	11.3	5.4	63	13.4	5.2	63	11.0	5.0
MURANGA KIKUYU	56	15.8	6.6	56	10.4	5.7	56	10.2	5.6	56	13.1	5.7	56	11.4	5.0
NYERI KIKUYU	49	12.2	7.4	48	8.9	5.7	49	8.6	6.1	48	11.3	5.9	49	9.7	4.7
NDIA	53	12.9	6.4	53	9.2	5.9	55	9.4	4.9	52	12.0	4.6	56	11.0	4.6
KAMBA	73	14.4	6.4	75	9.7	5.6	74	10.0	5.8	72	12.7	5.0	71	11.1	4.0
EMBU	85	12.8	6.8	86	8.9	5.3	87	9.6	5.8	86	11.6	5.7	87	10.5	4.6
MBERE	62	13.3	6.9	63	11.0	5.6	62	11.4	5.5	63	14.0	5.3	62	11.7	4.7
CHUKA	74	13.4	5.5	73	8.4	5.0	72	9.6	4.6	72	12.5	4.8	73	10.3	4.3
MUTHAMBI	74	13.0	6.9	74	8.6	5.1	76	9.3	5.6	73	11.3	4.9	73	10.3	4.1
MWIMBI	61	12.8	5.9	60	8.8	5.0	61	8.8	6.1	59	11.3	4.7	61	9.8	4.4
IGOJI	73	13.7	6.1	73	9.8	6.1	76	10.3	5.5	75	12.9	5.9	76	10.9	5.1
IMENTI	60	12.0	6.5	61	8.6	4.9	59	9.5	4.7	60	11.8	4.9	59	10.3	4.4
TIGANIA	64	13.3	5.8	64	9.6	5.5	64	10.1	5.2	64	12.6	5.5	64	10.7	4.4
IGEMBE	64	13.5	6.5	63	8.7	5.0	65	9.5	5.0	65	12.4	5.0	64	10.9	4.3
THARAKA	54	13.9	6.8	52	10.3	5.3	53	10.8	6.2	52	13.6	5.4	54	11.7	5.1
POKOMO	92	12.5	6.2	90	9.5	6.0	90	10.0	5.9	92	13.1	5.4	92	11.7	4.7
MALAKOTE	41	14.2	4.2	41	10.4	4.8	41	10.2	5.0	41	12.6	4.4	41	10.7	4.2
GIRIAMA	48	12.8	7.0	45	8.2	5.9	48	9.9	4.9	49	12.5	4.2	49	10.7	3.9
CHONYI	76	13.2	6.9	73	9.0	6.0	78	10.3	5.0	77	13.2	5.4	77	11.1	4.2
MIJIKENDA	31	14.0	5.6	31	10.0	6.3	31	10.4	5.5	32	13.1	5.1	31	10.7	4.5
DIGO	113	13.9	6.4	113	10.6	5.2	116	12.2	4.7	113	14.2	4.5	115	11.4	4.0
TAITA	55	14.4	6.6	52	9.0	5.4	54	9.9	5.4	54	11.7	5.2	54	9.6	4.5
TAVETA	54	12.1	6.7	55	8.6	5.2	52	8.8	5.2	55	11.4	5.5	56	10.6	5.6

Table AP. 1.4.11 : Distribution of unilateral ridge counts in Kenyan minimal ethnic population samples (right hand females).

POPULATION	FINGER ONE			FINGER TWO			FINGER THREE			FINGER FOUR			FINGER FIVE		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD
SOMALI	103	14.5	5.6	103	11.1	5.0	103	10.4	4.5	103	13.2	5.3	103	11.3	4.3
RENDILLE	45	16.2	5.0	44	12.2	4.6	42	11.5	4.8	44	13.7	5.1	43	12.2	3.7
GABBRA	63	15.6	4.7	60	11.5	5.0	61	11.6	4.7	62	13.8	5.2	62	11.7	4.4
BORAN	56	14.5	6.1	56	10.7	5.6	56	9.7	5.0	55	13.4	5.1	57	11.2	4.7
BURJI	55	13.7	6.1	56	8.9	5.7	55	9.4	5.0	56	12.1	5.9	55	11.2	5.1
SAMBURU	42	14.3	4.5	43	11.1	5.4	42	10.1	5.3	42	13.4	6.3	42	12.1	4.9
KADJIADO MAASAI	150	13.4	6.0	150	10.6	5.5	149	10.1	5.0	150	12.9	5.8	150	11.0	5.0
KONY	23	12.1	4.8	23	8.0	4.3	23	8.3	4.1	23	10.1	4.7	23	8.7	3.8
NANDI	50	12.0	6.2	50	9.7	4.8	50	9.9	4.8	49	13.5	5.3	50	11.1	5.0
KIPSIGIS	43	14.4	6.5	43	10.8	5.8	43	10.1	5.2	43	12.1	5.4	43	11.1	4.7
TUGEN	102	14.6	5.0	101	9.5	4.7	101	10.6	3.9	99	12.2	4.6	101	10.8	4.2
KEYO	50	12.3	6.5	50	9.2	4.9	50	9.5	4.8	50	12.0	4.9	50	9.8	4.9
MARAKWET	56	13.1	5.7	56	9.3	5.5	56	9.3	4.8	56	11.8	5.7	56	10.0	4.2
POKOT	53	13.3	5.3	53	10.0	4.0	53	10.0	4.9	52	11.7	5.2	53	10.1	4.6
ITESO	47	13.9	5.4	47	10.6	5.1	46	10.7	4.8	47	13.1	5.0	47	10.9	4.8
TURKANA	42	15.1	4.5	40	11.9	5.2	42	11.9	4.9	42	13.0	5.9	43	12.3	4.7
LUO	107	12.9	6.0	107	10.8	5.1	107	10.6	4.8	106	13.7	5.5	107	11.5	4.7
GUSII	51	15.2	5.5	50	10.4	5.8	51	10.4	5.3	50	13.5	5.9	51	11.2	5.1
TERIK	25	15.0	5.8	25	10.0	4.6	25	11.6	4.8	25	14.2	6.1	25	12.9	4.8
MARAGOLI	24	12.5	5.2	24	10.7	3.7	24	10.7	3.9	24	14.6	3.5	24	10.7	4.5
BUNYORE	20	13.3	4.9	20	8.8	4.9	20	8.8	3.8	20	13.3	6.2	20	11.2	4.0
IDAKHO	15	12.1	5.9	15	8.0	5.0	15	9.2	4.9	15	12.0	5.1	15	11.1	4.3
MARAMA	25	13.8	6.1	25	10.4	5.5	25	10.4	5.5	25	14.5	5.5	25	13.0	4.9
WANGA	24	11.6	7.4	23	8.6	4.9	24	10.0	5.1	24	12.2	5.6	24	9.5	4.1
MARACH	24	13.2	6.9	23	10.3	6.1	23	10.5	4.8	23	14.0	5.7	23	10.3	4.3
BUKHAYO	26	13.0	6.5	26	9.3	5.0	26	9.5	4.2	26	13.5	5.0	25	11.1	3.8
SAMIA	26	14.2	5.3	26	12.5	4.5	26	12.1	4.7	26	14.3	5.4	26	13.3	4.6
BUTSOTSO	27	12.8	5.9	27	8.8	4.6	27	8.4	4.8	27	13.4	5.4	27	11.4	4.8
BUNYALA	24	15.1	7.4	25	9.8	4.7	25	9.5	5.0	25	13.1	5.7	25	11.8	4.0
KABRAS	26	13.1	6.4	26	9.7	5.0	26	9.8	5.6	26	13.1	5.2	26	11.3	4.1
BUKUSU	24	10.4	5.9	24	8.0	4.4	27	9.3	4.4	25	11.2	5.2	25	9.1	4.5
KIAMBU KIKUYU	38	14.2	7.0	38	9.9	5.1	38	10.4	5.3	38	12.7	6.9	37	10.7	5.9
MURANGA KIKUYU	45	13.9	6.7	45	9.3	5.2	45	9.4	5.6	45	11.7	6.0	45	9.1	5.1
NYERI KIKUYU	49	13.7	6.0	51	10.0	5.0	51	10.1	4.5	50	12.0	5.8	51	11.0	3.8
NDIA	64	13.6	6.2	66	10.4	5.8	65	10.5	4.9	66	12.4	5.3	66	11.4	4.7
KAMBA	41	15.3	4.9	42	11.5	4.9	42	12.1	4.0	42	15.0	5.6	40	13.1	4.5
EMBU	72	14.6	6.2	72	10.0	5.3	72	10.0	5.0	72	12.7	4.8	72	10.3	4.2
MBERE	66	13.4	5.4	65	9.7	4.9	66	9.5	4.9	64	11.5	5.6	65	9.8	4.3
CHUKA	58	15.1	6.3	58	9.8	5.3	58	10.3	5.4	55	12.5	5.8	55	10.9	4.6
MUTHAMBI	78	13.7	5.8	78	9.4	4.6	80	9.9	4.1	78	12.0	4.4	76	9.8	4.2
MWIMBI	43	13.0	6.5	41	10.3	5.1	43	10.5	4.8	42	13.1	5.7	43	10.8	4.9
IGOJI	91	13.5	6.7	94	9.8	5.6	93	10.4	5.5	92	13.1	5.6	94	10.6	5.1
IMENTI	39	12.5	5.9	39	8.8	4.7	39	9.0	5.1	38	11.4	5.4	39	9.9	5.0
TIGANIA	36	14.2	6.1	36	9.6	5.2	36	10.0	5.1	36	11.8	6.2	36	9.6	5.3
IGEMBE	32	13.5	7.4	33	9.6	5.7	33	10.2	5.4	31	13.1	5.6	33	10.8	5.1
THARAKA	46	14.8	6.8	46	10.3	4.9	46	10.3	4.7	46	12.8	5.3	46	11.2	5.4
POKOMO	90	12.4	6.7	89	9.8	5.4	90	9.9	5.2	90	14.1	6.1	89	12.1	5.0
GIRIAMA	34	12.4	7.3	34	9.1	5.4	34	9.6	5.5	34	13.3	5.6	33	10.4	5.2
CHONYI	13	12.1	7.2	13	8.8	5.9	13	10.2	4.2	13	13.2	6.1	13	10.9	5.3
MIJIKENDA	27	12.7	6.0	27	9.0	5.6	27	11.0	5.1	27	14.0	5.7	27	11.2	4.1
DIGO	99	15.3	6.3	100	12.3	5.4	99	12.1	4.7	100	15.6	5.0	99	12.3	4.2
TAITA	45	12.9	6.1	45	9.2	6.2	45	10.6	5.0	45	12.7	5.9	45	10.5	4.3
TAVETA	46	12.9	6.1	48	10.4	4.9	48	9.9	5.1	48	12.1	5.2	47	10.3	4.1

Table AP. 1.4.12 : Distribution of unilateral ridge counts in Kenyan minimal ethnic population samples (left hand females).

POPULATION	FINGER ONE			FINGER TWO			FINGER THREE			FINGER FOUR			FINGER FIVE		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD
SOMALI	103	14.3	5.6	103	10.5	5.1	102	10.1	5.3	102	12.9	5.2	101	11.4	4.6
RENDILLE	46	15.0	5.6	46	10.5	5.0	45	10.7	5.0	45	13.6	4.4	45	11.7	4.1
GABBRA	63	14.2	5.3	61	10.3	5.3	63	10.7	5.8	61	13.0	5.7	62	11.2	4.4
BORAN	57	12.3	6.8	57	9.2	6.0	58	9.1	5.9	58	12.2	5.5	58	11.1	4.3
BURJI	55	13.4	6.3	56	8.4	5.6	56	8.7	6.1	56	12.4	5.6	55	11.1	5.1
SAMBURU	45	12.9	5.2	42	10.1	6.0	43	9.9	6.4	43	12.8	6.6	43	11.4	4.7
KADJIADO MAASAI	150	11.4	6.2	149	10.2	6.1	150	9.2	6.0	148	12.3	5.7	149	10.7	4.9
KONY	23	10.0	5.2	23	7.3	4.4	23	7.3	4.0	23	10.8	4.5	23	8.4	4.2
NANDI	50	10.4	6.5	50	9.4	5.4	50	9.9	5.5	50	13.0	5.3	50	10.7	4.6
KIPSIGIS	43	11.9	6.1	43	10.1	5.9	43	9.4	5.8	43	11.2	5.8	43	10.0	5.0
TUGEN	100	12.6	5.3	94	8.7	4.9	97	8.9	4.5	95	11.5	4.7	101	10.1	4.5
KEYO	50	11.6	6.3	50	8.1	5.2	50	8.7	5.2	50	11.7	5.3	50	8.8	4.5
MARAKWET	56	10.3	7.1	56	7.2	5.2	56	8.7	5.2	56	11.5	5.1	56	9.8	4.1
POKOT	51	11.8	6.1	52	9.2	5.0	51	9.9	5.5	52	11.8	6.1	51	9.4	5.0
ITESO	47	11.4	5.7	47	10.0	4.5	47	10.1	5.1	47	12.3	5.1	47	9.6	4.3
TURKANA	42	12.4	5.8	43	9.6	5.5	43	11.2	6.5	43	11.9	5.4	42	11.0	4.7
LUO	107	11.6	6.5	107	10.1	5.6	107	10.3	5.4	107	13.0	5.8	107	11.3	4.3
GUSII	51	13.2	5.9	51	8.7	6.4	51	9.1	5.9	51	12.4	6.0	50	11.0	4.9
TIRIKI	25	14.2	4.1	25	9.6	5.9	25	10.5	5.3	25	13.2	5.0	25	11.8	4.2
MARAGOLI	24	12.3	5.6	24	8.7	4.9	24	8.6	5.0	24	11.8	4.7	24	9.7	3.3
BUNYORE	20	11.3	6.1	19	7.5	6.4	20	7.1	5.3	20	10.8	5.8	20	9.5	4.0
IDAKHO	15	12.7	6.0	15	8.1	5.5	15	8.9	5.2	15	10.7	5.7	15	10.2	4.3
MARAMA	25	11.6	6.5	25	9.5	6.0	25	9.7	5.8	25	14.3	4.4	25	11.8	4.5
WANGA	24	10.5	7.2	24	8.4	6.2	24	7.7	5.8	24	10.7	4.6	24	8.0	3.8
MARACH	24	11.5	6.3	24	9.5	5.9	24	8.3	5.8	23	12.4	5.1	24	10.0	4.1
BUKHAYO	26	11.3	5.4	26	7.7	5.4	26	8.5	5.6	26	11.5	4.5	26	8.3	3.6
SAMIA	26	12.5	5.4	26	11.8	6.2	26	11.2	4.7	26	13.0	5.5	26	12.8	4.7
BUTSOTSO	26	9.7	6.5	27	7.7	5.3	26	7.8	6.0	26	11.7	5.1	27	10.4	4.8
BUNYALA	25	12.3	6.8	24	9.4	5.8	25	9.8	5.8	25	12.4	6.5	24	10.9	4.7
KABRAS	26	11.7	6.2	26	8.0	5.6	26	8.9	6.0	26	12.6	4.8	26	10.5	4.1
BUKUSU	24	9.3	5.7	26	8.0	5.5	27	7.6	4.8	26	9.9	5.0	26	8.2	4.4
KIAMBU KIKUYU	37	12.3	6.6	38	10.4	6.4	38	10.2	6.0	38	12.1	6.7	38	9.2	5.7
MURANGA KIKUYU	45	12.7	6.1	45	8.5	6.2	45	8.3	6.2	44	9.9	6.5	45	9.3	5.4
NYERI KIKUYU	51	11.7	6.0	51	9.0	5.8	51	8.5	5.7	50	11.2	5.4	50	10.0	4.2
NDIA	65	12.4	5.6	63	9.3	6.2	63	10.0	5.5	65	11.6	5.1	65	10.6	4.7
KAMBA	42	14.2	5.4	42	9.8	5.4	42	10.9	4.7	42	13.3	5.0	42	12.2	4.0
EMBU	72	13.6	6.0	72	9.5	5.4	72	9.1	5.4	72	11.8	5.2	72	9.5	4.5
MBERE	62	11.8	5.6	63	8.8	5.2	64	8.0	5.2	61	9.8	5.3	62	9.1	4.2
CHUKA	58	14.3	5.4	58	10.0	5.7	60	9.6	6.3	58	11.9	4.9	55	9.8	4.2
MUTHAMBI	78	11.7	5.7	76	8.3	5.0	80	8.4	5.2	79	10.3	4.7	78	9.4	4.1
MWIMBI	43	12.0	6.0	42	8.6	6.1	43	9.1	5.3	43	11.7	5.3	43	10.0	4.9
IGOJI	94	12.4	6.3	94	8.7	5.8	92	9.9	5.6	93	11.8	5.7	89	9.9	4.8
IMENTI	39	10.7	5.9	39	7.7	5.2	39	8.1	5.4	39	10.5	5.6	39	9.5	4.5
TIGANIA	36	11.8	6.6	36	9.0	6.1	36	9.1	5.4	36	11.5	6.2	36	9.1	4.3
IGEMBE	33	12.4	6.9	33	8.6	5.8	33	8.9	5.7	33	11.8	6.0	33	9.8	4.7
THARAKA	46	14.6	6.2	46	9.4	5.5	46	9.8	5.2	46	13.1	5.3	46	11.0	5.1
POKOMO	89	11.1	6.7	87	8.4	5.9	90	9.5	5.7	90	12.5	6.4	89	11.0	5.1
GIRIAMA	34	10.7	7.1	34	8.8	5.5	34	9.0	5.2	34	11.8	5.6	34	9.0	4.1
CHONYI	13	9.8	6.1	13	9.4	5.8	13	10.3	5.7	13	12.6	5.3	13	9.2	4.9
MIJIKENDA	27	11.6	6.8	26	9.1	4.7	27	9.7	5.3	27	13.0	5.1	27	9.8	5.3
DIGO	99	14.1	6.5	97	11.5	5.2	99	11.5	5.3	98	14.3	5.0	100	11.5	3.7
TAITA	45	12.1	5.1	45	8.7	6.1	45	8.7	5.1	45	11.1	5.6	44	9.2	5.0
TAVETA	47	12.1	6.2	48	9.7	5.0	48	9.8	5.4	48	11.2	5.1	47	9.9	4.1

Table AP. 1.4.13 : Distribution of absolute ridge counts in Kenyan minimal ethnic population samples (right hand males).

POPULATION	FINGER ONE			FINGER TWO			FINGER THREE			FINGER FOUR			FINGER FIVE		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD
SOMALI	218	23.5	12.2	218	15.5	9.4	219	13.7	8.6	219	20.3	11.1	219	14.1	6.6
RENDILLE	151	22.9	10.7	150	16.2	8.7	151	13.7	7.5	150	19.1	9.3	147	13.4	5.6
GABBRA	27	22.3	11.6	27	15.6	9.1	27	11.6	6.5	26	18.5	9.3	27	14.1	5.3
BORAN	127	22.7	12.6	126	14.6	10.4	126	13.0	8.6	125	19.4	10.3	125	14.1	6.5
BURJI	63	25.1	12.8	64	15.3	10.9	64	14.7	9.7	64	20.4	11.6	64	14.8	7.4
SAMBURU	88	21.0	10.6	84	14.6	8.7	86	12.2	8.2	84	17.0	9.2	85	13.4	6.0
KAJIADO MAASAI	63	20.5	12.2	63	13.9	9.4	63	13.3	8.4	63	19.5	11.1	63	13.0	7.5
NAROK MAASAI	35	18.3	11.9	36	15.2	10.5	35	11.9	9.5	36	16.6	10.8	36	12.0	5.6
NGWESI	41	21.8	10.1	41	16.7	9.1	40	15.0	6.6	41	19.2	9.7	41	13.5	6.0
MUKOGODO	38	25.6	12.2	38	19.1	11.4	38	14.3	7.8	38	21.1	11.6	38	14.1	7.4
KONY	36	13.0	10.5	37	9.6	7.9	37	8.9	6.3	37	13.9	10.0	37	9.9	6.0
NANDI	52	19.4	10.4	52	13.6	7.3	52	13.0	6.1	52	16.4	8.7	51	12.8	5.0
KIPSIGIS	54	20.3	11.4	54	15.7	9.4	55	14.5	7.4	53	19.5	10.1	55	14.4	6.4
TUGEN	105	19.1	10.6	106	12.7	8.9	104	12.1	7.9	107	17.6	9.9	107	12.8	6.2
KEYO	50	17.7	9.4	48	13.7	7.6	49	12.3	6.2	49	18.0	9.1	50	12.2	5.4
MARAKWET	50	19.8	9.6	50	14.0	8.9	50	13.0	6.7	50	19.5	9.9	50	13.1	6.3
POKOT	45	16.1	10.2	45	14.7	8.9	45	11.5	6.5	44	17.1	8.8	45	11.3	6.0
ITESO	52	18.5	12.5	52	11.2	8.1	51	11.0	6.0	52	15.3	8.5	52	11.3	5.3
TURKANA	62	21.7	11.4	65	14.0	9.1	65	12.5	8.3	65	19.4	10.4	62	13.2	6.9
LUO	168	20.6	11.3	168	13.3	8.4	167	12.6	7.9	168	17.8	9.2	167	12.8	6.2
GUSII	50	21.8	12.3	49	13.9	8.0	49	12.2	7.5	49	17.8	9.5	48	13.6	5.4
TIRIKI	26	19.2	13.6	26	12.6	10.0	26	13.0	9.8	26	17.3	10.4	26	13.2	5.9
NARAGOLI	26	17.9	12.3	26	11.8	9.4	26	11.7	7.7	26	17.2	10.6	26	11.8	5.1
BUNYORE	30	21.4	11.1	30	16.2	7.7	30	14.6	6.7	29	22.1	9.1	30	13.7	4.8
IDAKHO	39	17.9	12.1	39	15.0	9.4	39	13.5	7.8	39	16.9	9.2	39	12.3	4.6
MARAMA	25	22.3	12.0	25	17.4	7.0	25	16.2	8.2	25	22.8	9.7	25	14.7	5.4
WANGA	25	21.1	10.6	25	13.2	6.3	25	10.5	4.7	25	18.1	7.3	25	11.8	4.4
MARACH	25	19.9	12.3	25	16.1	10.9	25	15.1	9.3	25	19.2	10.7	25	13.2	7.0
BUKHAYO	22	18.1	12.6	22	12.4	8.0	22	10.9	5.3	22	14.9	8.3	22	11.1	4.6
SAMIA	24	21.6	11.3	24	12.9	8.1	24	11.4	8.5	24	18.5	9.8	24	14.4	7.6
BUTSOTSO	20	22.1	9.6	20	14.5	6.9	20	14.6	6.8	20	21.6	8.7	20	14.3	5.6
BUNYALA	25	24.0	13.5	25	13.2	9.4	25	11.1	7.8	25	17.6	10.7	25	11.8	6.3
KABRAS	26	23.5	10.6	25	16.8	8.7	24	15.0	9.5	25	20.0	9.8	26	13.3	5.0
BUKUSU	57	18.3	11.0	60	11.4	8.0	60	10.9	7.6	58	14.8	8.2	58	10.8	5.6
KIAMBU KIKUYU	64	22.0	12.3	64	16.7	10.2	63	13.9	8.4	64	19.0	10.1	64	12.9	6.5
MURANGA KIKUYU	55	22.9	12.2	54	12.9	8.8	55	13.2	8.8	54	19.4	11.6	55	12.7	6.3
NYERI KIKUYU	49	20.2	12.9	48	13.9	9.3	48	11.3	8.9	49	16.2	10.7	49	11.6	6.1
NDIA	55	20.0	11.6	56	12.6	8.1	56	11.2	8.0	56	16.2	8.7	56	11.8	5.7
KAMBA	73	21.3	12.2	73	13.7	8.4	74	12.6	7.4	74	17.1	9.2	71	12.5	5.4
EMBU	86	21.4	12.1	86	12.7	8.5	87	11.5	8.2	85	15.6	8.8	87	11.6	5.4
MBERE	62	22.0	13.0	61	13.5	9.1	63	13.5	8.0	62	19.5	9.7	63	12.9	6.1
CHUKA	72	21.3	9.9	71	11.2	8.2	72	11.9	7.6	73	17.3	9.4	73	11.5	5.3
MUTHAMBI	76	21.8	12.0	75	13.3	8.7	76	11.0	7.0	78	16.5	9.2	76	12.9	7.1
MWIMBI	59	19.5	11.2	60	12.4	7.4	59	10.3	6.8	59	13.6	8.4	60	11.5	5.4
IGOJI	76	22.7	12.5	78	13.8	9.7	77	12.6	8.7	76	18.2	11.0	77	12.0	7.6
IMENTI	61	20.1	11.5	61	12.6	8.4	60	11.1	8.4	59	17.1	8.6	60	13.0	5.8
TIGANIA	64	20.3	12.2	64	12.3	7.7	64	10.9	7.0	64	16.4	9.4	64	11.2	4.9
IGEMBE	62	22.1	11.1	64	12.1	7.4	64	10.9	5.6	63	17.9	9.5	64	12.9	5.7
THARAKA	54	21.6	12.2	53	14.5	10.1	54	13.0	8.2	54	18.1	10.6	54	13.2	6.5
POKOMO	92	19.2	11.8	92	13.5	9.7	93	12.4	8.2	92	16.6	10.1	93	13.9	7.0
MALAKOTE	40	20.7	9.9	39	14.7	9.8	39	13.2	8.0	39	18.5	9.2	40	13.9	6.3
GIRIAMA	49	22.8	14.2	49	13.4	10.2	49	12.8	8.6	49	18.8	8.8	49	11.9	3.9
CHONYI	78	21.7	13.0	78	13.0	9.9	78	11.5	7.2	79	18.3	9.6	79	12.6	6.1
MID NJI KENDA	32	22.1	12.3	32	14.8	9.6	32	13.8	8.8	32	18.1	10.1	32	12.5	5.3
DIGO	114	23.8	12.7	115	15.8	9.5	116	14.5	8.3	116	21.0	9.9	115	14.2	6.3
TAITA	54	18.8	12.4	55	12.2	8.6	55	10.6	6.5	54	15.5	8.7	53	10.5	4.5
TAVETA	57	19.5	12.7	56	11.6	8.8	56	10.3	6.7	58	14.6	9.3	58	11.6	6.0

Table AP. 1.4.14 : Distribution of absolute ridge counts in Kenyan minimal ethnic population samples (left hand males).

POPULATION	FINGER ONE			FINGER TWO			FINGER THREE			FINGER FOUR			FINGER FIVE		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD
SOMALI	216	21.2	11.7	221	14.7	9.7	221	14.4	9.3	221	19.2	11.2	216	14.0	6.6
REENDILLE	150	22.4	10.7	145	15.5	9.4	143	14.0	8.3	147	18.2	9.0	148	13.0	5.8
GABBRA	27	18.2	9.9	27	13.8	8.3	27	14.3	8.2	27	16.4	8.7	27	12.8	4.7
BORAN	126	19.5	12.4	127	13.9	10.6	126	13.4	9.7	125	18.0	10.9	124	14.1	6.6
BURJI	64	23.1	11.4	64	14.5	10.3	63	15.0	10.2	63	20.4	11.5	64	15.0	7.9
SAMBURU	85	18.7	10.2	84	13.6	9.4	84	11.8	8.3	84	16.7	9.7	82	13.7	6.5
KADJIADO MAASAI	63	17.7	12.9	63	13.3	9.1	63	13.0	9.1	63	17.9	12.0	63	13.3	7.8
NAROK MAASAI	36	15.4	11.7	36	14.5	11.2	36	12.0	10.6	36	15.9	9.7	36	11.1	5.4
NGWESI	39	20.9	9.9	40	16.3	9.6	39	15.9	8.6	40	18.8	9.2	40	12.2	6.4
MUKOGODO	38	23.4	11.6	38	16.6	10.1	37	15.5	9.7	38	20.8	10.9	38	15.0	8.3
KONY	37	12.2	9.9	37	8.7	7.3	37	8.8	7.5	37	13.3	9.2	37	10.1	5.9
NANDI	52	17.1	9.7	51	13.7	8.1	52	13.4	7.5	52	17.4	8.9	52	13.0	5.7
KIPSIGIS	55	18.7	11.7	55	13.8	9.1	55	15.0	9.4	55	19.9	11.2	55	13.7	6.3
TUGEN	105	16.8	10.4	103	12.2	9.5	106	12.7	9.1	106	16.9	9.8	106	12.0	6.3
KEYO	50	16.0	9.4	50	13.2	9.2	49	13.0	8.0	50	18.0	8.6	49	12.3	5.5
MARAKWET	50	16.2	9.8	50	12.7	9.1	50	13.8	8.9	50	17.7	8.4	50	12.6	6.0
POKOT	45	14.7	9.6	44	12.9	9.3	44	12.0	7.5	44	15.0	8.6	45	11.0	5.4
TESO	52	15.2	13.2	52	9.5	7.1	52	10.3	6.7	51	14.9	8.3	52	11.8	6.0
TURKANA	63	19.6	11.1	64	12.1	9.0	65	11.8	8.4	63	18.1	10.4	63	13.0	7.0
LUO	168	17.6	11.4	169	13.8	9.0	169	13.3	8.8	169	17.0	9.1	169	12.3	6.0
GUSII	50	17.5	11.6	50	13.2	8.2	50	12.0	7.5	49	16.3	9.4	50	12.8	5.2
KIPSIKI	26	17.0	13.8	26	12.6	10.6	26	12.5	10.2	26	16.3	9.2	26	12.0	5.7
MARAGOLI	26	15.6	12.9	26	13.2	10.1	26	12.0	9.9	26	15.9	10.6	26	10.8	4.6
KUNYORE	30	19.4	11.7	28	15.5	7.3	30	13.9	7.5	30	18.8	7.4	30	13.0	4.4
IDAKHO	39	15.7	11.0	39	11.5	8.0	39	12.3	7.5	38	17.9	10.1	39	11.7	4.3
MARAMA	24	16.6	11.2	25	16.6	9.8	25	16.2	8.3	25	21.4	8.2	25	14.7	6.6
WANGA	25	17.2	9.6	24	10.7	10.8	25	8.6	5.3	25	13.8	8.2	25	10.9	6.9
MARACH	24	16.3	9.7	25	15.6	9.9	25	14.8	9.8	25	18.2	11.2	25	12.2	6.1
HUKHAYO	23	15.1	9.5	23	13.3	9.9	23	11.5	6.9	23	15.4	8.7	23	11.0	6.4
SAMIA	24	17.5	10.8	24	13.1	10.8	24	11.2	8.9	24	15.9	7.2	24	12.3	5.3
BUTSOTSO	20	15.9	7.9	20	11.4	5.2	20	14.3	8.6	20	21.8	11.0	20	13.5	4.1
BUNYALA	25	22.8	14.0	25	11.6	9.0	25	12.3	8.9	25	18.6	11.4	25	12.2	7.0
KAMBAS	26	18.7	11.7	26	14.5	8.1	26	13.1	9.0	25	17.1	10.2	26	12.7	5.3
BUKUSU	58	14.4	10.3	60	11.4	9.0	61	10.0	8.0	58	14.7	9.2	60	10.1	5.5
KIAMBU KIKUYU	63	19.8	11.2	63	14.6	10.3	64	13.7	8.7	63	18.4	10.1	63	12.3	6.9
MURANGA KIKUYU	56	21.9	11.6	56	14.0	9.6	56	11.8	8.2	56	18.8	11.5	56	13.0	7.0
NYERI KIKUYU	49	16.9	12.8	48	12.1	9.7	49	11.1	9.9	48	15.6	10.4	49	10.7	6.2
NDIA	53	16.9	10.9	53	11.8	8.7	55	11.3	7.5	52	16.3	9.4	56	11.8	5.8
KAMBA	73	20.0	12.2	75	12.6	9.1	74	12.8	10.0	72	16.5	9.1	71	12.8	6.6
EMBU	85	17.9	12.2	86	10.9	8.3	87	11.3	9.0	86	14.3	9.5	87	11.0	5.5
MBERE	62	19.0	13.0	63	14.3	8.9	62	14.6	9.9	63	19.1	10.8	62	13.1	6.9
CHUKA	74	18.8	10.2	73	10.6	8.4	72	11.5	7.9	72	16.2	9.2	73	10.8	5.5
MUTHAMBI	74	18.7	12.1	74	11.1	8.6	76	11.3	8.9	73	16.2	8.6	73	11.5	5.8
MWIMBI	61	17.5	10.9	60	11.6	8.6	61	10.5	8.5	59	13.9	7.9	61	10.5	5.4
IGOJI	73	16.5	11.0	73	13.3	10.1	76	13.0	9.3	75	17.4	11.4	76	11.8	6.8
IMENTI	60	17.0	11.6	61	11.5	8.1	59	11.1	7.0	60	15.7	8.7	59	11.5	6.3
TIGANIA	64	17.6	10.8	64	11.8	8.6	64	10.9	6.6	64	16.1	9.0	64	11.8	5.9
IGEMBE	64	18.0	11.9	63	10.3	7.3	65	11.7	8.0	65	17.2	9.8	64	11.6	5.1
THARAKA	54	20.1	11.4	52	13.2	9.1	53	13.1	10.3	52	18.1	10.9	54	13.1	7.0
POKOMO	92	17.0	11.0	90	13.1	10.2	90	12.1	9.5	92	16.9	9.9	92	13.0	6.9
MALAKOTE	41	18.2	9.0	41	12.3	8.0	41	12.2	8.7	41	15.4	8.9	41	11.7	5.4
GIRIAMA	48	19.9	12.9	45	11.0	10.1	48	11.3	7.3	49	16.2	9.5	49	11.3	4.7
CHONYI	76	18.7	12.5	73	11.7	9.8	78	11.9	8.1	77	17.4	10.0	77	12.0	6.0
MIO MJI KENDA	31	19.8	11.2	31	13.5	10.4	31	13.2	9.5	32	17.6	10.0	31	12.1	6.7
DIGO	113	20.2	12.0	113	14.3	9.4	116	15.5	9.5	113	19.0	9.0	115	12.4	6.0
TAITA	55	18.6	11.8	52	10.8	8.6	54	11.5	8.1	54	16.8	9.6	54	10.1	5.7
TAVETA	54	16.7	11.7	55	10.2	7.4	52	10.4	7.8	55	14.3	8.9	56	11.1	6.4

Table AP.1.4.15: Distribution of absolute ridge counts in Kenyan minimal population samples (right hand : females)

POPULATION	FINGER ONE			FINGER TWO			FINGER THREE			FINGER FOUR			FINGER FIVE		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD
SOMALI	103	20.3	10.9	103	14.4	9.2	103	12.0	7.6	103	17.2	10.1	103	12.6	5.6
RENDILLE	45	22.9	10.6	44	14.6	7.4	42	12.9	6.8	44	18.5	9.0	43	12.9	4.6
GABBRA	63	20.3	9.3	60	14.8	8.6	61	13.5	7.3	62	18.8	10.0	62	13.1	6.6
BORAN	56	18.3	10.5	56	13.8	9.1	56	11.1	7.7	55	16.1	8.5	57	11.6	5.1
BURJI	55	18.5	10.8	54	11.8	9.8	55	11.0	7.8	56	16.4	11.1	55	12.2	6.7
SAMBURU	42	19.0	9.7	43	13.8	9.0	42	11.9	8.1	42	18.2	11.3	42	12.9	6.1
KADJIADO MAASAI	150	17.9	10.8	150	14.4	9.9	149	11.4	7.4	150	16.5	10.1	150	11.9	6.3
KONY	23	14.2	7.1	23	8.8	5.8	23	8.7	4.5	23	12.6	7.8	23	8.9	3.8
NANDI	50	16.1	10.8	50	12.9	8.9	50	10.8	6.5	49	17.3	9.4	50	11.7	6.1
KIPSIGIS	43	19.0	11.4	43	13.9	9.5	43	11.7	8.5	43	15.6	10.1	43	11.7	5.8
TUGEN	102	18.7	9.4	101	11.4	7.1	101	11.5	5.5	99	15.2	8.3	101	11.3	5.1
KEYO	50	15.2	10.6	50	11.4	8.4	50	10.0	6.4	50	15.0	9.1	50	10.1	5.3
MARAKWET	56	16.3	9.4	56	10.7	8.0	56	10.1	6.2	56	15.4	9.7	56	10.6	5.0
POKOT	53	15.8	8.7	53	13.1	8.0	53	11.8	8.4	52	15.6	9.6	53	11.0	5.8
ITESO	47	19.1	10.7	47	14.3	9.0	46	12.2	6.8	47	16.4	8.5	47	11.5	5.6
TURKANA	42	19.3	9.3	40	14.8	9.6	42	14.3	9.6	42	17.8	11.7	43	13.5	7.0
LUO	107	16.6	11.2	107	14.3	9.4	107	12.8	8.5	106	18.3	10.6	107	12.6	6.2
GUSII	51	20.9	11.2	50	14.2	10.7	51	12.5	9.1	50	16.9	10.7	51	12.1	6.6
TIRIKI	25	18.6	9.6	25	13.8	9.0	25	12.5	6.0	25	17.4	9.7	25	13.5	5.8
NARAGOLI	24	17.0	10.2	24	12.1	6.0	24	12.3	6.7	24	17.8	6.6	24	10.7	4.5
SUNYORE	20	19.9	10.4	20	10.6	7.1	20	10.2	7.0	20	15.8	10.4	20	11.3	4.1
IDAKHO	15	16.8	11.4	15	9.7	7.8	15	10.3	8.1	15	14.5	8.2	15	11.1	4.3
NARAMA	25	19.8	12.1	25	14.1	9.7	25	12.2	8.2	25	18.4	9.6	25	14.0	5.8
WANGA	24	16.3	13.2	23	10.8	7.8	24	11.3	8.1	24	14.0	8.1	24	9.5	4.1
MARACH	24	17.0	11.5	23	14.1	11.4	23	11.1	6.3	23	17.3	10.6	23	10.7	4.6
BUKHAYO	26	15.8	7.6	26	11.6	8.6	26	10.8	6.7	26	16.2	8.8	25	12.0	5.5
SAMIA	26	17.7	9.8	26	16.3	8.3	26	14.5	9.2	26	19.4	10.1	26	14.9	6.8
BUTSOTSO	27	15.8	10.3	27	10.4	6.7	27	9.2	6.5	27	15.6	8.6	27	11.6	5.1
BUNYALA	24	20.5	13.6	25	12.3	7.9	25	11.4	8.7	25	15.9	10.0	25	12.7	5.3
KABRAS	26	18.1	11.9	26	11.4	7.0	26	10.5	6.6	26	14.3	7.1	26	11.5	4.6
BUKUSU	24	12.2	8.5	24	9.1	6.3	27	9.7	4.9	25	13.8	8.0	25	10.2	6.2
KIAMBU KIKUYU	38	18.8	13.4	38	13.6	9.7	38	11.9	7.6	38	16.4	11.6	37	11.6	7.5
MURANGA KIKUYU	45	18.8	12.4	45	11.5	8.1	45	10.4	7.2	45	14.3	9.6	45	9.5	5.8
NYERI KIKUYU	49	16.9	9.5	51	13.3	9.1	51	11.5	8.9	50	13.5	8.0	51	11.4	4.6
NDIA	64	19.4	12.3	66	13.0	9.1	65	11.8	7.4	66	15.5	9.1	66	12.5	6.2
KAMBA	41	20.7	10.3	42	14.2	8.4	42	13.5	5.9	42	18.7	9.5	40	13.2	4.6
EMBU	72	20.5	11.3	72	13.0	8.8	72	10.6	6.1	72	15.2	8.2	72	10.7	5.0
MBERE	66	16.7	8.5	65	11.8	7.6	66	9.8	5.5	64	12.8	7.2	65	10.1	4.8
CHUKA	58	20.6	10.7	58	13.0	8.6	58	11.4	7.0	55	15.2	9.3	55	11.8	5.4
MUTHAMBI	78	18.6	10.1	78	12.3	7.8	80	10.8	5.8	78	15.2	8.1	76	10.5	5.0
MWIMBI	43	18.9	12.8	41	13.3	8.9	43	11.2	5.8	42	15.7	8.8	43	11.6	6.4
IGOJI	91	18.2	11.4	94	12.7	9.2	93	11.6	7.5	92	16.4	9.2	94	11.1	5.8
IMENTI	39	17.1	10.2	39	11.9	8.4	39	10.4	7.6	38	13.9	8.8	39	10.1	5.2
TIGANIA	36	17.9	10.5	36	11.9	8.1	36	10.7	5.8	36	13.6	9.1	36	9.7	5.5
IGEMBE	32	16.4	11.2	33	11.9	8.5	33	10.2	5.4	33	15.7	8.4	33	10.8	5.3
THARAKA	46	21.3	12.4	46	13.2	7.9	46	11.8	7.0	46	15.7	8.5	46	11.7	6.0
POKOMO	90	17.0	11.3	89	12.2	8.8	90	11.3	7.8	90	17.9	10.1	89	12.5	5.7
GIRIAMA	34	17.3	12.8	34	11.9	8.7	34	10.7	7.6	34	15.8	8.8	33	11.0	5.9
CHONYI	13	14.8	10.5	13	10.3	8.4	13	13.4	7.6	13	16.8	9.0	13	11.3	5.7
MID MJI KENDA	27	16.9	11.6	27	13.2	9.9	27	11.7	6.0	27	16.9	8.9	27	11.6	5.1
DIGO	99	23.8	12.7	100	18.2	10.4	99	15.7	9.1	100	21.4	9.7	99	13.4	6.0
TAITA	45	17.5	10.6	45	11.4	9.9	45	11.6	7.0	45	15.4	9.7	45	11.4	6.3
TAVETA	46	17.5	10.2	48	14.3	9.7	48	11.3	7.3	48	16.0	8.7	47	11.0	5.4

Table AP.1.4.16: Distribution of absolute ridge counts in Kenyan minimal population samples (left hand : females)

POPULATION	FINGER ONE			FINGER TWO			FINGER THREE			FINGER FOUR			FINGER FIVE		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD
SOMALI	103	20.6	10.5	103	13.8	9.1	102	12.5	9.0	102	16.5	8.9	101	12.6	5.8
RENDILLE	46	21.4	11.3	46	14.8	9.7	45	14.0	8.7	45	19.4	9.6	45	12.8	5.4
GABBRA	63	18.6	9.5	61	13.7	9.0	63	13.3	9.4	61	17.9	9.8	62	12.9	6.5
BORAN	57	15.8	10.9	57	12.2	9.8	58	11.4	9.5	58	15.0	9.2	58	11.9	5.8
GURJI	55	19.6	12.2	56	11.5	9.3	56	11.3	10.2	56	16.9	10.5	55	12.8	7.4
SAMBURU	45	16.9	9.8	42	13.4	10.2	43	12.8	10.6	43	18.2	12.0	43	13.2	7.0
KADJIADO MAASAI	150	15.6	11.1	149	13.7	10.1	150	11.9	10.1	148	15.8	9.6	149	12.1	7.1
KONY	23	10.9	6.9	23	7.5	4.7	23	7.9	5.5	23	14.9	8.9	23	8.7	4.3
NANDI	50	14.2	11.0	50	12.8	9.7	50	12.5	9.6	50	17.3	9.7	50	11.8	6.2
KIPSIGIS	43	15.8	10.5	43	13.6	10.4	43	12.0	9.9	43	14.7	10.7	43	10.6	5.8
TUGEN	100	16.2	9.1	94	10.6	8.3	97	10.0	6.5	95	15.3	9.0	101	11.0	5.8
KEYO	50	15.3	11.2	50	10.4	8.3	50	10.5	8.3	50	15.4	9.7	50	9.7	6.0
MARAKWET	56	12.9	10.1	56	8.9	7.8	56	10.4	8.1	56	15.6	9.5	56	11.6	6.5
POKOT	51	14.1	8.9	52	12.9	9.5	51	12.7	9.5	52	16.8	11.5	51	10.5	6.7
ITESO	47	14.7	10.3	47	13.6	8.5	47	12.3	8.5	47	16.9	9.5	47	10.5	5.9
TURKANA	42	16.4	10.9	43	12.7	10.1	43	13.6	10.6	43	16.1	10.9	42	12.6	7.1
LUO	107	16.1	11.7	107	13.9	10.3	107	13.1	9.8	107	17.1	10.6	107	12.5	6.2
GUSII	51	18.6	11.6	51	12.2	11.0	51	11.4	9.9	51	17.2	12.0	50	12.3	6.7
TERIK	25	19.1	8.7	25	12.7	10.1	25	13.6	9.3	25	16.4	9.3	25	12.8	6.2
MARAGOLI	24	16.9	9.8	24	10.8	7.8	24	10.3	8.0	24	15.1	8.1	24	10.2	4.2
BUNYORE	20	17.1	11.6	19	9.2	9.2	20	7.1	5.3	20	11.1	6.3	20	9.6	4.1
TOAKHO	15	17.9	12.0	15	10.2	9.9	15	10.4	8.5	15	14.3	10.7	15	10.8	5.1
MARAMA	25	16.8	11.8	25	13.6	10.6	25	13.5	10.6	25	18.2	8.9	25	14.3	7.3
WANGA	24	15.1	11.9	24	10.6	10.1	24	8.7	7.2	24	13.7	9.8	24	8.6	4.9
MARACH	24	15.2	10.9	24	13.0	10.8	24	10.0	9.1	23	16.7	9.5	24	10.8	5.3
BUKHAYO	26	15.0	10.6	26	9.8	9.1	26	10.1	8.7	26	14.7	8.5	26	9.6	5.7
SAMIA	26	15.6	9.7	26	17.3	11.6	26	14.0	9.8	26	17.1	10.1	26	14.7	6.6
BUTSOTSO	26	12.2	9.9	27	10.8	9.4	26	10.3	10.2	26	15.5	9.5	27	11.4	6.3
BUNYALA	25	17.7	12.8	24	11.1	9.4	25	11.7	10.1	25	15.1	11.4	24	11.5	5.1
KABRAS	26	14.3	9.5	26	9.8	8.5	26	9.7	7.5	26	14.5	7.2	26	10.8	4.5
BUKUSU	24	12.4	9.4	26	10.1	8.4	27	8.8	6.5	26	11.5	7.2	26	8.4	4.6
KIAMBU KIKUYU	37	16.6	12.3	38	14.1	10.8	38	12.4	10.2	38	15.8	11.6	38	10.7	8.4
MURANGA KIKUYU	45	17.2	10.8	45	11.1	9.8	45	9.3	7.8	44	12.6	9.8	45	9.8	6.2
NYERI KIKUYU	51	15.1	9.9	51	11.5	9.0	51	10.4	8.7	50	14.7	8.9	50	10.8	5.5
NOIA	65	17.0	10.7	63	12.3	10.2	63	12.0	9.0	65	15.5	9.2	65	12.0	6.8
KAMBA	42	19.6	10.7	42	13.0	9.4	42	13.0	7.5	42	17.1	9.5	42	13.2	5.5
EMBU	72	19.5	11.4	72	12.2	9.1	72	10.3	7.7	72	15.9	9.1	72	10.5	6.3
MBERE	62	15.4	10.1	63	10.8	8.2	64	9.0	7.1	61	12.2	8.7	62	9.6	5.1
CHUKA	58	20.8	10.8	58	14.1	9.9	60	12.0	9.7	58	16.3	9.9	55	10.9	5.9
MUTHAMBI	78	16.3	10.3	76	10.8	8.2	80	10.6	8.5	79	13.6	8.6	78	10.4	5.5
MWIMBI	43	16.7	11.4	42	11.8	10.2	43	9.9	6.7	43	15.0	9.8	43	11.3	7.1
IGOJI	94	17.6	11.3	94	12.1	9.8	92	11.9	9.0	93	15.6	9.7	89	11.1	6.8
IMENTI	39	14.9	10.7	39	10.1	8.2	39	9.7	7.9	39	14.4	10.0	39	10.2	5.8
TIGANIA	36	15.9	11.3	36	11.4	9.6	36	11.2	8.8	36	15.2	10.6	36	10.3	6.5
IGEMBE	33	15.8	11.2	33	10.8	9.1	33	9.7	7.6	33	15.3	10.2	33	11.2	6.4
THARAKA	46	22.3	12.0	46	12.1	8.8	46	11.8	8.3	46	17.0	9.0	46	11.7	6.1
POKOMO	89	15.7	11.6	87	11.4	9.9	90	11.8	9.4	90	16.1	10.6	89	11.8	6.4
GIRIAMA	34	15.9	12.7	34	12.2	9.4	34	10.4	7.9	34	14.6	9.1	34	9.5	5.1
CHONYI	13	13.1	10.3	13	12.0	9.6	13	13.5	10.2	13	14.5	8.0	13	9.9	6.2
MID MJI KENDA	27	15.7	13.0	26	12.0	8.0	27	11.1	7.8	27	17.7	9.6	27	10.8	6.8
DIGO	99	22.0	12.7	97	17.5	10.3	99	16.0	10.2	98	20.2	10.0	100	12.5	5.5
TAITA	45	17.0	10.2	45	11.5	10.4	45	9.8	7.3	45	15.1	10.7	44	10.4	7.6
TAVETA	47	17.3	11.0	48	13.2	8.9	48	12.4	8.7	48	14.5	8.9	47	10.6	4.9

Table AP. 1.4.17 : Distribution of total ridge counts in Kenyan minimal ethnic population samples (males)

Right Hand

POPULATION	TOTAL RADIAL			TOTAL ULNAR			TOTAL UNILATERAL			TOTAL ABSOLUTE		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD.
SOMALI	211	63.2	20.0	215	23.9	23.5	211	86.1	21.3	211	87.5	39.3
RENDILLE	145	64.6	18.2	148	21.3	18.8	145	86.1	18.2	145	86.2	32.6
GABBRA	26	64.4	16.8	26	18.2	18.2	26	85.7	16.9	26	82.7	31.9
BORAN	121	63.0	22.4	123	20.7	22.7	123	84.9	23.4	123	83.7	40.7
BURJI	63	64.6	22.6	64	25.7	25.9	63	87.0	22.9	63	90.7	44.5
SAMBURU	82	60.6	19.1	83	17.2	18.5	82	82.0	19.3	82	78.1	32.8
KADJIADO MAASAI	63	60.5	23.5	63	19.7	22.5	63	82.3	24.2	63	80.2	41.1
NAROK MAASAI	35	55.7	22.1	35	17.2	22.2	34	57.2	23.5	34	72.2	40.7
NGWESI	40	66.0	20.0	41	19.7	17.9	40	68.2	19.5	40	86.0	32.9
MUKOGODO	38	67.0	22.0	38	27.2	21.9	38	69.3	23.0	38	94.2	40.2
KONY	37	45.3	21.7	36	10.5	14.9	36	46.0	22.7	36	55.3	34.0
NANDI	52	58.7	17.5	51	16.6	17.3	51	60.4	18.1	51	74.9	30.5
KIPSIGIS	53	64.1	18.3	52	20.4	23.5	52	66.2	19.4	52	84.3	36.5
TUGEN	105	56.9	19.4	104	16.7	21.4	102	59.3	20.7	102	73.6	36.5
KEYO	47	58.6	17.6	49	15.6	19.4	46	60.3	18.9	46	72.2	29.8
MARAKWET	50	61.6	16.8	50	17.8	17.8	50	62.9	17.2	50	79.4	31.3
POKOT	44	55.9	18.8	45	14.6	18.3	44	57.2	19.7	44	70.5	32.0
ITESO	51	53.4	22.7	52	14.0	14.3	51	55.9	22.8	51	67.6	32.9
TURKANA	60	57.7	23.6	63	23.4	19.0	60	60.3	23.6	60	81.8	38.6
LUO	165	59.5	19.1	164	17.5	20.0	163	61.3	19.8	163	76.8	34.7
GUSII	48	61.5	19.7	49	17.4	15.2	48	63.5	20.4	48	79.0	30.7
TIRIKI	26	55.7	23.1	26	19.7	23.0	26	68.1	24.5	26	75.4	43.3
MARAGOLI	26	53.9	20.7	26	16.6	19.5	26	56.4	22.0	26	70.8	35.9
BUNYORE	29	65.4	14.0	29	22.7	18.6	29	68.9	13.4	29	88.1	29.0
IDAKHO	39	61.8	19.1	39	13.8	19.9	39	62.8	19.7	39	75.6	35.1
MARAMA	25	66.2	19.5	25	27.1	15.5	25	69.3	19.6	25	93.3	29.7
WANGA	25	61.0	19.6	25	13.6	12.5	25	64.0	19.5	25	74.6	27.0
MARACH	25	60.9	25.6	25	22.6	21.5	25	64.2	26.1	25	83.4	42.9
BUKHAYO	22	55.5	20.2	22	11.9	13.9	22	57.2	20.5	22	67.4	31.6
SAMIA	24	59.6	20.4	24	19.2	19.6	24	63.3	22.4	24	78.8	36.3
BUTSOTSO	20	67.5	16.4	20	19.8	19.8	20	70.2	16.2	20	87.3	24.8
BUNYALA	25	56.1	24.4	25	21.6	20.9	25	60.6	25.5	25	77.7	40.3
KABRAS	24	64.3	14.9	25	26.2	17.5	24	67.8	15.1	24	91.5	29.3
BUKUSU	54	50.6	21.4	56	14.4	17.2	53	51.5	21.6	53	64.2	34.4
KIAMBU KIKUYU	63	64.7	23.2	63	18.3	20.3	63	66.0	23.8	63	83.0	38.4
MURANGA KIKUYU	54	60.2	23.2	53	20.6	20.2	53	62.9	23.9	53	80.7	39.3
NYERI KIKUYU	47	54.9	23.9	47	19.0	19.1	47	56.1	24.3	47	73.9	40.4
NDIA	55	57.8	19.7	56	13.6	16.2	55	59.4	20.1	55	71.5	32.2
KAMBA	70	59.5	19.4	71	17.5	17.9	70	61.9	20.5	70	77.2	33.5
EMBU	84	57.0	20.9	86	15.6	17.8	83	58.7	21.8	83	72.0	34.7
MBERE	62	60.9	21.0	60	19.9	20.7	59	62.2	21.8	59	80.1	37.9
CHUKA	70	55.5	16.9	71	17.1	19.0	70	57.9	18.0	70	72.4	31.8
MUTHAMBI	75	57.4	19.6	76	18.2	19.2	75	59.5	20.4	75	75.7	35.7
MWIMBI	59	55.4	18.5	58	11.8	16.6	57	56.1	18.7	57	66.4	30.4
IGOJI	73	60.1	23.1	77	19.0	22.0	73	62.3	24.2	73	79.0	40.8
IMENTI	59	57.2	18.6	60	16.8	17.7	59	58.5	18.8	59	74.3	32.5
TIGANIA	64	55.0	20.5	64	16.1	17.2	64	57.2	21.1	64	71.1	33.8
EGEMBE	61	58.6	19.3	62	17.4	16.2	61	60.9	19.4	61	76.2	32.4
THARAKA	53	59.6	23.5	54	20.6	20.4	53	61.9	23.0	53	80.1	39.1
POKOMO	90	59.2	22.6	91	18.0	19.9	90	61.2	23.3	90	77.3	38.0
MALAKOTE	39	61.7	19.7	39	19.2	20.3	39	63.5	20.0	39	80.9	34.6
GIRIAMA	49	57.6	20.1	49	22.2	21.4	49	61.2	22.0	49	79.7	38.5
CHONYI	78	57.9	22.1	79	19.1	19.1	78	60.7	22.7	78	77.2	37.7
MIO MJI KENDA	32	60.3	21.4	32	20.9	23.2	32	62.5	22.9	32	81.2	40.5
DIGO	112	65.5	20.5	115	23.9	21.4	112	67.3	21.2	112	89.3	38.6
TAITA	53	55.0	21.7	55	12.3	16.3	53	56.5	21.7	53	67.8	34.0
TAVETA	55	52.3	23.7	56	15.3	17.5	55	54.5	24.5	55	67.6	36.8

Left Hand

POPULATION	TOTAL RADIAL			TOTAL ULNAR			TOTAL UNILATERAL			TOTAL ABSOLUTE		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD.
SOMALI	210	62.5	21.1	213	22.0	22.6	208	84.8	22.0	208	84.8	39.6
RENDILLE	138	61.3	19.5	145	21.3	20.1	137	83.6	19.9	137	83.1	35.3
GABBRA	27	59.3	18.4	27	18.1	20.9	27	82.2	17.8	27	75.5	33.3
BORAN	122	59.1	23.1	125	19.5	22.7	122	81.6	24.3	122	78.9	42.2
BURJI	63	60.6	23.0	63	27.1	25.1	62	83.5	24.0	62	98.1	44.3
SAMBURU	82	55.4	20.8	83	18.5	17.7	81	57.6	20.6	81	73.9	34.5
KADJIADO MAASAI	63	56.3	24.6	63	19.0	22.9	63	57.9	25.5	63	75.3	43.2
NAROK MAASAI	36	52.1	22.0	36	16.8	23.3	36	54.3	24.1	36	68.9	41.1
NGWESI	38	61.6	18.7	39	21.9	21.6	38	65.4	19.8	38	83.3	34.2
MUKOGODO	37	64.0	23.9	38	27.4	22.3	37	67.9	23.8	37	91.4	40.8
KONY	37	42.0	21.4	37	11.0	15.0	37	43.9	22.2	37	53.0	32.7
NANDI	52	57.6	18.9	51	16.8	17.6	51	60.2	19.8	51	74.2	31.5
KIPSIGIS	55	58.0	20.3	55	23.1	24.7	55	61.8	21.2	55	81.1	40.3
TUGEN	101	54.4	20.1	102	17.2	21.1	100	58.0	21.2	100	71.7	36.6
KEYO	48	55.4	19.4	49	17.4	20.1	48	59.4	19.0	48	73.2	32.0
MARAKWET	50	56.4	15.8	50	16.6	17.6	50	58.0	19.0	50	73.0	32.4
POKOT	42	53.2	20.8	43	12.1	15.1	42	55.3	21.8	42	65.2	31.6
ITESO	51	48.7	23.3	52	12.7	15.4	51	51.0	23.7	51	60.9	34.5
TURKANA	59	53.9	23.0	63	20.3	18.6	59	56.6	22.8	59	74.8	37.4
LUO	168	55.5	20.5	169	18.6	20.8	168	58.9	20.8	168	73.9	35.8
GUSII	50	56.1	19.2	49	17.9	17.7	49	59.3	20.6	49	73.4	31.7
TIRIKI	26	53.4	22.7	26	17.1	26.4	26	56.4	24.7	26	70.5	43.6
MARAGOLI	26	50.2	21.5	26	17.3	23.4	26	52.5	22.4	26	67.4	40.7
BUNYORE	28	62.1	14.0	28	17.8	19.2	28	64.7	15.3	28	79.9	30.2
IDAKHO	38	56.2	17.0	39	13.7	20.9	38	59.4	17.8	38	70.2	31.5
MARAMA	25	62.9	18.7	24	23.5	19.1	24	64.8	19.4	24	85.8	32.7
WANGA	24	47.2	21.9	24	13.6	14.6	24	50.8	22.2	24	60.8	32.7
MARACH	25	58.3	24.2	24	19.7	22.7	24	61.6	25.6	24	77.5	42.0
BUKHAYO	23	51.6	22.0	23	14.7	16.7	23	54.4	21.2	23	66.3	33.8
SAMIA	24	56.2	17.4	24	13.9	16.4	24	58.8	19.2	24	70.0	27.9
BUTSOTSO	20	61.9	18.6	20	14.9	13.1	20	64.6	19.3	20	76.9	26.1
BUNYALA	25	53.8	22.5	25	20.7	21.7	25	57.3	23.1	25	74.5	40.1
KABRAS	25	57.9	21.3	25	17.7	16.3	25	59.8	21.7	25	75.0	33.8
BUKUSU	55	45.1	20.1	58	14.4	16.3	55	48.1	21.2	55	59.9	35.3
KIAMBU KIKUYU	61	60.6	23.4	62	18.6	20.3	61	61.9	23.7	61	79.3	39.9
MURANGA KIKUYU	56	56.3	24.9	56	23.2	20.3	56	60.9	24.3	56	79.4	39.7
NYERI KIKUYU	48	47.8	24.9	48	19.1	20.7	48	51.1	25.5	48	66.9	41.6
NDIA	47	50.9	20.0	55	17.0	15.9	47	54.6	21.4	47	69.0	34.4
KAMBA	67	55.5	21.6	70	20.0	21.4	67	58.5	22.5	67	75.3	38.3
EMBU	85	49.6	23.3	85	15.8	20.1	83	53.3	23.7	83	65.6	38.4
MBERE	61	59.2	21.9	63	20.6	22.7	61	61.3	23.2	61	80.2	40.9
CHUKA	70	50.2	17.4	73	17.1	18.6	70	53.5	18.3	70	66.4	31.4
MUTHAMBI	72	49.7	19.3	71	16.7	19.8	67	52.4	20.1	67	66.6	35.7
MWIMBI	59	49.4	18.7	60	14.5	17.3	58	51.2	19.3	58	63.5	32.7
IGOJI	70	54.5	24.4	75	18.7	21.3	68	57.2	25.8	68	73.3	42.8
IMENTI	57	48.6	20.4	60	18.2	16.8	57	51.9	20.9	57	66.7	33.7
TIGANIA	64	53.5	21.1	64	14.7	18.0	64	56.2	22.1	64	68.2	33.2
EGEMBE	62	51.4	20.6	63	16.3	18.7	62	54.1	21.2	62	67.5	35.1
THARAKA	52	56.8	24.3	52	20.5	23.0	52	60.1	24.6	52	77.3	42.2
POKOMO	87	51.9	21.9	90	19.0	21.1	86	56.0	23.2	86	70.5	38.7
MALAKOTE	41	56.2	17.1	41	13.6	19.3	41	58.1	17.6	41	69.8	31.9
GIRIAMA	44	48.0	20.2	47	20.8	20.7	43	52.3	21.9	43	66.3	37.0
CHONYI	71	52.2	21.6	73	17.6	20.7	69	54.8	22.1	69	68.8	37.6
MIO MJI KENDA	29	53.0	22.4	32	23.0	22.4	29	57.2	24.1	29	74.4	41.6
DIGO	112	59.0	19.5	109	23.1	22.6	108	62.6	20.6	109	81.7	38.1
TAITA	50	52.3	23.0	54	13.3	20.9	50	55.0	22.7	50	66.5	38.6
TAVETA	49	47.3	22.8	54	14.7	18.0	49	51.1	24.8	49	62.9	35.4

Table AP. 1.4.18 : Distribution of total ridge counts in Kenyan minimal ethnic population samples (females)

Right Hand

POPULATION	TOTAL RADIAL			TOTAL ULNAR			TOTAL UNILATERAL			TOTAL ABSOLUTE		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD
SOMALI	103	59.2	18.0	103	18.3	19.7	103	60.5	19.0	103	76.5	19.7
PENDILLE	41	61.0	16.9	41	18.3	17.8	41	65.1	17.8	41	81.4	20.2
GABRA	60	62.3	19.2	60	18.0	20.7	59	61.9	19.7	59	80.6	15.7
BORAN	54	57.0	21.0	55	13.7	17.2	54	59.1	21.1	54	70.7	17.2
BURJI	52	52.9	22.1	54	16.6	18.0	52	54.7	23.0	52	69.5	18.8
SAMBURU	107	59.0	21.7	43	16.5	19.2	42	60.9	21.7	42	75.9	16.0
KADJIADO MAASAI	149	56.1	22.3	150	16.1	19.2	149	58.0	22.8	149	72.2	17.1
KONY	23	45.4	17.0	23	7.7	10.6	23	47.3	17.9	23	53.1	23.4
NANDI	49	55.0	21.1	50	11.6	18.9	49	55.8	21.5	49	68.1	15.1
KIPSIGIS	43	56.8	21.5	43	15.2	20.8	41	58.5	23.1	43	72.0	18.0
TUGEN	99	56.2	16.3	99	11.5	14.8	98	57.4	16.7	98	67.4	26.6
KEYO	50	51.9	19.8	50	9.8	16.8	50	52.9	20.5	50	61.7	13.3
MARAKWET	56	52.6	20.5	56	10.5	14.7	56	53.4	20.9	56	63.1	31.0
POKOT	52	53.9	20.5	52	12.6	17.8	52	54.8	20.7	52	66.8	34.1
ITESO	46	56.8	20.5	46	16.0	16.7	46	58.8	20.1	46	72.9	12.7
TURKANA	39	61.6	19.3	39	16.7	26.1	38	63.7	20.2	38	78.1	62.0
LUO	107	57.3	19.5	106	17.4	23.7	106	59.4	21.3	106	74.7	39.4
GUSII	49	59.0	23.1	51	17.0	21.9	49	61.3	23.5	49	77.6	41.2
TIRIKI	25	60.9	19.9	25	14.8	14.4	25	63.6	19.4	25	75.8	29.0
MARAGOLI	24	56.3	14.4	24	13.0	17.0	24	59.1	15.4	24	69.9	26.1
NUNYORE	20	51.5	15.5	20	14.2	15.7	20	55.5	16.6	20	67.8	27.7
TEAKIO	15	51.3	20.5	15	11.1	15.2	15	52.4	20.4	15	62.4	31.3
MARAMA	25	59.4	20.6	25	19.1	22.2	25	62.1	22.6	25	78.5	17.9
WANGA	23	49.9	20.8	23	12.2	14.1	23	51.0	21.4	23	62.1	12.0
MARACH	23	56.4	22.0	24	13.1	18.7	23	58.3	23.3	23	70.1	17.0
NUKHAYO	25	54.8	16.2	25	11.5	20.2	25	56.4	16.6	25	66.7	11.1
SAMIA	26	64.6	18.1	26	18.8	21.8	26	66.5	19.8	26	82.8	56.9
NUTSOTSO	27	52.2	19.0	27	10.4	17.3	27	54.9	21.2	27	62.6	31.2
NUNYALA	24	55.8	18.7	25	16.8	21.6	24	59.3	20.6	24	73.1	18.4
KAMBA	26	58.9	18.7	26	10.8	12.3	26	56.9	18.7	26	65.7	36.9
NUKUSU	22	41.6	17.0	22	7.1	10.7	22	45.3	18.0	22	50.7	24.6
KIAMBU KIKUYU	37	56.0	27.2	37	14.4	19.9	37	57.3	27.2	37	70.4	41.7
MURANGA KIKUYU	45	52.2	23.2	45	12.3	17.2	45	53.4	24.0	45	64.5	35.8
NYERI KIKUYU	49	55.3	20.5	50	10.8	14.3	48	56.4	20.9	49	66.1	31.4
NDIA	64	57.5	21.0	66	15.1	19.7	64	58.9	22.5	64	71.0	37.5
KAMBA	39	64.3	18.3	41	16.8	16.2	39	67.7	19.2	39	81.6	28.6
EMUU	72	56.0	19.6	72	14.1	15.1	72	57.5	20.5	72	70.1	31.1
MUSIRE	65	51.1	18.9	64	8.1	12.0	64	53.8	19.1	64	61.2	26.4
CHUKA	51	56.2	21.8	58	13.9	16.8	51	57.7	24.0	51	69.9	38.4
MUTHAMBI	70	52.0	17.4	78	13.5	14.9	70	53.4	17.7	70	64.5	26.9
MWIMBI	40	55.6	21.4	42	14.9	15.6	40	57.8	21.9	40	71.0	11.0
IGOJI	90	56.0	23.7	90	13.3	14.5	88	58.4	23.7	88	68.7	35.5
IMENTI	39	51.0	21.0	38	11.7	14.8	38	51.2	21.4	38	62.1	31.7
TIGANIA	36	58.6	23.2	36	9.2	13.7	36	55.2	23.3	36	63.8	32.8
IGEMBE	32	56.4	24.5	32	9.2	10.8	32	57.7	24.9	32	65.6	32.7
THARAKA	46	57.5	21.5	46	16.2	17.1	46	59.4	22.2	46	73.7	32.7
POKOMO	88	55.5	22.4	90	15.1	17.2	88	58.0	23.2	88	70.1	15.6
GIRIAMA	33	51.8	22.9	33	15.3	17.4	33	54.9	24.4	33	67.1	16.7
CHONYI	33	51.6	21.0	33	11.8	14.1	33	55.3	23.5	33	66.9	33.5
MIJIKENDA	27	55.6	21.0	27	14.7	15.5	27	58.0	22.0	27	70.1	11.9
DIGO	97	54.7	20.4	100	20.8	23.9	97	57.5	21.4	97	72.8	40.7
TAITA	45	54.1	21.5	45	13.1	17.3	45	56.0	22.1	45	67.4	36.1
TAVETA	46	58.2	21.7	46	15.9	17.9	46	55.5	21.5	46	70.1	35.1

Left Hand

POPULATION	TOTAL RADIAL			TOTAL ULNAR			TOTAL UNILATERAL			TOTAL ABSOLUTE		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD
SOMALI	99	57.4	19.8	101	18.5	19.4	99	59.5	20.1	99	76.0	18.4
PENDILLE	44	59.6	18.2	46	23.0	20.2	43	62.1	18.1	44	81.5	33.9
GABRA	59	55.1	20.7	61	20.7	21.1	59	59.1	21.1	59	79.8	16.0
BORAN	56	50.1	22.2	58	16.1	19.7	56	51.5	23.4	56	65.8	16.7
BURJI	54	49.3	22.1	55	21.6	22.1	54	51.5	23.1	54	73.7	41.4
SAMBURU	40	53.1	24.9	41	18.8	20.4	40	55.9	23.7	40	72.4	41.0
KADJIADO MAASAI	147	49.9	23.2	149	19.5	21.3	147	53.9	24.2	147	69.3	40.0
KONY	23	41.0	15.0	23	8.9	12.3	23	43.9	16.2	23	49.9	23.1
NANDI	50	50.0	22.2	50	18.7	21.4	50	53.6	22.9	50	68.7	39.2
KIPSIGIS	43	50.7	22.3	43	16.1	19.6	43	52.6	23.8	43	66.8	30.9
TUGEN	98	48.9	19.7	99	13.7	15.5	89	51.9	19.4	89	62.9	23.8
KEYO	50	46.3	21.4	50	14.9	18.8	50	49.0	21.1	50	61.2	15.9
MARAKWET	56	45.3	21.0	56	18.1	17.9	56	47.5	21.3	56	59.4	14.6
POKOT	49	51.5	21.7	50	17.3	19.9	49	53.1	24.1	49	69.1	39.7
ITESO	47	49.2	19.5	47	18.6	19.1	47	51.4	20.0	47	67.9	16.7
TURKANA	41	51.8	21.9	42	19.2	27.7	41	55.9	24.2	41	71.1	65.0
LUO	107	52.6	20.9	107	20.1	24.0	107	56.1	22.7	107	72.7	40.7
GUSII	50	50.5	25.1	51	21.2	23.4	50	54.3	25.1	50	71.5	44.0
TIRIKI	25	55.5	20.0	25	19.2	21.4	25	59.2	19.7	25	74.5	30.3
MARAGOLI	24	49.7	15.5	24	17.6	17.2	24	51.1	15.5	24	69.1	26.6
NUNYORE	19	44.2	21.6	19	9.1	11.5	19	45.6	23.4	19	53.3	30.6
TEAKIO	15	48.9	20.2	15	14.7	20.6	15	50.5	20.7	15	61.5	30.1
MARAMA	25	54.1	19.9	25	22.1	24.6	25	56.9	22.0	25	76.8	60.5
WANGA	24	46.8	21.1	24	15.8	19.4	24	49.3	22.9	24	56.6	17.0
MARACH	23	47.3	22.6	24	17.8	19.0	23	51.4	22.8	23	65.8	18.4
NUKHAYO	26	44.6	17.2	26	14.6	21.8	26	47.2	18.4	26	59.2	14.8
SAMIA	26	58.4	21.1	26	20.4	23.4	26	61.2	22.5	26	84.8	61.1
NUTSOTSO	25	42.0	16.8	26	18.6	21.5	25	46.4	21.0	25	59.6	32.1
NUNYALA	23	51.5	24.8	24	16.8	21.5	23	55.6	25.5	23	67.0	42.0
KAMBA	26	48.0	20.9	26	11.8	13.7	26	51.7	20.1	25	59.0	28.3
NUKUSU	22	38.9	18.1	24	11.8	13.6	22	41.5	19.8	22	49.4	28.6
KIAMBU KIKUYU	38	49.7	25.4	37	20.1	25.7	37	54.8	28.2	37	70.5	47.9
MURANGA KIKUYU	44	44.5	24.5	45	15.0	17.2	44	49.0	26.2	44	59.1	37.0
NYERI KIKUYU	49	47.2	21.9	51	15.6	17.8	49	50.7	22.6	49	62.7	34.7
NDIA	63	50.7	21.1	66	17.2	20.5	62	54.0	22.5	62	69.2	38.2
KAMBA	42	56.9	17.5	42	19.1	18.9	42	60.3	19.0	42	76.0	32.3
EMUU	72	49.6	20.0	72	18.9	19.5	72	53.4	21.8	72	69.5	35.3
MUSIRE	59	41.9	19.2	64	13.4	16.0	59	46.0	20.0	59	57.7	30.0
CHUKA	54	49.9	20.0	58	22.7	21.6	51	56.3	21.3	51	71.7	36.6
MUTHAMBI	76	44.1	19.1	78	16.5	15.5	73	47.1	19.7	73	60.1	11.0
MWIMBI	43	46.8	20.2	42	16.8	18.0	42	50.6	21.9	42	63.4	18.9
IGOJI	88	49.4	23.3	91	18.2	18.7	85	52.1	24.2	85	67.6	32.9
IMENTI	39	41.9	21.2	39	17.9	18.7	39	45.6	22.5	39	59.3	35.4
TIGANIA	36	48.7	21.0	36	15.2	21.1	36	50.5	24.0	36	63.9	39.0
IGEMBE	33	48.3	24.0	33	14.6	16.4	33	51.4	24.7	33	62.9	36.1
THARAKA	46	54.5	21.5	46	20.4	18.5	46	57.8	22.4	46	75.0	34.4
POKOMO	87	48.7	24.1	88	17.2	19.7	86	52.9	24.6	86	69.1	38.4
GIRIAMA	34	41.8	22.1	34	18.8	19.6	34	46.1	23.2	34	62.6	37.5
CHONYI	33	47.8	23.1	33	15.2	15.2	33	51.5	25.4	33	62.9	36.1
MIJIKENDA	26	49.7	21.6	27	19.1	20.8	26	54.1	22.6	26	68.7	38.5
DIGO	96	50.2	20.1	97	20.5	21.7	93	53.8	21.7	93	68.7	40.7
TAITA	44	44.9	22.8	45	18.9	20.8	44	49.7	22.9	44	61.9	39.2
TAVETA	47	49.1	21.4	47	20.1	21.2	47	51.0	21.6	47	69.5	39.6

Table AP. 1.4.19 : Distribution of finger pattern intensity in Kenyan minimal ethnic population samples (right hand males).

POPULATION	FINGER ONE			FINGER TWO			FINGER THREE			FINGER FOUR			FINGER FIVE		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD
SOMALI	223	1.480	0.576	223	1.386	0.540	223	1.197	0.431	223	1.484	0.536	223	1.188	0.414
RENDILLE	153	1.490	0.527	153	1.412	0.556	152	1.217	0.501	151	1.510	0.527	149	1.128	0.391
GABBRA	27	1.444	0.577	27	1.407	0.501	27	1.185	0.396	26	1.500	0.510	27	1.148	0.362
BORAN	127	1.425	0.598	126	1.254	0.619	127	1.134	0.461	127	1.465	0.546	126	1.143	0.414
BURJI	64	1.516	0.534	64	1.313	0.614	64	1.234	0.427	64	1.500	0.504	64	1.250	0.436
SAMBURU	87	1.425	0.563	87	1.276	0.521	87	1.115	0.416	86	1.349	0.526	86	1.198	0.401
KADJIADO MAASAI	63	1.365	0.576	63	1.206	0.544	63	1.190	0.470	63	1.508	0.504	63	1.206	0.408
NAROK MAASAI	35	1.286	0.622	36	1.278	0.615	36	1.139	0.543	36	1.389	0.599	36	1.139	0.351
NGWESI	41	1.415	0.547	41	1.415	0.547	41	1.268	0.449	41	1.415	0.499	41	1.146	0.358
MUKOGODO	38	1.447	0.555	38	1.526	0.557	38	1.132	0.475	38	1.579	0.552	38	1.184	0.393
KONY	37	1.081	0.547	37	1.081	0.595	37	0.973	0.372	37	1.324	0.530	37	1.135	0.481
NANDI	52	1.365	0.525	52	1.327	0.550	52	1.212	0.457	52	1.385	0.630	51	1.196	0.448
KIPSIGIS	55	1.345	0.552	56	1.304	0.570	56	1.196	0.483	56	1.500	0.572	56	1.196	0.444
TUGEN	106	1.330	0.511	107	1.262	0.572	107	1.103	0.454	107	1.364	0.521	107	1.150	0.358
KEYU	50	1.240	0.517	50	1.360	0.525	50	1.060	0.314	50	1.420	0.538	50	1.160	0.422
MARAKWET	50	1.360	0.525	50	1.380	0.530	50	1.180	0.388	50	1.460	0.503	50	1.180	0.388
POKOT	45	1.222	0.517	45	1.378	0.535	45	1.111	0.438	45	1.378	0.576	45	1.111	0.383
ITESO	52	1.269	0.598	52	1.192	0.525	52	1.077	0.334	52	1.288	0.536	52	1.096	0.298
TURKANA	66	1.515	0.614	65	1.323	0.640	66	1.152	0.533	66	1.530	0.613	64	1.234	0.463
LUO	169	1.408	0.550	170	1.276	0.499	170	1.159	0.440	170	1.406	0.538	167	1.132	0.357
GUSII	50	1.400	0.606	49	1.245	0.560	49	1.184	0.441	49	1.347	0.481	49	1.204	0.407
TIRIKI	26	1.385	0.697	26	1.269	0.724	26	1.154	0.464	26	1.423	0.504	26	1.154	0.368
MARAGOLI	26	1.231	0.652	26	1.154	0.464	26	1.077	0.392	26	1.346	0.562	26	1.077	0.392
BUNYORE	30	1.433	0.504	30	1.400	0.563	30	1.300	0.466	29	1.517	0.509	30	1.167	0.379
IDAKHO	39	1.205	0.522	39	1.308	0.521	39	1.179	0.389	39	1.359	0.486	39	1.077	0.270
MARAMA	25	1.480	0.586	25	1.600	0.500	25	1.320	0.557	25	1.660	0.476	25	1.240	0.436
WANGA	25	1.280	0.542	25	1.240	0.523	25	1.000	0.0	25	1.440	0.507	25	1.080	0.277
MARACH	25	1.240	0.523	25	1.360	0.638	25	1.200	0.577	25	1.480	0.586	25	1.120	0.440
BUKHAYO	22	1.227	0.612	22	1.227	0.528	22	0.955	0.375	22	1.227	0.528	22	1.091	0.294
SANIA	24	1.458	0.658	24	1.208	0.658	24	1.042	0.550	24	1.417	0.504	24	1.083	0.408
BUTSOTSO	20	1.450	0.510	20	1.350	0.489	20	1.200	0.410	20	1.550	0.510	20	1.200	0.410
BUNYALA	25	1.520	0.586	25	1.200	0.500	25	1.040	0.539	25	1.280	0.614	25	1.120	0.440
KABRAS	26	1.538	0.647	25	1.480	0.510	25	1.200	0.408	26	1.462	0.508	26	1.154	0.368
BUKUSU	58	1.310	0.627	60	1.250	0.571	61	1.131	0.465	61	1.459	0.535	61	1.131	0.427
KIAMBU KIKUYU	64	1.313	0.560	64	1.328	0.536	64	1.188	0.432	64	1.484	0.504	64	1.109	0.403
MURANGA KIKUYU	55	1.455	0.603	54	1.185	0.517	55	1.182	0.434	55	1.455	0.538	55	1.182	0.434
NYERI KIKUYU	49	1.367	0.668	48	1.333	0.630	49	1.163	0.553	49	1.327	0.591	49	1.082	0.344
NDIA	56	1.429	0.599	56	1.232	0.539	56	1.089	0.345	56	1.286	0.494	56	1.089	0.345
KAMBA	75	1.373	0.588	76	1.237	0.538	75	1.132	0.442	77	1.364	0.484	76	1.158	0.367
EMBU	87	1.425	0.563	87	1.299	0.508	87	1.080	0.348	87	1.241	0.481	87	1.092	0.291
MBERE	63	1.460	0.618	63	1.206	0.626	63	1.127	0.523	63	1.508	0.504	63	1.127	0.336
CHUKA	75	1.453	0.576	75	1.293	0.588	75	1.200	0.435	75	1.400	0.493	75	1.107	0.311
MUTHAMBI	76	1.474	0.553	76	1.342	0.530	76	1.132	0.411	78	1.342	0.478	76	1.184	0.423
MWIMBI	59	1.305	0.500	60	1.217	0.524	60	1.033	0.410	60	1.233	0.500	60	1.050	0.287
IGOJI	78	1.487	0.575	78	1.231	0.533	78	1.077	0.419	75	1.320	0.524	78	1.077	0.352
IMENTI	61	1.443	0.620	61	1.279	0.552	61	1.115	0.412	61	1.410	0.496	61	1.197	0.401
TIGANIA	64	1.344	0.623	64	1.297	0.609	64	1.047	0.415	64	1.406	0.555	64	1.125	0.333
IGEMBE	65	1.431	0.529	66	1.258	0.506	66	1.106	0.397	65	1.477	0.503	66	1.167	0.376
THARAKA	54	1.407	0.714	54	1.296	0.603	54	1.167	0.505	54	1.333	0.549	54	1.185	0.479
POKOMO	93	1.333	0.614	93	1.258	0.569	93	1.118	0.439	93	1.376	0.509	93	1.161	0.398
MALAKOTE	40	1.425	0.501	39	1.282	0.605	39	1.179	0.451	39	1.436	0.502	40	1.250	0.439
GIRIAMA	49	1.469	0.680	49	1.327	0.555	49	1.245	0.480	49	1.408	0.497	49	1.061	0.242
CHONYI	79	1.456	0.573	79	1.278	0.598	79	1.038	0.338	79	1.468	0.527	79	1.152	0.361
MIJ MJI KENDA	32	1.438	0.564	32	1.344	0.602	32	1.250	0.568	32	1.406	0.499	32	1.188	0.397
DIGO	116	1.500	0.626	116	1.388	0.571	116	1.207	0.502	116	1.448	0.533	116	1.138	0.371
TAITA	55	1.273	0.622	55	1.200	0.558	55	1.018	0.360	55	1.309	0.466	55	1.036	0.189
TAVETA	57	1.316	0.659	59	1.237	0.678	59	0.983	0.473	59	1.288	0.589	59	1.017	0.347

Table AP. 1.4.20 : Distribution of finger pattern intensity in Kenyan minimal ethnic population samples (left hand males).

POPULATION	FINGER ONE			FINGER TWO			FINGER THREE			FINGER FOUR			FINGER FIVE		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD
SOMALI	224	1.406	0.519	224	1.321	0.539	224	1.188	0.502	224	1.446	0.533	224	1.192	0.406
RENDILLE	152	1.434	0.583	151	1.391	0.588	151	1.212	0.524	152	1.395	0.517	151	1.106	0.368
GABBRA	27	1.296	0.465	27	1.407	0.501	27	1.259	0.447	27	1.333	0.480	27	1.074	0.267
BORAN	127	1.276	0.600	127	1.276	0.638	127	1.150	0.536	127	1.346	0.525	127	1.173	0.420
BURJI	64	1.531	0.563	64	1.391	0.581	64	1.313	0.531	64	1.547	0.532	64	1.266	0.479
SAMBURU	85	1.341	0.589	85	1.329	0.543	87	1.149	0.471	87	1.379	0.534	87	1.230	0.423
KAOJIADO MAASAI	63	1.270	0.574	63	1.238	0.588	63	1.111	0.479	63	1.429	0.560	63	1.238	0.429
NAROK MAASAI	36	1.194	0.577	36	1.278	0.659	36	1.083	0.554	36	1.333	0.586	36	1.028	0.291
NGWESI	40	1.425	0.598	40	1.350	0.533	40	1.250	0.494	40	1.475	0.506	40	1.075	0.350
MUKOGODO	38	1.421	0.552	38	1.342	0.627	38	1.184	0.563	38	1.579	0.500	38	1.237	0.490
KONY	37	1.054	0.621	37	1.081	0.547	37	0.892	0.567	37	1.297	0.671	37	1.081	0.433
NANDI	52	1.173	0.474	52	1.308	0.579	52	1.212	0.457	52	1.481	0.542	52	1.115	0.323
KIPSIGIS	56	1.232	0.603	55	1.309	0.605	55	1.291	0.567	55	1.491	0.605	55	1.200	0.447
TUGEN	108	1.259	0.570	107	1.224	0.520	107	1.140	0.504	108	1.352	0.480	108	1.157	0.366
KEYO	50	1.220	0.507	50	1.280	0.497	49	1.143	0.408	50	1.380	0.530	50	1.120	0.385
MARAKWET	50	1.180	0.560	50	1.360	0.485	50	1.200	0.571	50	1.460	0.503	50	1.160	0.422
POKOT	45	1.111	0.438	44	1.250	0.534	45	1.067	0.393	44	1.295	0.553	45	1.022	0.260
TESO	52	1.173	0.585	52	1.115	0.471	52	1.019	0.420	52	1.327	0.513	52	1.173	0.382
TURKANA	66	1.439	0.611	65	1.215	0.649	66	1.061	0.551	66	1.424	0.609	66	1.182	0.426
LUO	170	1.282	0.598	170	1.294	0.529	170	1.182	0.495	170	1.382	0.534	170	1.129	0.370
GUSII	50	1.260	0.565	50	1.260	0.527	50	1.120	0.435	50	1.460	0.503	50	1.140	0.351
TIRIKI	26	1.269	0.667	26	1.154	0.613	26	1.115	0.568	26	1.269	0.533	26	1.115	0.326
MARAGOLI	26	1.231	0.652	26	1.231	0.514	26	1.115	0.516	26	1.308	0.549	26	1.038	0.344
HUNYORE	30	1.333	0.606	28	1.429	0.504	30	1.167	0.379	30	1.400	0.498	30	1.067	0.254
SOAKMO	39	1.051	0.560	39	1.154	0.489	39	1.128	0.409	39	1.333	0.478	39	1.077	0.270
MARAMA	25	1.280	0.614	25	1.400	0.577	25	1.240	0.523	25	1.560	0.507	25	1.200	0.408
WANGA	25	1.320	0.476	25	1.200	0.500	25	1.040	0.200	25	1.320	0.476	25	1.040	0.351
MARACH	25	1.160	0.554	25	1.280	0.614	25	1.200	0.577	25	1.360	0.569	25	1.160	0.473
BUKHAYO	23	1.217	0.600	23	1.217	0.600	23	1.000	0.426	23	1.304	0.470	23	1.087	0.417
SAMIA	24	1.375	0.647	24	1.250	0.676	24	1.000	0.511	24	1.167	0.381	24	1.083	0.282
BUTSOTSO	20	1.100	0.553	20	1.100	0.308	20	1.100	0.447	20	1.550	0.510	20	1.100	0.308
BUNYALA	25	1.440	0.651	25	1.240	0.523	25	1.080	0.572	25	1.240	0.436	24	1.167	0.381
KABRAS	26	1.423	0.703	26	1.385	0.496	26	1.154	0.464	26	1.308	0.471	26	1.077	0.272
BUKUSU	59	1.203	0.581	61	1.213	0.520	61	1.082	0.458	61	1.344	0.544	61	1.066	0.359
KIAMBU KIKUYU	64	1.313	0.531	64	1.328	0.565	64	1.125	0.549	63	1.413	0.528	64	1.109	0.403
MURANGA KIKUYU	56	1.446	0.601	56	1.357	0.554	56	1.089	0.394	56	1.464	0.538	56	1.143	0.444
NYERI KIKUYU	49	1.224	0.685	49	1.224	0.587	49	1.163	0.590	48	1.375	0.606	49	1.102	0.368
NDIA	56	1.250	0.640	56	1.214	0.624	55	1.145	0.488	55	1.291	0.533	56	1.125	0.429
KAMBA	75	1.373	0.610	77	1.221	0.576	77	1.156	0.540	77	1.403	0.494	76	1.211	0.410
EMBU	87	1.253	0.633	87	1.184	0.861	87	1.057	0.491	87	1.207	0.609	87	1.057	0.279
MBERE	63	1.365	0.604	63	1.286	0.607	63	1.222	0.522	63	1.444	0.532	63	1.127	0.381
CHUKA	75	1.493	0.578	75	1.253	0.496	75	1.227	0.452	75	1.400	0.493	75	1.080	0.273
MUTHAMBI	76	1.421	0.572	75	1.227	0.481	76	1.132	0.472	76	1.368	0.486	76	1.158	0.367
MWIMBI	61	1.328	0.598	60	1.200	0.546	61	1.082	0.493	61	1.262	0.513	61	1.082	0.331
IGOJI	78	1.359	0.602	77	1.299	0.630	78	1.192	0.511	78	1.333	0.526	78	1.090	0.330
IMENTI	61	1.393	0.640	61	1.311	0.620	60	1.117	0.490	61	1.377	0.553	61	1.164	0.373
TIGANIA	64	1.297	0.582	63	1.190	0.535	64	1.016	0.418	64	1.281	0.519	64	1.094	0.344
IGEMBE	65	1.338	0.538	64	1.172	0.490	66	1.197	0.471	66	1.409	0.495	66	1.121	0.329
THARAKA	54	1.444	0.691	53	1.208	0.600	54	1.130	0.478	54	1.315	0.577	54	1.130	0.436
POKOMO	93	1.301	0.622	92	1.283	0.635	93	1.097	0.553	93	1.258	0.509	93	1.108	0.403
MALAKOTE	41	1.341	0.480	41	1.146	0.527	41	1.098	0.436	41	1.244	0.435	41	1.171	0.381
GIRIAMA	48	1.438	0.741	48	1.271	0.574	49	1.102	0.421	49	1.347	0.481	49	1.082	0.277
CHONYI	79	1.354	0.621	77	1.195	0.650	79	1.101	0.411	78	1.410	0.545	79	1.127	0.335
MIJ MJI KENDA	32	1.469	0.567	32	1.219	0.659	32	1.250	0.568	32	1.406	0.615	32	1.156	0.448
OTGO	116	1.448	0.623	116	1.293	0.560	116	1.216	0.507	116	1.431	0.531	116	1.086	0.338
TAITA	55	1.273	0.560	54	1.074	0.544	55	1.073	0.466	55	1.255	0.440	55	1.018	0.304
TAVETA	57	1.281	0.675	58	1.103	0.552	57	1.018	0.551	59	1.186	0.541	59	0.966	0.414

Table AP. 1.4.21 : Distribution of finger pattern intensity in Kenyan minimal ethnic population samples (right hand females).

POPULATION	FINGER ONE			FINGER TWO			FINGER THREE			FINGER FOUR			FINGER FIVE		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD
SOMALI	103	1.485	0.592	103	1.311	0.524	103	1.126	0.518	103	1.379	0.507	103	1.155	0.390
RENDILLE	45	1.489	0.589	46	1.391	0.577	46	1.261	0.575	46	1.478	0.567	46	1.130	0.341
GABBRA	63	1.444	0.532	62	1.387	0.523	63	1.190	0.503	61	1.508	0.536	62	1.210	0.410
BORAN	58	1.155	0.586	58	1.207	0.614	58	1.086	0.506	58	1.224	0.531	58	1.069	0.317
BURJI	57	1.421	0.653	57	1.263	0.642	57	1.088	0.544	57	1.368	0.555	57	1.123	0.466
SAMBURU	46	1.326	0.560	44	1.227	0.565	45	1.200	0.548	45	1.400	0.539	45	1.200	0.457
KADJIADO MAASAI	150	1.227	0.667	149	1.255	0.628	150	1.093	0.595	149	1.282	0.582	150	1.107	0.451
KONY	23	1.000	0.522	23	0.957	0.367	23	1.043	0.367	23	1.391	0.499	23	1.043	0.209
NANDI	50	1.220	0.679	50	1.220	0.648	50	1.160	0.548	50	1.360	0.563	50	1.120	0.435
KIPSIGIS	43	1.279	0.630	43	1.279	0.591	43	1.093	0.570	43	1.326	0.566	43	1.023	0.344
TUGEN	101	1.307	0.561	101	1.188	0.463	101	1.119	0.382	101	1.376	0.507	101	1.109	0.344
KEYO	50	1.220	0.616	50	1.260	0.487	50	1.140	0.452	50	1.400	0.535	50	1.100	0.364
MARAKWET	56	1.107	0.652	56	1.161	0.596	56	1.071	0.499	56	1.429	0.535	56	1.268	0.447
POKOT	53	1.151	0.601	52	1.288	0.605	53	1.151	0.601	53	1.396	0.566	53	1.075	0.474
ITESO	47	1.213	0.587	47	1.298	0.548	47	1.170	0.481	47	1.383	0.573	47	1.043	0.292
TURKANA	42	1.190	0.594	43	1.163	0.574	43	1.116	0.498	43	1.279	0.549	43	1.093	0.426
LUO	107	1.262	0.649	107	1.327	0.563	107	1.178	0.511	107	1.346	0.568	107	1.131	0.391
GUSII	51	1.353	0.658	51	1.235	0.681	51	1.098	0.539	51	1.333	0.554	51	1.176	0.434
TIRIKI	25	1.360	0.490	25	1.280	0.542	25	1.200	0.500	25	1.280	0.542	25	1.080	0.277
MARAGOLI	24	1.458	0.658	24	1.208	0.415	24	1.125	0.448	24	1.333	0.482	24	1.083	0.282
BUNYORE	20	1.450	0.605	19	1.158	0.501	20	0.850	0.366	20	1.000	0.324	20	1.050	0.224
IDAKHO	15	1.333	0.617	15	1.200	0.561	15	1.067	0.258	15	1.333	0.617	15	1.000	0.378
MARAMA	25	1.320	0.690	25	1.320	0.627	25	1.240	0.597	25	1.320	0.476	25	1.240	0.436
WANGA	24	1.292	0.751	24	1.042	0.624	24	1.000	0.590	24	1.208	0.415	24	1.083	0.282
MARACH	24	1.208	0.658	24	1.375	0.495	24	1.083	0.408	24	1.375	0.495	24	1.125	0.338
BUKHAYO	26	1.231	0.514	26	1.192	0.567	26	1.038	0.445	26	1.308	0.549	26	1.154	0.368
SAMIA	26	1.192	0.567	26	1.385	0.637	26	1.154	0.464	26	1.308	0.618	26	1.269	0.452
BUTSOTSO	27	1.148	0.662	27	1.259	0.594	27	1.148	0.534	27	1.333	0.555	27	1.074	0.385
BUNYALA	25	1.280	0.678	24	1.000	0.511	25	1.040	0.455	25	1.160	0.554	25	1.080	0.400
KABRAS	26	1.077	0.560	26	0.962	0.599	26	0.885	0.516	26	1.115	0.516	26	0.962	0.196
BUKUSU	28	1.269	0.604	29	1.138	0.516	29	1.103	0.489	29	1.103	0.489	28	1.036	0.331
KIAMBU KIKUYU	38	1.211	0.622	38	1.211	0.664	38	1.053	0.517	38	1.289	0.611	38	1.105	0.559
MURANGA KIKUYU	46	1.326	0.598	46	1.109	0.640	46	0.978	0.577	46	1.283	0.564	46	1.000	0.365
NYERI KIKUYU	51	1.235	0.619	51	1.196	0.633	51	1.098	0.500	51	1.314	0.583	51	1.098	0.300
NDIA	66	1.303	0.607	66	1.242	0.556	66	1.106	0.500	66	1.409	0.526	66	1.136	0.346
KAMBA	42	1.405	0.544	42	1.286	0.554	42	1.143	0.472	42	1.333	0.526	42	1.143	0.354
EMBU	72	1.403	0.643	72	1.292	0.542	72	1.042	0.458	72	1.403	0.573	72	1.097	0.381
MHERE	65	1.277	0.573	65	1.138	0.556	65	1.000	0.468	64	1.188	0.531	65	1.062	0.348
CHUKA	60	1.533	0.566	59	1.356	0.637	60	1.083	0.561	60	1.383	0.524	59	1.203	0.406
MUTHAMBI	80	1.350	0.597	80	1.262	0.631	80	1.200	0.513	80	1.400	0.493	80	1.162	0.371
MWIMBI	43	1.302	0.674	43	1.372	0.618	43	1.047	0.375	43	1.233	0.527	43	1.116	0.391
TIGOJI	95	1.368	0.653	95	1.211	0.667	95	1.084	0.519	95	1.284	0.577	94	1.106	0.427
IMENTI	39	1.308	0.655	39	1.179	0.644	39	1.077	0.532	39	1.282	0.647	39	1.103	0.304
TIGANIA	36	1.306	0.577	36	1.083	0.604	36	1.139	0.543	36	1.250	0.554	36	1.111	0.319
IGEMBE	33	1.212	0.600	33	1.182	0.584	33	0.970	0.394	33	1.303	0.585	33	1.182	0.465
THARAKA	46	1.543	0.622	46	1.196	0.619	46	1.087	0.551	46	1.370	0.572	46	1.130	0.400
POKOMO	90	1.256	0.728	90	1.144	0.646	90	1.100	0.542	90	1.278	0.581	90	1.089	0.386
GIRIAMA	34	1.294	0.760	34	1.235	0.654	35	1.000	0.485	35	1.257	0.443	38	1.079	0.273
CHONYI	13	1.154	0.689	13	1.231	0.599	13	1.154	0.555	13	1.077	0.494	13	1.000	0.408
MID MJI KENDA	27	1.259	0.526	26	1.308	0.618	27	1.037	0.517	27	1.481	0.509	27	1.185	0.396
DIGO	100	1.560	0.656	100	1.500	0.611	100	1.310	0.581	100	1.500	0.541	100	1.100	0.333
TAITA	45	1.422	0.583	45	1.156	0.601	45	1.044	0.367	45	1.333	0.522	45	1.089	0.358
TAVETA	47	1.383	0.644	48	1.333	0.630	48	1.188	0.607	48	1.292	0.617	48	1.083	0.404

Table AP. 1.4.22 : Distribution of finger pattern intensity in Kenyan minimal ethnic population samples (left hand females).

POPULATION	FINGER ONE			FINGER TWO			FINGER THREE			FINGER FOUR			FINGER FIVE		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD
SOMALI	103	1.417	0.569	103	1.291	0.554	103	1.146	0.406	103	1.388	0.490	103	1.194	0.397
RENDILLE	45	1.533	0.505	44	1.182	0.495	43	1.116	0.391	44	1.523	0.505	45	1.089	0.417
GABBRA	63	1.429	0.499	62	1.387	0.491	62	1.177	0.426	63	1.476	0.503	63	1.206	0.408
BORAN	57	1.263	0.613	57	1.211	0.619	57	1.053	0.440	56	1.179	0.471	57	1.053	0.294
BURJI	56	1.411	0.596	57	1.175	0.601	56	1.089	0.438	57	1.386	0.526	57	1.105	0.409
SAMBURU	44	1.409	0.497	44	1.273	0.499	44	1.114	0.443	44	1.386	0.493	44	1.091	0.362
KADJIADO MAASAI	150	1.360	0.583	150	1.300	0.576	150	1.053	0.446	150	1.287	0.548	150	1.107	0.436
KONY	23	1.000	0.522	23	1.087	0.417	23	1.043	0.367	23	1.304	0.470	23	1.087	0.288
NANDI	50	1.200	0.639	50	1.260	0.565	50	1.040	0.402	50	1.320	0.551	50	1.020	0.428
KIPSIGIS	43	1.233	0.611	43	1.209	0.600	43	1.070	0.457	43	1.279	0.549	43	1.047	0.305
TUGEN	102	1.363	0.523	102	1.196	0.446	102	1.088	0.318	102	1.353	0.480	102	1.049	0.217
KEYO	50	1.120	0.594	50	1.180	0.438	50	0.980	0.319	50	1.280	0.497	50	1.020	0.247
MARAKWET	56	1.214	0.530	56	1.071	0.535	56	1.018	0.447	56	1.375	0.558	56	1.161	0.371
POKOT	53	1.189	0.483	53	1.302	0.503	53	1.094	0.460	52	1.346	0.520	53	1.094	0.405
ITESO	47	1.404	0.577	47	1.255	0.570	47	1.149	0.510	47	1.298	0.507	47	1.043	0.292
TURKANA	43	1.279	0.504	42	1.190	0.505	42	1.143	0.472	42	1.381	0.539	43	1.070	0.338
LUO	107	1.224	0.555	107	1.327	0.510	107	1.168	0.466	107	1.355	0.571	107	1.150	0.408
GUSII	51	1.431	0.539	51	1.275	0.568	51	1.078	0.483	50	1.280	0.497	51	1.098	0.361
TIRIKI	25	1.240	0.523	25	1.360	0.569	25	1.080	0.400	25	1.280	0.542	25	1.120	0.332
MARAGOLI	24	1.333	0.565	24	1.125	0.448	24	1.125	0.448	24	1.333	0.482	24	1.042	0.204
BUNYORE	20	1.600	0.503	20	1.150	0.489	20	1.000	0.324	20	1.200	0.410	20	1.100	0.308
IDAKHO	15	1.333	0.617	15	1.133	0.516	15	1.000	0.378	15	1.333	0.488	15	1.000	0.0
MARAMA	25	1.400	0.577	25	1.280	0.678	25	1.080	0.493	25	1.360	0.490	25	1.120	0.332
WANGA	24	1.250	0.676	24	1.167	0.637	24	1.083	0.504	24	1.208	0.509	24	1.000	0.0
MARACH	24	1.167	0.637	24	1.250	0.532	24	1.042	0.204	24	1.292	0.464	24	1.000	0.295
BUKHAYO	26	1.269	0.452	26	1.192	0.491	26	1.077	0.392	26	1.231	0.514	26	1.077	0.272
SAMIA	26	1.231	0.514	26	1.385	0.571	26	1.115	0.431	26	1.462	0.508	26	1.154	0.464
BUTSOTSO	27	1.148	0.534	27	1.222	0.424	27	1.000	0.392	27	1.148	0.456	27	1.037	0.192
BUNYALA	25	1.280	0.614	25	1.120	0.600	25	1.120	0.440	25	1.200	0.577	25	1.080	0.400
KABRAS	26	1.192	0.694	26	1.038	0.528	26	0.923	0.484	26	1.154	0.464	26	1.000	0.283
BUKUSU	27	1.185	0.557	28	1.143	0.448	29	1.034	0.325	29	1.241	0.511	29	1.103	0.409
KIAMBU KIKUYU	38	1.184	0.609	38	1.211	0.622	38	1.132	0.414	38	1.289	0.565	38	1.132	0.475
MURANGA KIKUYU	46	1.283	0.584	46	1.152	0.595	46	0.978	0.494	46	1.261	0.535	46	1.043	0.419
NYERI KIKUYU	51	1.216	0.577	51	1.294	0.576	51	1.118	0.431	51	1.137	0.491	51	1.039	0.196
NDIA	66	1.394	0.605	66	1.212	0.512	66	1.106	0.397	66	1.318	0.469	66	1.106	0.356
KAMBA	41	1.366	0.536	42	1.310	0.468	42	1.143	0.417	42	1.310	0.517	42	1.048	0.216
EMBU	72	1.444	0.648	72	1.319	0.552	72	1.042	0.391	72	1.250	0.467	72	1.056	0.285
MBERE	66	1.273	0.542	66	1.197	0.533	66	0.970	0.302	66	1.227	0.520	66	1.061	0.298
CHUKA	61	1.410	0.588	61	1.295	0.587	60	1.050	0.429	60	1.300	0.462	60	1.133	0.343
MUTHAMBI	80	1.412	0.589	80	1.275	0.551	80	1.050	0.314	80	1.337	0.476	79	1.127	0.335
MWIMBI	43	1.349	0.650	43	1.302	0.558	43	1.070	0.338	43	1.256	0.492	43	1.047	0.375
IGOJI	95	1.326	0.626	94	1.191	0.610	95	1.042	0.459	95	1.284	0.559	95	1.074	0.334
IMENTI	39	1.385	0.544	39	1.308	0.569	39	1.077	0.422	39	1.256	0.498	39	1.026	0.260
TIGANIA	36	1.333	0.478	36	1.167	0.561	36	1.028	0.377	36	1.139	0.424	36	0.972	0.291
IGEMBE	32	1.188	0.535	33	1.091	0.631	33	0.909	0.292	33	1.242	0.561	33	1.000	0.250
THARAKA	46	1.457	0.657	46	1.261	0.575	46	1.087	0.412	46	1.261	0.535	46	1.022	0.333
POKOMO	90	1.278	0.687	90	1.144	0.610	90	1.022	0.449	90	1.300	0.550	90	1.056	0.313
GIRIAMA	34	1.235	0.699	34	1.235	0.606	34	0.971	0.460	34	1.294	0.462	37	1.108	0.393
CHONYI	13	1.308	0.630	13	1.077	0.494	13	1.231	0.599	13	1.308	0.630	13	1.000	0.408
MIJ MJI KENDA	27	1.370	0.565	27	1.296	0.724	27	1.074	0.474	27	1.333	0.480	27	1.037	0.192
DIGO	100	1.590	0.605	100	1.500	0.577	100	1.260	0.525	100	1.530	0.521	100	1.120	0.383
TAITA	45	1.378	0.576	45	1.089	0.514	45	1.089	0.288	45	1.311	0.468	45	1.089	0.358
TAVETA	47	1.426	0.580	48	1.271	0.610	48	1.042	0.504	48	1.354	0.601	48	1.083	0.347

Table AP. 1.4.23 : Distribution of total arches and total loops in Kenyan minimal ethnic population samples (males).

Total Arches

POPULATION	NO	RIGHT HAND ONE %	TWO %	THREE %	FINGER FOUR %	FIVE %	LEFT HAND ONE %	TWO %	THREE %	FINGER FOUR %	FIVE %
SOMALI	224	4.0	2.2	1.3	1.8	0.9	1.3	4.9	5.4	1.8	0.9
RENDILLE	153	1.3	3.3	3.9	1.3	2.0	4.6	6.0	6.6	1.3	2.6
GABBRA	27	3.7	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BORAN	128	5.5	10.1	4.7	2.4	2.4	7.9	11.0	7.9	2.4	1.6
BURJI	64	1.6	6.3	0.0	0.0	0.0	3.1	3.1	3.1	1.6	1.6
SAMBURU	87	3.4	3.4	3.4	2.3	0.0	5.9	5.9	4.6	2.3	0.0
KADJIADO MAASAI	63	4.8	6.3	3.2	0.0	0.0	6.3	7.9	6.3	3.2	0.0
NAROK MAASAI	37	8.6	8.3	8.3	5.6	0.0	8.3	11.1	11.1	5.6	2.8
NGWESI	41	2.4	2.4	0.0	0.0	0.0	5.0	2.5	2.5	0.0	2.5
MUKOGODO	38	2.6	5.3	5.3	2.6	0.0	2.6	7.9	7.9	0.0	2.6
KONY	37	10.8	13.5	8.1	2.7	5.4	16.2	10.8	21.6	5.4	5.4
NANDI	52	1.9	3.8	1.9	1.9	2.0	3.8	5.8	1.9	3.8	0.0
KIPSIGIS	57	3.6	5.4	5.4	3.6	1.8	8.9	7.3	5.5	5.5	1.8
TUGEN	108	1.9	7.5	5.6	1.9	0.0	6.5	5.6	6.5	0.0	0.0
KEYO	50	4.0	2.0	2.0	2.0	2.0	4.0	4.0	2.0	2.0	2.0
MARAKWET	50	2.0	2.0	0.0	0.0	0.0	8.0	0.0	8.0	0.0	2.0
POKOT	45	4.4	2.2	4.4	4.4	2.2	4.4	6.8	4.4	4.5	2.2
TESO	52	7.7	5.8	1.9	3.8	0.0	9.6	5.8	7.7	1.9	0.0
TURKANA	66	6.1	12.3	7.6	6.1	1.6	8.1	12.3	12.1	6.1	1.5
LUO	170	3.0	2.4	3.5	2.9	0.6	7.6	4.7	4.7	2.4	1.2
GUSII	50	6.0	6.1	2.0	0.0	0.0	8.0	4.0	4.0	0.0	0.0
TIRIKI	26	11.5	15.4	3.8	0.0	0.0	11.5	15.4	15.4	3.8	0.0
MASAGOLI	26	11.5	3.8	3.8	3.8	3.8	11.5	3.8	7.7	3.8	3.8
BUNYORE	30	0.0	3.3	0.0	0.0	0.0	6.7	0.0	0.0	0.0	0.0
IDAKHO	39	5.1	2.6	0.0	0.0	0.0	12.8	5.1	2.6	0.0	0.0
MARAMA	25	4.0	0.0	4.0	0.0	0.0	8.0	4.0	4.0	0.0	0.0
WANGA	25	4.0	4.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	4.0
MARACH	25	4.0	8.0	8.0	4.0	4.0	8.0	8.0	8.0	4.0	4.0
BUKHAYO	23	9.1	4.5	9.1	4.5	0.0	8.7	8.7	8.7	0.0	4.3
SAMIA	24	8.3	12.5	12.5	0.0	4.2	8.3	16.7	12.5	0.0	0.0
BUTSOTSO	20	0.0	0.0	0.0	0.0	0.0	10.0	0.0	5.0	0.0	0.0
BUNYALA	25	4.0	4.0	12.0	8.0	4.0	8.0	8.0	12.0	0.0	0.0
KABRAS	26	7.7	0.0	0.0	0.0	0.0	11.5	0.0	7.7	0.0	0.0
BUKUSU	61	8.6	6.7	4.9	1.6	3.3	8.5	4.9	8.2	3.3	3.3
KIAMBU KIKUYU	65	4.7	3.1	1.6	0.0	3.1	3.1	6.3	9.4	1.6	3.1
MURANGA KIKUYU	56	5.5	5.6	1.8	1.8	1.8	5.4	5.4	5.4	1.8	5.4
NYERI KIKUYU	49	10.2	8.3	8.2	6.1	2.0	14.3	12.2	12.2	6.3	2.0
NDIA	56	5.4	5.4	1.8	1.8	1.8	10.7	12.5	5.5	3.6	3.6
KAMBA	78	5.3	6.6	3.9	0.0	0.0	6.7	7.8	9.1	0.0	0.0
EMBU	87	3.4	2.3	2.3	2.3	0.0	10.3	8.0	9.2	5.7	1.1
MBERE	64	6.3	12.7	7.9	0.0	0.0	6.3	9.5	4.8	1.6	1.6
CHUKA	75	4.0	8.0	1.3	0.0	0.0	4.0	2.7	1.3	0.0	0.0
MUTHAMBI	76	2.6	3.9	3.9	0.0	1.3	3.9	6.7	6.6	0.0	0.0
MWIMBI	62	1.7	5.0	6.7	3.3	1.7	6.6	10.0	8.2	3.3	1.6
IGOJI	78	3.8	6.4	5.1	2.7	2.6	6.4	7.8	5.1	3.8	1.3
IMENTI	61	6.6	4.9	3.3	0.0	0.0	8.2	8.2	6.7	3.3	0.0
TIGANIA	64	7.8	6.3	6.3	3.1	0.0	6.3	6.3	7.8	3.1	1.6
EGEMBE	66	1.5	4.5	3.0	0.0	0.0	3.1	6.3	3.0	0.0	0.0
THARAKA	54	13.0	7.4	5.6	3.7	3.7	11.1	9.4	5.6	5.6	3.7
POKOMO	114	7.5	6.5	4.3	1.1	1.1	8.6	9.8	9.7	3.2	3.2
MALAKOTE	41	0.0	10.3	2.6	0.0	0.0	0.0	7.3	4.9	0.0	0.0
GIRIAMA	64	10.2	4.1	2.0	0.0	0.0	14.6	8.3	4.1	0.0	0.0
CHONYI	79	3.8	7.6	3.8	1.3	0.0	7.6	13.0	3.8	2.6	0.0
MIJ MJI KENDA	32	3.1	6.3	6.3	0.0	0.0	3.1	12.5	6.3	6.3	3.1
DIGO	116	6.9	5.2	4.3	1.7	0.9	6.9	5.2	4.3	1.7	1.7
TAITA	55	9.1	7.3	5.5	0.0	0.0	5.5	13.0	7.3	0.0	3.6
TAVETA	59	10.5	13.6	11.9	6.8	5.1	12.3	10.3	14.0	6.8	10.2

Total Loops

POPULATION	NO	RIGHT HAND ONE %	TWO %	THREE %	FINGER FOUR %	FIVE %	LEFT HAND ONE %	TWO %	THREE %	FINGER FOUR %	FIVE %
SOMALI	224	43.9	57.4	77.6	48.0	79.4	56.7	59.4	71.0	51.8	79.5
RENDILLE	153	48.4	52.3	70.4	46.4	83.2	47.4	49.7	66.9	57.9	84.8
GABBRA	27	44.1	55.6	81.5	50.0	85.2	70.4	59.3	74.1	66.7	92.6
BORAN	128	46.5	54.8	77.2	48.8	81.0	56.7	52.8	69.3	60.6	79.5
BURJI	64	45.3	57.8	78.6	50.0	79.0	40.6	56.3	62.5	42.2	70.3
SAMBURU	87	50.6	65.5	81.6	60.5	80.2	54.1	57.6	75.9	57.5	77.0
KADJIADO MAASAI	63	54.0	66.7	74.6	49.2	79.4	60.3	60.3	76.2	50.8	76.2
NAROK MAASAI	37	54.3	55.6	69.4	50.0	86.1	63.9	50.0	69.4	55.6	91.7
NGWESI	41	53.7	53.7	73.2	58.5	85.4	47.5	60.0	70.0	52.5	87.5
MUKOGODO	38	50.0	39.5	76.3	36.8	81.6	52.6	50.0	65.8	42.1	71.1
KONY	37	70.3	64.9	86.5	62.2	75.7	62.2	70.3	67.6	59.5	81.1
NANDI	52	59.6	59.6	75.0	57.7	76.5	75.0	57.7	75.0	46.2	88.5
KIPSIGIS	57	58.2	58.9	71.4	42.9	76.8	58.9	54.5	60.0	40.0	76.4
TUGEN	108	63.2	59.8	78.5	59.8	85.0	61.1	67.3	72.9	64.8	84.3
KEYO	50	68.0	60.0	90.0	54.0	80.0	70.0	66.0	81.6	58.0	84.0
MARAKWET	50	60.0	58.0	82.0	54.0	82.0	66.0	64.0	64.0	54.0	80.0
POKOT	45	68.9	57.8	80.0	53.3	84.4	80.0	63.6	84.4	61.4	93.3
TESO	52	57.7	69.2	88.5	63.5	90.4	63.5	76.9	82.7	63.5	82.7
TURKANA	66	36.4	46.2	69.7	34.8	73.4	43.9	53.8	69.7	45.5	78.8
LUO	170	53.3	67.6	77.6	54.1	85.6	56.5	62.4	72.4	57.1	84.7
GUSII	50	68.0	63.3	77.6	65.3	79.6	62.0	66.0	80.0	54.0	86.0
TIRIKI	26	38.5	42.3	76.9	57.7	84.6	50.0	57.7	61.5	65.4	88.5
MASAGOLI	26	53.8	76.9	84.6	57.7	84.6	53.8	69.2	73.1	61.5	88.5
BUNYORE	30	56.7	53.3	70.0	48.3	83.3	53.3	57.1	83.3	60.0	93.3
IDAKHO	39	69.2	64.1	82.1	64.1	92.3	69.2	74.4	82.1	66.7	92.3
MARAMA	25	44.0	40.0	60.0	32.0	76.0	56.0	52.0	68.0	44.0	80.0
WANGA	25	64.0	68.0	100.0	56.0	92.0	68.0	72.0	96.0	68.0	88.0
MARACH	25	68.0	48.0	64.0	44.0	80.0	68.0	56.0	64.0	56.0	76.0
BUKHAYO	23	59.1	68.2	86.4	68.2	90.9	60.9	60.9	82.6	69.6	82.6
SAMIA	24	37.5	54.2	70.8	58.3	83.3	45.8	45.8	75.0	83.3	91.7
BUTSOTSO	20	55.0	65.0	80.0	45.0	80.0	70.0	90.0	80.0	45.0	90.0
BUNYALA	25	40.0	72.0	72.0	56.0	80.0	40.0	64.0	68.0	76.0	83.3
KABRAS	26	30.8	52.0	80.0	53.8	84.6	34.6	61.5	73.1	69.2	92.3
BUKUSU	61	51.7	61.7	77.0	50.8	80.3	62.7	68.9	77.0	59.0	86.9
KIAMBU KIKUYU	65	59.4	60.9	78.1	51.6	82.8	62.5	56.3	68.8	55.6	82.8
MURANGA KIKUYU	56	43.6	70.4	78.2	50.9	78.2	44.6	55.4	82.1	50.0	76.8
NYERI KIKUYU	49	42.9	50.0	67.3	55.1	87.8	49.0	57.1	65.3	50.0	85.7
NDIA	56	46.4	66.1	87.5	67.9	87.5	53.6	55.4	74.5	63.6	80.4
KAMBA	78	52.6	64.5	78.9	63.6	84.2	49.3	62.3	67.5	59.7	78.9
EMBU	87	50.6	68.5	87.4	71.3	90.8	54.0	67.8	75.9	69.0	92.0
MBERE	64	41.3	55.6	71.4	49.2	87.3	50.8	54.0	68.3	52.4	84.1
CHUKA	75	46.7	56.0	77.3	60.0	89.3	42.7	69.3	74.7	60.0	92.0
MUTHAMBI	76	47.4	59.2	80.3	65.8	78.9	50.0	68.0	75.0	63.2	84.2
MWIMBI	62	66.1	66.1	83.3	70.0	91.7	54.1	63.3	75.4	67.2	88.5
IGOJI	78	41.6	65.4	82.1	62.7	87.2	51.3	55.8	70.5	60.3	88.5
IMENTI	61	42.6	62.3	82.0	59.0	80.3	44.3	52.5	75.0	55.7	93.6
TIGANIA	64	50.0	59.4	82.8	53.1	87.5	57.8	68.3	82.8	65.6	87.5
EGEMBE	66	53.8	66.7	83.3	52.3	83.3	60.0	71.9	74.2	59.1	87.9
THARAKA	54	33.3	55.6	72.2	59.3	74.1	33.3	60.4	75.9	57.4	79.6
POKOMO	114	51.6	61.3	79.6	60.2	81.7	52.7	54.3	72.0	67.7	82.8
MALAKOTE	41	57.5	53.8	76.9	56.4	75.0	65.9	70.7	80.5	75.6	82.9
GIRIAMA	64	32.7	59.2	71.4	59.2	93.9	27.1	58.3	81.6	65.3	91.8
CHONYI	79	46.8	57.0	88.6	50.6	84.8	49.4	54.5	82.3	53.8	87.3
MIJ MJI KENDA	32	50.0	53.1	62.5	59.4	81.3	46.9	53.1	62.5	46.9	78.1
DIGO	116	36.2	51.7	70.7	51.7	84.5	41.4	62.1	69.8	53.4	87.9
TAITA	55	54.5	65.5	87.3	69.1	96.4	61.8	68.5	78.2	74.5	90.9
TAVETA	59	47.4	49.2	78.0	57.6	88.1	47.4	69.0	70.2	67.8	83.1

Table AP. 1.4.24 : Distribution of total arches and total loops in Kenyan minimal ethnic population samples (females)

Total Arches

POPULATION	NO	RIGHT HAND FINGER ONE %	TWO %	THREE %	FOUR %	FIVE %	LEFT HAND FINGER ONE %	TWO %	THREE %	FOUR %	FIVE %
SOMALI	103	3.9	4.9	1.9	0.0	1.0	4.9	3.9	7.8	1.0	1.0
RENDILLE	46	0.0	4.5	2.3	0.0	4.4	4.4	6.5	6.5	2.2	0.0
GABBRA	63	0.0	0.0	1.6	0.0	0.0	1.6	3.2	6.3	1.6	0.0
BORAN	60	8.8	10.5	7.0	3.6	1.8	10.3	10.3	8.6	5.2	3.4
BURJI	57	5.4	10.5	5.4	1.8	3.5	8.8	12.3	10.5	3.5	5.3
SAMBURU	46	0.0	2.3	4.5	0.0	2.1	4.3	6.8	6.7	2.2	2.2
KADJIADO MAASAI	150	5.3	6.0	7.3	4.7	4.7	13.3	10.1	13.3	6.7	5.3
KONY	23	13.0	4.3	4.3	0.0	0.0	13.0	8.7	4.3	0.0	0.0
NANDI	50	12.0	6.0	6.0	4.0	8.0	14.0	12.0	10.0	4.0	4.0
KIPSIGIS	43	9.3	9.3	7.0	4.7	2.3	9.3	7.0	11.6	4.7	4.7
TUGEN	102	2.0	2.9	1.0	0.0	0.0	5.0	4.0	2.0	1.0	1.0
KEYO	50	12.0	2.0	6.0	2.0	2.0	10.0	10.0	6.0	2.0	2.0
MARAKWET	56	5.4	10.7	8.9	5.4	0.0	16.1	14.3	10.7	3.6	0.0
POKOT	54	1.8	1.9	5.7	1.9	3.8	11.3	9.6	11.3	3.8	7.5
ITESO	47	4.3	6.4	6.4	2.1	2.1	8.5	4.3	4.3	4.3	2.1
TURKANA	43	2.3	4.8	4.8	2.4	2.3	9.5	11.6	7.0	7.0	4.7
LUO	107	6.5	1.9	3.7	4.7	1.9	11.2	4.7	5.6	4.7	1.9
GUSII	51	2.0	5.9	7.8	2.0	2.0	9.8	15.7	11.8	3.9	2.0
TIRIKI	25	4.0	4.0	4.0	4.0	0.0	0.0	4.0	8.0	4.0	0.0
MARAGOLI	24	4.2	4.2	4.2	0.0	0.0	8.3	0.0	8.3	0.0	0.0
BUNYORE	20	0.0	5.0	5.0	0.0	0.0	5.0	10.5	20.0	5.0	0.0
TOKIKU	15	6.7	6.7	6.7	0.0	0.0	6.7	13.3	6.7	6.7	6.7
MARAMA	25	4.0	12.0	8.0	0.0	0.0	12.0	8.0	8.0	0.0	0.0
WANGA	24	12.5	12.5	8.3	4.2	0.0	16.7	16.7	20.8	0.0	0.0
MARACH	24	12.5	4.2	0.0	0.0	4.2	12.5	0.0	8.3	0.0	0.0
BUKHAYO	26	0.0	3.8	3.8	3.8	0.0	3.8	7.7	7.7	3.8	0.0
SAMIA	26	3.8	3.8	3.8	0.0	3.8	7.7	7.7	3.8	7.7	0.0
BUTSOTSO	27	7.4	0.0	7.4	3.7	0.0	14.8	7.4	7.4	3.7	3.7
BUNYALA	25	8.0	12.0	4.0	8.0	4.0	12.0	12.5	8.0	8.0	4.0
KABRAS	26	15.4	11.5	15.4	3.8	3.8	11.5	19.2	19.2	7.7	3.8
BUKUSU	29	7.4	3.6	3.4	3.4	3.4	7.7	6.9	6.9	6.9	3.6
KIAMBU KIKUYU	39	10.5	10.5	2.6	5.3	5.3	10.5	13.2	10.5	7.9	10.5
MURANGA KIKUYU	46	6.5	10.9	13.0	4.3	6.5	6.5	15.2	17.4	4.3	8.7
NYERI KIKUYU	51	7.8	7.8	3.9	5.9	0.0	9.8	9.8	9.8	5.9	0.0
NOIA	66	6.1	4.5	4.5	0.0	1.5	7.6	9.1	7.6	3.0	0.0
KAMBA	42	2.4	0.0	2.4	2.4	0.0	2.4	7.1	4.8	2.4	0.0
EMBU	72	8.3	4.2	5.6	1.4	1.4	8.3	4.2	8.3	4.2	2.8
MERU	66	4.5	6.1	6.1	3.0	1.5	6.2	10.8	10.8	6.3	3.1
CHUKA	61	4.9	6.6	6.7	0.0	0.0	3.3	8.5	11.7	1.7	0.0
MUTHAMBI	83	5.0	6.3	2.5	0.0	0.0	6.3	10.8	7.5	0.0	0.0
MWIMBI	43	9.3	4.7	2.3	2.3	4.7	11.6	7.0	4.7	4.7	2.3
IGOJI	95	8.4	10.6	8.4	5.3	2.1	9.5	13.7	10.5	6.3	4.3
IMENTI	39	2.6	7.7	5.1	2.6	2.6	10.3	12.8	10.3	10.1	2.6
TIGANIA	36	0.0	8.3	5.6	2.8	5.6	5.6	13.9	8.3	5.6	0.0
IGEMBE	33	6.3	18.2	9.1	6.1	3.0	9.1	12.1	15.2	6.1	3.0
THARAKA	46	8.7	6.5	4.3	4.3	4.3	6.5	15.2	10.9	4.3	2.2
POKOMO	90	11.5	12.2	8.9	4.4	2.2	16.7	14.4	10.0	4.4	4.4
GIRIAMA	38	14.7	11.8	11.8	0.0	2.7	17.6	11.8	11.4	0.0	0.0
CHONYI	14	7.7	15.4	7.7	7.7	7.7	15.4	7.7	7.7	7.7	7.7
MID MJI KENDA	27	3.7	14.8	7.4	0.0	0.0	3.7	7.7	11.1	0.0	0.0
DIGO	100	8.0	4.0	6.0	1.0	2.0	9.0	6.0	6.0	3.0	1.0
TAITA	45	4.4	11.1	2.2	0.0	2.2	4.4	13.3	4.4	2.2	2.2
TAVETA	48	4.3	8.3	10.4	6.3	2.1	8.5	8.3	10.4	8.3	4.2

Total Loops

POPULATION	NO	RIGHT HAND FINGER ONE %	TWO %	THREE %	FOUR %	FIVE %	LEFT HAND FINGER ONE %	TWO %	THREE %	FOUR %	FIVE %
SOMALI	103	50.5	61.2	81.6	61.2	79.6	41.7	62.1	71.8	69.2	82.5
RENDILLE	46	46.7	72.7	83.7	47.7	82.2	42.2	50.0	60.9	47.8	87.0
GABBRA	63	57.1	61.3	79.0	52.4	79.4	52.4	56.5	69.8	45.9	79.0
BORAN	60	56.1	57.9	80.7	75.0	91.2	63.8	58.6	74.1	67.2	87.9
BURJI	57	48.2	61.4	80.4	57.9	82.5	40.4	50.9	70.2	56.1	77.2
SAMBURU	46	59.1	68.2	79.5	61.4	86.4	58.7	63.6	66.7	55.6	75.6
KADJIADO MAASAI	150	53.3	58.0	80.0	62.0	80.0	50.7	54.4	64.0	58.4	78.7
KONY	23	73.9	82.6	87.0	69.6	91.3	73.9	87.0	87.0	60.9	95.7
NANDI	50	56.0	62.0	84.0	60.0	82.0	50.0	54.0	66.0	56.0	80.0
KIPSIGIS	43	58.1	60.5	79.1	62.8	90.7	53.5	58.1	67.4	58.1	88.4
TUGEN	102	59.8	75.5	89.2	64.7	95.1	59.4	74.3	84.2	60.4	97.1
KEYO	50	64.0	78.0	90.0	68.0	94.0	58.0	62.0	76.0	56.0	86.0
MARAKWET	56	67.9	71.4	80.4	53.6	83.9	57.1	58.9	73.2	51.8	73.2
POKOT	54	73.6	66.0	79.2	61.5	83.0	62.3	53.8	62.3	52.8	77.4
ITESO	47	51.1	61.7	72.3	66.0	91.5	61.7	61.7	74.5	53.2	91.5
TURKANA	43	67.4	71.4	76.2	57.1	88.4	61.9	62.8	74.4	60.5	81.4
LUO	107	64.5	63.6	75.7	55.1	81.3	51.4	57.9	71.0	56.1	83.2
GUSII	51	62.9	60.8	76.5	68.0	86.3	45.1	47.1	68.6	58.8	78.4
TIRIKI	25	68.0	56.0	84.0	64.0	88.0	64.0	64.0	68.0	64.0	92.0
MARAGOLI	24	58.3	79.2	79.2	66.7	95.8	37.5	79.2	75.0	66.7	91.7
BUNYORE	20	40.0	75.0	90.0	80.0	90.0	45.0	68.4	80.0	90.0	95.0
TOKIKU	15	53.3	73.3	86.7	66.7	100.0	53.3	60.0	86.7	53.3	86.7
MARAMA	25	52.0	48.0	76.0	64.0	88.0	44.0	52.0	60.0	68.0	76.0
WANGA	24	50.0	58.3	75.0	70.8	100.0	37.5	62.5	62.5	79.2	91.7
MARACH	24	58.3	66.7	95.8	70.8	91.7	54.2	62.5	79.2	62.5	87.5
BUKHAYO	26	73.1	73.1	84.6	69.2	92.3	69.2	65.4	80.8	61.5	84.6
SAMIA	26	69.2	53.8	80.8	53.8	76.9	65.4	46.2	76.9	53.8	73.1
BUTSOTSO	27	70.4	77.8	85.2	77.8	96.3	55.6	59.3	70.4	59.3	85.2
BUNYALA	25	56.0	64.0	80.0	64.0	84.0	48.0	75.0	80.0	68.0	84.0
KABRAS	26	50.0	73.1	76.9	76.9	92.3	69.2	65.4	73.1	73.1	96.2
BUKUSU	29	66.7	78.6	89.7	69.0	82.8	57.7	72.4	75.9	75.9	89.3
KIAMBU KIKUYU	39	60.5	57.9	81.6	60.5	76.3	57.9	52.6	73.7	55.3	68.4
MURANGA KIKUYU	46	58.7	63.0	76.1	65.2	82.6	54.3	58.7	67.4	63.0	84.8
NYERI KIKUYU	51	62.7	56.9	80.4	74.5	96.1	56.9	62.7	72.5	56.9	90.2
NOIA	66	46.5	69.7	81.8	68.2	86.4	54.5	60.6	74.2	54.5	86.4
KAMBA	42	58.5	69.0	81.0	64.3	95.2	54.8	59.5	76.2	61.9	85.7
EMBU	72	38.9	59.7	84.7	72.2	91.7	43.1	62.5	79.2	51.4	84.7
MERU	66	63.6	68.2	90.9	72.7	90.9	60.0	66.2	78.5	68.8	87.7
CHUKA	61	49.2	57.4	81.7	70.0	86.7	40.0	47.5	68.3	58.3	79.7
MUTHAMBI	83	48.7	61.2	90.0	66.2	87.3	52.5	53.7	67.5	60.0	83.7
MWIMBI	43	46.5	60.5	88.4	69.8	86.0	46.5	53.5	86.0	67.4	83.7
IGOJI	95	50.5	59.6	78.9	61.1	88.4	44.2	51.6	71.6	58.9	80.9
IMENTI	39	56.4	56.4	82.1	69.2	92.3	48.7	56.4	71.8	51.3	84.6
TIGANIA	36	66.7	66.7	86.1	80.6	91.7	58.3	63.9	69.4	63.9	88.9
IGEMBE	33	66.8	57.6	90.9	63.6	93.9	60.6	60.6	78.8	57.6	75.8
THARAKA	46	37.0	60.9	82.6	65.2	89.1	32.6	54.3	69.6	54.3	82.6
POKOMO	90	45.6	61.1	80.0	61.1	90.0	41.1	56.7	70.0	63.3	83.3
GIRIAMA	38	47.1	55.9	79.4	70.6	83.8	35.3	52.9	77.1	74.3	92.1
CHONYI	14	53.8	69.2	61.5	53.8	84.6	53.8	61.5	69.2	76.9	84.6
MID MJI KENDA	27	55.6	40.7	77.8	66.7	96.3	66.7	53.8	74.1	51.9	81.5
DIGO	100	29.0	42.0	84.0	45.0	84.0	26.0	36.0	57.0	45.0	88.0
TAITA	45	53.3	71.1	88.9	68.9	86.7	48.9	60.0	80.7	62.2	86.7
TAVETA	48	48.9	56.3	75.0	52.1	87.5	44.7	50.0	60.4	54.2	83.3

Table AP. 1.4.25 : Distribution of total whorls and ulnar loops in Kenyan minimal ethnic population samples (males).

POPULATION	Total Whorls						Ulnar Loops					
	NO	ONE %	TWO %	THREE %	FOUR %	FIVE %	NO	ONE %	TWO %	THREE %	FOUR %	FIVE %
SOMALI	224	52.0	40.4	21.1	50.2	19.7	224	43.5	53.4	75.8	47.5	78.5
RENDILLE	153	50.3	44.4	25.7	52.3	14.8	153	47.7	46.4	70.4	46.4	83.2
GABBRA	27	48.1	40.7	18.5	50.0	14.8	27	48.1	55.6	81.5	50.0	85.2
BORAN	128	48.0	34.9	18.1	48.8	16.7	128	45.7	51.6	75.6	46.0	80.2
BURJI	64	53.1	35.9	23.4	50.0	25.0	64	45.3	53.1	75.0	50.0	75.0
SAMBURU	87	46.0	31.0	14.9	37.2	19.8	87	50.6	59.8	81.6	59.3	88.2
KAJIADO MAASAI	63	41.3	27.0	22.2	50.8	20.6	63	52.4	60.3	74.6	49.2	79.4
NARIK MAASAI	37	37.1	36.1	22.2	44.4	13.9	37	54.3	55.6	69.4	50.0	86.1
NGWESI	41	43.9	43.9	26.8	41.5	14.6	41	53.7	43.9	73.2	58.5	85.4
MUKOGODO	38	47.4	55.3	18.4	60.5	18.4	38	50.0	36.8	73.7	36.8	81.6
KONY	37	18.9	21.6	5.4	35.1	18.9	37	70.3	59.5	83.8	62.2	75.7
NANDI	52	38.5	36.5	23.1	40.4	21.6	52	59.6	57.7	75.0	55.8	78.5
KIPSIGIS	57	38.2	35.7	23.2	53.6	21.4	57	56.4	53.6	71.4	42.9	76.8
TUGEN	108	34.9	32.7	15.9	38.3	15.0	108	62.3	52.3	77.6	58.9	85.0
KEYO	50	28.0	38.0	8.0	44.0	18.0	50	68.0	58.0	90.0	50.0	80.0
MARAKWET	50	38.0	40.0	18.0	46.0	18.0	50	60.0	54.0	82.0	54.0	80.0
POKOT	45	26.7	40.0	15.6	42.2	13.3	45	68.9	57.8	88.0	53.3	84.4
ITESO	52	34.6	25.0	9.6	32.7	9.6	52	55.8	59.6	82.7	63.5	90.4
TURKANA	66	57.6	41.5	22.7	59.1	25.0	66	36.4	43.1	68.2	31.8	73.4
LUO	170	43.5	30.0	18.8	42.9	13.8	170	52.1	61.8	77.1	54.1	85.6
GUSII	50	46.0	30.6	20.4	34.7	20.4	50	48.0	51.0	77.6	65.3	79.6
TIRIKI	26	50.0	42.3	19.2	42.3	15.4	26	38.5	38.5	76.9	57.7	84.6
MARAGOLI	26	34.6	19.2	11.5	38.5	11.5	26	53.8	65.4	84.6	57.7	84.6
BUNYORE	30	43.3	43.3	30.0	51.7	16.7	30	56.7	40.0	70.0	48.3	83.3
IDAKHO	39	25.6	33.3	17.9	35.9	7.7	39	69.2	64.1	82.1	64.1	92.3
MARAMA	25	52.0	60.0	36.0	68.0	24.0	25	44.0	36.0	60.0	32.0	76.0
WANGA	25	32.0	28.0	8.0	44.0	8.0	25	64.0	52.0	96.0	56.0	92.0
MASAKH	25	28.0	44.0	28.0	52.0	16.0	25	68.0	32.0	64.0	44.0	80.0
HUKHAYO	23	31.8	27.3	4.5	27.3	9.1	23	59.1	59.1	86.4	68.2	90.9
SAMIA	24	54.2	33.3	16.7	41.7	12.5	24	37.5	45.8	70.8	58.3	83.3
BUTSOTSO	20	45.0	35.0	20.0	55.0	20.0	20	55.0	60.0	80.0	45.0	80.0
BUNYALA	25	56.0	24.0	16.0	36.0	16.0	25	40.0	52.0	72.0	56.0	76.0
KABRAS	26	61.5	48.0	20.0	46.2	15.4	26	26.9	44.0	80.0	53.8	84.6
NUKUSU	61	39.7	31.7	18.0	47.5	18.4	61	51.7	60.0	77.0	50.8	80.3
KIAMBU KIKUYU	65	35.9	35.9	20.3	48.4	14.1	65	59.4	59.4	78.1	51.6	82.8
MURANGA KIKUYU	56	50.9	24.1	20.0	47.3	20.0	56	41.8	59.3	76.4	50.9	78.2
NYERI KIKUYU	49	46.9	41.7	24.5	38.8	10.2	49	42.9	45.8	67.3	55.1	87.8
NDIA	56	48.2	28.6	10.7	30.4	10.7	56	46.4	58.9	87.5	67.9	87.5
KAMBA	78	42.7	28.9	17.1	36.4	15.6	78	52.0	53.9	78.9	63.6	82.9
EMBU	87	46.0	32.2	18.3	26.4	9.2	87	48.3	60.9	87.4	71.3	90.8
MBERE	64	52.4	31.7	20.6	50.8	12.7	64	41.3	50.8	71.4	49.2	87.3
CHUKA	75	49.3	36.0	21.3	40.0	10.7	75	46.7	46.7	77.3	58.7	89.3
MUTHAMBI	76	50.0	36.8	15.8	34.2	19.7	76	46.1	48.7	80.3	65.8	78.9
MWIMBI	62	32.2	26.7	10.0	26.7	6.7	62	66.1	63.3	80.0	68.3	91.7
IGOJI	78	52.6	28.2	12.8	34.7	10.3	78	43.6	59.0	79.5	61.3	87.2
IMENTI	61	50.8	32.8	14.8	41.0	19.7	61	42.6	55.7	82.0	59.0	80.3
TIGANIA	64	42.2	34.4	10.9	43.8	12.5	64	50.0	50.0	82.8	51.6	87.5
IGEMBE	66	44.6	28.8	13.6	47.7	16.7	66	53.8	57.6	83.3	50.8	83.3
THARAKA	54	53.7	37.0	22.2	37.0	22.2	54	33.3	46.3	72.2	59.3	74.1
POKOMO	114	40.9	32.3	16.1	38.7	17.2	114	50.5	53.8	78.5	60.2	81.7
MALAKOTE	41	42.5	35.9	20.5	43.6	25.0	41	57.5	51.3	76.9	56.4	75.0
GIRIAMA	64	57.1	36.7	26.5	40.8	6.1	64	28.6	51.0	69.4	57.1	93.9
CHONYI	79	49.4	35.4	7.6	48.1	15.2	79	45.6	46.8	88.6	50.6	84.8
MIJ MJI KENDA	32	40.9	40.6	31.3	40.6	18.8	32	50.0	50.0	62.5	56.3	81.3
DIGO	116	56.9	43.1	25.0	46.6	14.7	116	36.2	47.4	70.7	51.7	84.5
TAITA	55	36.4	27.3	7.3	30.9	3.6	55	54.5	61.8	85.5	69.1	96.4
TAVETA	59	42.1	17.5	10.2	35.6	6.8	59	47.4	44.1	76.3	57.6	88.1

POPULATION	Ulnar Loops					
	ONE %	TWO %	THREE %	FOUR %	FIVE %	
SOMALI	56.3	52.7	70.5	50.9	79.0	
RENDILLE	46.4	43.7	65.6	56.6	84.8	
GABBRA	50.0	66.7	59.3	74.1	88.7	92.6
BORAN	46.0	80.2	56.7	42.5	66.9	59.8
BURJI	50.0	75.0	40.6	50.0	68.9	42.2
SAMBURU	59.3	88.2	54.1	47.1	75.9	55.2
KAJIADO MAASAI	49.2	79.4	58.7	58.7	76.2	50.8
NARIK MAASAI	50.0	86.1	61.1	47.2	89.4	55.6
NGWESI	58.5	85.4	45.0	52.5	70.0	52.5
MUKOGODO	36.8	81.6	52.6	42.1	65.8	42.1
KONY	59.5	83.8	62.2	75.7	82.2	51.4
NANDI	55.8	78.5	75.0	51.9	73.1	46.2
KIPSIGIS	53.6	71.4	42.9	76.8	55.4	43.6
TUGEN	52.3	77.6	58.9	85.0	81.1	56.1
KEYO	58.0	90.0	50.0	80.0	70.0	54.0
MARAKWET	54.0	82.0	54.0	80.0	66.0	60.0
POKOT	57.8	88.0	53.3	84.4	80.0	54.5
ITESO	59.6	82.7	63.5	90.4	63.5	65.4
TURKANA	43.1	68.2	31.8	73.4	43.9	46.2
LUO	61.8	77.1	54.1	85.6	55.3	50.6
GUSII	51.0	77.6	65.3	79.6	62.0	52.0
TIRIKI	38.5	76.9	57.7	84.6	50.0	50.0
MARAGOLI	65.4	84.6	57.7	84.6	53.8	53.8
BUNYORE	40.0	70.0	48.3	83.3	53.3	53.6
IDAKHO	64.1	82.1	64.1	92.3	69.2	64.1
MARAMA	36.0	60.0	32.0	76.0	56.0	44.0
WANGA	52.0	96.0	56.0	92.0	68.0	52.0
MASAKH	32.0	64.0	44.0	80.0	68.0	40.0
HUKHAYO	59.1	86.4	68.2	90.9	60.9	47.8
SAMIA	45.8	70.8	58.3	83.3	45.8	41.7
BUTSOTSO	60.0	80.0	45.0	80.0	70.0	75.0
BUNYALA	52.0	72.0	56.0	76.0	40.0	44.0
KABRAS	44.0	80.0	53.8	84.6	30.8	50.0
NUKUSU	60.0	77.0	50.8	80.3	61.0	54.1
KIAMBU KIKUYU	59.4	78.1	51.6	82.8	62.5	50.0
MURANGA KIKUYU	59.3	76.4	50.9	78.2	42.9	39.3
NYERI KIKUYU	42.9	45.8	67.3	55.1	87.8	49.0
NDIA	58.9	87.5	67.9	87.5	53.6	35.7
KAMBA	53.9	78.9	63.6	82.9	49.3	51.9
EMBU	60.9	87.4	71.3	90.8	51.7	51.7
MBERE	50.8	71.4	49.2	87.3	50.8	52.4
CHUKA	46.7	77.3	58.7	89.3	42.7	57.3
MUTHAMBI	48.7	80.3	65.8	78.9	48.7	52.0
MWIMBI	63.3	80.0	68.3	91.7	54.1	55.0
IGOJI	59.0	79.5	61.3	87.2	50.0	46.8
IMENTI	55.7	82.0	59.0	80.3	44.3	44.3
TIGANIA	50.0	82.8	51.6	87.5	57.8	54.0
IGEMBE	53.8	57.6	83.3	50.8	83.3	60.0
THARAKA	33.3	46.3	72.2	59.3	74.1	33.3
POKOMO	53.8	78.5	60.2	81.7	51.6	39.1
MALAKOTE	57.5	51.3	76.9	56.4	75.0	65.9
GIRIAMA	51.0	69.4	57.1	93.9	25.0	39.6
CHONYI	46.8	88.6	50.6	84.8	46.8	49.4
MIJ MJI KENDA	50.0	62.5	56.3	81.3	43.8	40.6
DIGO	47.4	70.7	51.7	84.5	40.5	51.7
TAITA	61.8	85.5	69.1	96.4	58.2	61.1
TAVETA	44.1	76.3	57.6	88.1	47.4	56.9

Table AP. 1.4.26 : Distribution of total whorls and ulnar loops in Kenyan minimal ethnic population samples (females).

Total Whorls

POPULATION	NO	RIGHT HAND FINGER ONE %	TWO %	THREE %	FOUR %	FIVE %	LEFT HAND FINGER ONE %	TWO %	THREE %	FOUR %	FIVE %
SOMALI	103	45.6	34.0	16.5	38.8	19.4	33.4	34.0	20.4	38.8	16.5
RENDILLE	46	53.3	22.7	14.0	52.3	13.3	53.3	43.5	32.6	50.0	13.0
GABBRA	63	42.9	38.7	19.4	47.6	20.6	46.0	40.3	23.8	52.5	21.0
BORAN	66	35.1	31.6	12.3	21.4	7.0	25.9	31.0	17.2	27.6	8.6
BURJI	57	46.4	28.1	14.3	40.4	14.0	50.9	36.8	19.3	40.4	17.5
SAMBURU	46	40.9	29.5	15.9	38.6	11.4	37.0	29.5	26.7	42.2	22.2
KAOJIADO MAASAI	150	41.3	36.0	12.7	33.3	15.3	36.0	35.6	22.7	34.9	16.0
KONY	23	13.0	13.0	8.7	30.4	8.7	13.0	4.3	8.7	39.1	4.3
NANDI	50	32.0	32.0	10.0	36.0	10.0	36.0	34.0	24.0	40.0	10.0
KIPSIGIS	43	32.6	30.2	14.0	32.6	7.0	37.2	34.9	20.9	37.2	7.0
TUGEN	102	38.2	21.6	9.8	35.3	4.9	35.6	21.8	13.9	38.6	11.9
KEYO	50	24.0	20.0	4.0	30.0	4.0	32.0	28.0	18.0	42.0	12.0
MARAKWET	56	26.8	17.9	10.7	41.1	16.1	26.8	26.8	16.1	44.6	26.8
POKOT	54	22.6	32.1	15.1	36.5	13.2	26.4	36.5	26.4	43.4	15.1
TESO	47	44.7	31.9	21.3	31.9	6.4	29.8	34.0	21.3	42.6	6.4
TURKANA	43	30.2	23.8	19.0	40.5	9.3	28.6	25.6	18.6	32.6	14.0
LUO	107	29.0	34.6	20.6	40.2	16.8	37.4	37.4	23.4	39.3	15.0
GUSII	51	45.1	33.3	15.7	30.0	11.8	45.1	37.3	19.6	37.3	19.6
TIRIKI	25	28.0	40.0	12.0	32.0	12.0	36.0	32.0	24.0	32.0	8.0
NARAGOLI	24	37.5	16.7	16.7	33.3	4.2	54.2	20.8	16.7	33.3	8.3
NUNYORE	20	60.0	20.0	5.0	20.0	10.0	50.0	21.1	0.0	5.0	5.0
IDAKHO	15	40.0	20.0	6.7	33.3	0.0	40.0	26.7	6.7	40.0	6.7
MARAMA	25	44.0	40.0	16.0	36.0	12.0	44.0	40.0	32.0	32.0	24.0
WANGA	24	37.5	29.2	16.7	25.0	0.0	45.8	20.8	16.7	20.8	8.3
MARACH	24	29.2	29.2	4.2	29.2	4.2	33.3	37.5	12.5	37.5	12.5
BUKHAYO	26	26.9	23.1	11.5	26.9	7.7	26.9	26.9	11.5	34.6	15.4
SAMIA	26	26.9	42.3	15.4	46.2	19.2	26.9	46.2	19.2	38.5	26.9
BOTSOTSO	27	22.2	22.2	7.4	18.5	3.7	29.6	33.3	22.2	37.0	11.1
BUNYALA	25	36.0	24.0	16.0	28.0	12.0	40.0	12.5	12.0	24.0	12.0
KABRAS	26	34.6	15.4	7.7	19.2	3.8	19.2	15.4	7.7	19.2	0.0
BUKUSU	29	25.9	17.9	6.9	27.6	13.8	34.6	20.7	17.2	17.2	7.1
KIAMBU KIKUYU	39	28.9	31.6	15.8	34.2	18.4	31.6	34.2	15.8	36.8	21.1
MURANGA KIKUYU	46	34.8	26.1	10.9	30.4	10.9	39.1	26.1	15.2	32.6	6.5
NYERI KIKUYU	51	29.4	35.3	15.7	19.6	3.9	33.3	27.5	17.6	37.3	9.8
NDIA	66	45.5	25.8	13.6	31.8	12.1	37.9	30.3	18.2	42.4	13.6
KAMBA	42	39.0	31.0	16.7	33.3	4.8	42.9	33.3	19.0	35.7	14.3
EMBU	72	52.8	36.1	9.7	26.4	6.9	48.6	33.3	12.5	44.4	12.5
MERU	66	31.8	25.8	3.0	28.2	7.6	33.8	23.1	10.8	25.0	9.2
CHUKA	61	45.9	36.1	11.7	30.0	13.3	58.7	44.1	20.0	40.0	20.3
MUTHAMBI	83	46.2	32.5	7.5	33.7	12.7	41.2	36.2	25.0	40.0	18.2
MWIMBI	43	44.2	34.9	9.3	27.9	9.3	41.9	39.5	9.3	27.9	14.0
TIGOI	95	41.1	29.8	12.6	33.7	9.5	40.3	34.7	17.9	34.7	14.9
KIENYI	39	41.0	35.9	12.8	28.2	5.1	41.0	30.8	17.9	38.5	12.8
TIGANIA	36	33.3	25.0	8.3	16.7	2.8	36.1	22.2	22.2	30.6	11.1
IGEMBE	33	25.0	24.2	0.0	30.3	3.0	30.3	27.3	6.1	36.4	21.2
THARAKA	46	54.3	32.6	13.0	30.4	6.5	60.9	30.4	19.6	41.3	15.2
POKOMO	90	41.1	26.7	11.1	34.4	7.8	42.2	28.9	20.0	32.2	12.2
GIRIAMA	38	38.2	32.4	8.8	29.4	13.5	47.1	35.3	11.4	25.7	7.9
CHONYI	14	38.5	15.4	30.8	38.5	7.7	30.8	30.8	23.1	15.4	7.7
MIJI KENDA	27	40.7	44.4	14.8	33.3	3.7	29.6	38.5	14.8	48.1	18.5
DIGO	100	65.0	54.0	30.0	54.0	14.0	65.0	66.0	37.0	52.0	11.0
TAITA	45	42.2	17.8	8.9	31.1	11.1	46.7	26.7	8.9	35.6	11.1
TAVETA	48	46.8	35.4	14.6	41.7	10.4	46.8	41.7	29.2	37.5	12.5

Ulnar Loops

POPULATION	NO	RIGHT HAND FINGER ONE %	TWO %	THREE %	FOUR %	FIVE %	LEFT HAND FINGER ONE %	TWO %	THREE %	FOUR %	FIVE %
SOMALI	103	50.5	58.3	81.6	59.2	78.6	41.7	61.2	71.8	60.2	82.5
RENDILLE	46	46.7	65.9	83.7	47.7	82.2	42.2	43.5	58.7	45.7	87.0
GABBRA	63	57.1	56.5	79.0	52.4	79.4	52.4	48.4	68.3	45.9	79.0
BORAN	66	56.1	52.6	78.9	75.0	91.2	63.8	66.8	72.4	67.2	87.9
BURJI	57	48.2	59.6	80.4	56.1	82.5	38.6	40.4	70.2	54.4	77.2
SAMBURU	46	56.8	63.6	79.5	61.4	86.4	56.5	52.3	66.7	53.3	75.6
KAOJIADO MAASAI	150	53.3	54.0	80.0	60.7	80.0	50.0	44.3	60.7	56.4	77.3
KONY	23	69.6	78.3	87.0	65.2	91.3	73.9	69.6	87.0	60.9	95.7
NANDI	50	56.0	60.0	84.0	60.0	82.0	50.0	46.0	66.0	52.0	80.0
KIPSIGIS	43	58.1	58.1	79.1	60.5	90.7	53.5	58.1	67.4	58.1	86.0
TUGEN	102	59.8	71.6	88.2	62.7	95.1	59.4	61.4	79.2	57.4	85.1
KEYO	50	64.0	74.0	90.0	66.0	94.0	58.0	52.0	74.0	54.0	86.0
MARAKWET	56	67.9	69.6	80.4	53.6	83.9	57.1	53.6	71.4	51.8	78.4
POKOT	54	71.7	66.0	79.2	61.5	83.0	62.3	46.2	60.4	49.1	75.5
TESO	47	51.1	51.1	72.3	63.8	91.5	57.4	48.9	72.3	51.1	91.5
TURKANA	43	62.8	65.7	76.2	57.1	88.4	57.1	53.5	74.4	60.5	79.1
LUO	107	64.5	58.9	75.7	54.2	80.4	50.5	49.5	71.0	55.1	83.2
GUSII	51	52.9	56.9	76.5	68.0	86.3	43.1	35.3	66.7	54.9	78.4
TIRIKI	25	68.0	44.0	84.0	64.0	88.0	56.0	40.0	64.0	64.0	92.0
NARAGOLI	24	58.3	70.8	79.2	66.7	95.8	37.5	58.3	75.0	66.7	91.7
NUNYORE	20	40.0	70.0	90.0	80.0	90.0	45.0	63.2	80.0	90.0	95.0
IDAKHO	15	53.3	66.7	86.7	66.7	100.0	53.3	53.3	86.7	53.3	86.7
MARAMA	25	52.0	48.0	76.0	64.0	88.0	44.0	48.0	60.0	68.0	76.0
WANGA	24	50.0	50.0	75.0	70.8	100.0	37.5	45.8	62.5	75.0	91.7
MARACH	24	58.3	62.5	95.8	70.8	91.7	50.0	50.0	70.8	62.5	87.5
BUKHAYO	26	73.1	73.1	84.6	69.2	92.3	65.4	50.0	80.8	61.5	84.6
SAMIA	26	69.2	53.8	80.8	53.8	76.9	61.5	42.3	73.1	50.0	73.1
BOTSOTSO	27	63.0	74.1	85.2	77.8	96.3	51.9	48.1	70.4	59.3	85.2
BUNYALA	25	56.0	56.0	72.0	64.0	84.0	48.0	64.2	80.0	60.0	80.0
KABRAS	26	50.0	53.8	76.9	76.9	92.3	61.5	53.8	65.4	73.1	96.2
BUKUSU	29	66.7	71.4	89.7	69.0	82.8	57.7	62.1	69.0	75.9	85.7
KIAMBU KIKUYU	39	57.9	52.6	81.6	57.9	76.3	55.3	42.1	71.1	55.3	68.4
MURANGA KIKUYU	46	58.7	60.9	76.1	63.0	80.4	52.2	50.0	67.4	56.5	82.6
NYERI KIKUYU	51	62.7	56.9	80.4	72.5	96.1	56.9	47.1	66.7	52.9	90.2
NDIA	66	47.0	68.2	81.8	68.2	86.4	53.0	48.5	71.2	53.0	86.4
KAMBA	42	58.5	59.5	81.0	64.3	95.2	54.8	52.4	73.8	59.5	85.7
EMBU	72	38.9	52.8	84.7	72.2	91.7	41.7	47.2	79.2	51.4	84.7
MERU	66	63.6	66.7	89.4	72.7	90.9	58.5	50.8	78.5	67.2	87.7
CHUKA	61	49.2	52.5	81.7	70.0	86.7	36.7	35.6	65.0	58.3	79.7
MUTHAMBI	83	48.7	56.3	90.0	66.2	87.3	52.5	41.2	66.2	58.7	83.7
MWIMBI	43	44.2	53.5	88.4	69.8	86.0	46.5	41.9	83.7	67.4	81.4
TIGOI	95	48.4	56.4	78.9	60.0	86.4	40.0	45.3	69.5	57.9	79.8
KIENYI	39	56.4	56.4	82.1	69.2	92.3	46.2	43.6	69.2	51.3	84.6
TIGANIA	36	66.7	63.9	86.1	77.8	91.7	58.3	55.6	69.4	61.1	88.9
IGEMBE	33	66.8	57.6	90.9	60.6	93.9	60.6	51.5	78.8	54.5	72.7
THARAKA	46	37.0	58.7	82.6	65.2	89.1	32.6	47.8	69.6	54.3	82.6
POKOMO	90	44.4	55.6	80.0	60.0	90.0	38.9	44.4	68.9	62.2	83.3
GIRIAMA	38	44.1	47.1	79.4	70.6	83.8	29.4	38.2	71.4	74.3	92.1
CHONYI	14	53.8	61.5	61.5	53.8	84.6	53.8	38.5	61.5	76.9	84.6
MIJI KENDA	27	55.6	37.0	77.8	66.7	96.3	55.6	48.2	74.1	51.9	81.5
DIGO	100	26.0	39.0	64.0	44.0	84.0	22.0	34.0	56.0	45.0	87.0
TAITA	45	53.3	68.9	86.7	68.9	86.7	42.2	44.4	80.0	62.2	86.7
TAVETA	48	46.8	54.2	72.9	52.1	87.5	42.6	47.9	60.4	52.1	81.3

Table AP. 1.4.27 : Distribution of concentric whorls and double loops in Kenyan minimal ethnic population samples (males).

Concentric Whorls

POPULATION	NO	RIGHT HAND FINGER ONE %	TWO %	THREE %	FOUR %	FIVE %	LEFT HAND FINGER ONE %	TWO %	THREE %	FOUR %	FIVE %
SONALI	224	34.1	26.0	16.1	42.2	11.2	19.2	22.8	14.7	34.4	10.7
RENDILLE	153	29.4	31.4	13.2	33.8	10.1	35.5	28.5	17.9	30.3	7.3
GABBRA	27	18.5	29.6	11.1	26.9	7.4	14.8	22.2	14.8	22.2	3.7
BORAN	128	20.5	24.6	15.0	29.9	8.7	15.7	22.0	16.5	24.4	9.4
BURJI	64	18.8	17.2	20.3	45.3	17.2	18.8	21.9	25.0	42.2	18.8
SAMBURU	87	26.4	17.2	11.5	27.9	12.8	23.5	25.9	8.0	29.9	12.6
KADJIADO MAASAI	63	14.3	22.2	12.7	42.9	11.1	9.5	22.2	14.3	39.7	12.7
NAROK MAASAI	37	11.4	22.2	19.4	27.8	2.8	11.1	25.0	19.4	30.6	2.8
NGWESI	41	22.0	26.8	14.6	31.7	4.9	20.0	22.5	17.5	32.5	7.5
MUKOGODO	38	36.8	34.2	13.2	50.0	13.2	23.7	28.9	18.4	36.8	15.8
KONY	37	8.1	18.9	5.4	24.3	5.4	5.4	13.5	5.4	27.0	8.1
NANDI	52	9.6	11.5	15.4	28.8	9.8	9.6	23.1	15.4	34.6	7.7
KIPSIGIS	57	14.5	30.4	12.5	41.1	7.1	17.9	21.8	20.0	41.8	7.3
TUGEN	108	9.4	19.6	8.4	31.8	6.5	11.1	15.0	15.9	28.7	6.5
KEYO	50	14.0	18.0	8.0	32.0	4.0	10.0	18.0	14.3	30.0	10.0
MARAKWET	50	20.0	22.0	8.0	30.0	12.0	16.0	26.0	20.0	34.0	8.0
POKOT	45	4.4	24.4	13.3	31.1	8.9	2.2	20.5	8.9	13.6	2.2
TESO	52	13.5	17.3	5.8	19.2	5.8	13.5	9.6	5.8	21.2	7.7
TURKANA	66	25.8	29.2	18.2	45.5	10.9	13.6	24.6	18.2	34.6	10.6
LUO	170	14.2	15.9	12.4	31.2	9.6	13.5	18.2	13.5	25.9	8.2
GUSII	50	12.0	22.4	10.2	24.5	8.2	10.0	18.6	14.0	30.6	6.0
KURIA	26	11.5	15.4	11.5	23.1	3.8	19.2	11.5	15.4	11.5	0.0
MARAGOLI	26	19.2	19.2	11.5	30.8	0.0	15.4	15.4	15.4	34.6	3.8
NUNYORE	30	23.3	30.0	13.3	37.9	3.3	20.0	17.9	10.0	23.3	6.7
IDAKHO	39	5.1	12.8	10.3	20.5	2.6	5.1	5.1	7.7	17.9	0.0
MARAMA	25	24.0	32.0	28.0	56.0	8.0	4.0	40.0	24.0	48.0	16.0
WANGA	25	16.0	16.0	0.0	12.0	0.0	8.0	12.0	0.0	20.0	4.0
MARACH	25	16.0	28.0	20.0	32.0	16.0	0.0	28.0	16.0	28.0	4.0
BUKHAYO	23	18.2	27.3	4.5	18.2	0.0	8.7	26.1	4.3	17.4	8.7
SAMIA	24	20.8	12.5	4.2	8.3	4.2	20.8	8.3	4.2	8.3	0.0
BUTSOTSO	20	20.0	10.0	15.0	30.0	0.0	0.0	0.0	15.0	40.0	5.0
BUNYALA	25	32.0	20.0	16.0	28.0	0.0	36.0	20.0	12.0	20.0	8.3
KABRAS	26	38.5	26.0	20.0	38.5	3.8	11.5	11.5	19.2	19.2	0.0
BUKUSU	61	19.0	16.7	8.2	19.7	6.6	8.5	18.0	6.6	21.3	4.9
KIAMBU KIKUYU	65	17.2	23.4	15.6	26.6	6.3	9.4	25.0	12.5	31.7	9.4
MURANGA KIKUYU	56	18.2	13.0	14.5	30.9	9.1	10.7	19.6	7.1	32.1	8.9
NYERI KIKUYU	49	22.4	22.9	10.2	30.6	4.1	6.1	16.3	12.2	31.3	10.2
NDIA	56	17.9	17.9	5.4	17.9	0.0	12.5	17.9	10.9	29.1	3.6
KAMBA	78	12.0	10.5	13.2	22.1	7.9	12.0	14.3	15.6	19.5	13.2
EMBU	87	10.3	17.2	4.6	17.2	2.3	8.0	8.9	4.6	12.6	1.1
MBERE	64	27.0	19.0	11.1	36.5	7.9	12.7	22.2	12.7	30.2	4.8
CHUKA	75	13.3	25.3	16.0	29.3	4.0	12.0	14.7	14.7	21.3	2.7
MUTHAMBI	76	21.1	18.4	9.2	27.6	10.5	13.2	12.0	10.5	19.7	6.6
MWIMBI	62	16.9	13.3	5.0	16.7	5.0	9.8	21.7	8.2	18.0	3.3
IGOJI	78	23.1	16.7	7.7	22.7	5.1	11.5	18.2	16.7	28.2	5.1
IMENTI	61	23.0	21.3	6.6	31.1	8.2	16.4	23.0	13.3	26.2	8.2
TIGANIA	64	14.1	20.3	9.4	31.3	3.1	12.5	12.7	6.3	26.6	7.8
IGEMBE	66	23.1	18.2	6.1	36.9	7.6	18.5	10.9	15.2	34.8	6.1
THARAKA	54	20.4	24.1	14.8	29.6	3.7	16.7	11.3	14.8	24.1	9.3
POKOMO	114	14.0	20.4	7.5	29.0	9.7	6.5	20.7	12.9	22.6	6.5
MALAKOTE	41	7.5	17.9	20.5	30.8	10.0	7.3	4.9	9.8	17.1	4.9
GIRIAMA	64	28.6	16.3	12.2	24.5	2.0	6.3	10.4	8.2	16.3	2.0
CHONYI	79	19.0	17.7	7.6	27.8	3.8	15.2	19.5	8.9	29.5	2.5
MID MJI KENDA	32	28.1	18.8	15.6	25.0	3.1	18.8	15.6	15.6	21.9	9.4
DIGO	116	25.0	25.0	19.0	34.5	8.6	12.1	19.0	21.6	24.1	5.2
TAITA	55	12.7	21.8	5.5	23.6	1.8	10.9	13.0	10.9	20.0	1.8
TAVETA	59	14.0	25.4	3.4	20.3	3.4	14.0	8.6	7.0	13.6	0.0

Double Loops

POPULATION	NO	RIGHT HAND FINGER ONE %	TWO %	THREE %	FOUR %	FIVE %	LEFT HAND FINGER ONE %	TWO %	THREE %	FOUR %	FIVE %
SONALI	224	16.1	9.0	3.1	2.7	2.2	21.0	8.0	5.8	7.1	4.9
RENDILLE	153	19.0	9.8	4.6	6.0	2.0	11.8	11.9	2.6	3.9	3.3
GABBRA	27	25.9	7.4	3.7	3.8	3.7	11.1	11.1	7.4	0.0	0.0
BORAN	128	26.0	7.1	1.6	9.4	4.8	19.7	11.0	4.7	7.1	5.5
BURJI	64	29.7	10.9	1.6	4.7	4.7	35.9	14.1	7.8	6.3	6.3
SAMBURU	87	19.5	10.3	2.3	2.3	1.2	15.3	5.9	3.4	6.9	2.3
KADJIADO MAASAI	63	27.0	3.2	1.6	1.6	4.8	23.8	6.3	3.2	0.0	4.8
NAROK MAASAI	37	22.9	5.6	2.8	5.6	11.1	16.7	5.6	0.0	2.8	2.8
NGWESI	41	22.0	14.6	7.3	2.4	4.9	25.0	10.0	7.5	7.5	2.5
MUKOGODO	38	10.5	21.1	5.3	7.9	5.3	21.1	13.2	5.3	7.9	10.5
KONY	37	8.1	2.7	0.0	2.7	2.7	16.2	5.4	5.4	0.0	0.0
NANDI	52	28.8	21.2	5.8	5.8	3.9	11.5	11.5	5.8	1.9	1.9
KIPSIGIS	57	21.8	5.4	3.6	3.6	8.9	14.3	10.9	7.3	3.6	7.3
TUGEN	108	24.5	11.2	5.6	0.9	4.7	21.3	11.2	2.8	3.7	3.7
KEYO	50	12.0	12.0	0.0	6.0	2.0	16.0	8.0	0.0	8.0	2.0
MARAKWET	50	14.0	12.0	4.0	4.0	0.0	8.0	10.0	2.0	2.0	2.0
POKOT	45	22.2	15.6	2.2	2.2	0.0	13.3	9.1	2.2	9.1	0.0
TESO	52	19.2	1.9	1.9	3.8	0.0	11.5	5.8	1.9	3.8	5.8
TURKANA	66	30.3	9.2	3.0	4.5	9.4	34.8	9.2	0.0	4.5	3.0
LUO	170	29.0	10.0	2.9	3.5	0.6	22.4	10.0	6.5	5.1	2.4
GUSII	50	34.0	8.2	6.1	6.1	8.2	22.0	10.0	2.0	10.0	4.0
KURIA	26	34.6	23.1	3.8	11.5	7.7	19.2	15.4	7.7	15.4	3.8
MARAGOLI	26	11.5	0.0	0.0	0.0	3.8	19.2	11.5	3.8	0.0	3.8
NUNYORE	30	16.7	10.0	10.0	6.9	6.7	20.0	17.9	6.7	6.7	0.0
IDAKHO	39	20.5	15.4	7.7	5.1	2.6	12.8	15.4	7.7	12.8	7.7
MARAMA	25	24.0	16.0	4.0	8.0	0.0	32.0	4.0	4.0	4.0	4.0
WANGA	25	16.0	12.0	0.0	12.0	4.0	24.0	8.0	0.0	4.0	4.0
MARACH	25	12.0	12.0	4.0	8.0	0.0	20.0	8.0	8.0	4.0	12.0
BUKHAYO	23	9.1	0.0	0.0	4.5	0.0	21.7	0.0	4.3	8.7	4.3
SAMIA	24	33.3	16.7	8.3	16.7	4.2	25.0	20.8	4.2	0.0	8.3
BUTSOTSO	20	25.0	10.0	5.0	5.0	5.0	20.0	5.0	0.0	5.0	0.0
BUNYALA	25	20.0	0.0	0.0	4.0	8.0	16.0	4.0	0.0	0.0	4.2
KABRAS	26	23.1	16.0	0.0	0.0	11.5	38.5	15.4	0.0	11.5	3.8
BUKUSU	61	15.5	10.0	4.9	11.5	4.9	20.3	8.2	3.3	9.8	4.9
KIAMBU KIKUYU	65	18.8	9.4	1.6	14.1	3.1	25.0	10.9	4.7	4.8	4.7
MURANGA KIKUYU	56	32.7	11.1	3.6	7.3	5.5	37.5	16.1	3.6	10.7	7.1
NYERI KIKUYU	49	22.4	16.7	6.1	6.1	2.0	30.6	10.2	6.1	6.3	2.0
NDIA	56	28.6	7.1	3.6	5.4	5.4	23.2	7.1	7.3	3.6	5.4
KAMBA	78	30.7	11.8	2.6	10.4	2.6	32.0	13.0	7.8	14.3	5.3
EMBU	87	34.5	13.8	5.7	8.0	3.4	28.4	13.8	9.2	9.2	5.7
MBERE	64	23.8	11.1	7.9	7.9	4.8	30.2	14.3	12.7	11.1	6.3
CHUKA	75	34.7	6.7	4.0	6.7	2.7	41.3	8.0	5.3	12.0	1.3
MUTHAMBI	76	27.6	13.2	6.6	2.6	3.9	32.9	9.3	5.3	7.9	6.6
MWIMBI	62	13.6	11.7	5.0	3.3	1.7	29.5	5.0	4.9	9.8	6.6
IGOJI	78	29.5	10.3	5.1	5.3	2.6	29.5	11.7	5.1	5.1	1.8
IMENTI	61	24.6	8.2	4.9	4.9	4.9	31.1	13.1	3.3	6.6	4.9
TIGANIA	64	25.0	10.9	0.0	4.7	3.1	23.4	9.5	3.1	1.6	3.1
IGEMBE	66	21.5	7.6	6.1	0.0	6.1	18.5	7.8	6.1	4.5	4.5
THARAKA	54	33.3	9.3	5.6	3.7	9.3	38.9	17.0	3.7	7.4	5.6
POKOMO	114	25.8	7.5	5.4	4.3	2.2	30.1	13.0	3.2	5.4	3.2
MALAKOTE	41	30.0	17.9	0.0	10.3	12.5	24.4	17.1	4.9	4.9	9.8
GIRIAMA	64	26.5	16.3	8.2	8.2	2.0	50.0	22.9	4.1	12.2	4.1
CHONYI	79	29.1	8.9	0.0	7.6	3.8	24.1	6.5	3.8	0.4	7.6
MID MJI KENDA	32	18.8	15.6	9.4	12.5	3.1	31.3	18.8	12.5	15.6	3.1
DIGO	116	31.9	16.4	4.3	6.0	3.4	37.9	11.2	4.3	12.9	3.4
TAITA	55	18.2	5.5	0.0	3.6	1.8	18.2	5.6	3.6	1.3	1.8
TAVETA	59	26.3	11.9	3.4	6.8	0.0	26.3	6.9	7.0	5.1	1.7

Table AP. 1.4.28 : Distribution of concentric whorls and double loops in Kenyan minimal ethnic population samples (females).

Concentric Whorls

POPULATION	NO	RIGHT HAND ONE %	TWO %	THREE %	FOUR %	FINGER FIVE %	ONE %	TWO %	LEFT HAND THREE %	FOUR %	FIVE %
SOMALI	103	30.1	19.4	8.7	26.2	11.7	24.3	14.6	16.5	25.2	8.7
RENDILLE	46	26.7	18.2	7.0	38.6	2.2	28.9	30.4	23.9	37.0	6.5
GABBRA	63	22.2	21.0	14.5	38.1	7.9	25.4	25.8	19.0	34.4	17.7
BORAN	60	15.8	24.6	8.8	17.9	3.5	8.6	24.1	13.8	17.2	3.4
BURJI	57	14.3	17.5	7.1	33.3	7.0	17.5	19.3	14.0	28.1	8.8
SAMBURU	46	27.3	15.9	9.1	27.3	4.5	15.2	20.5	8.9	35.6	8.9
KAJIADO MAASAI	150	18.7	24.0	8.0	26.0	4.7	15.3	17.4	16.0	21.5	8.0
KONY	23	4.3	13.0	0.0	21.7	0.0	4.3	0.0	4.3	39.1	4.3
NANDI	50	14.0	26.0	4.0	26.0	2.0	14.0	22.0	18.0	30.0	8.0
KIPSIGIS	43	14.0	18.6	9.3	16.3	4.7	9.3	25.6	14.0	30.2	2.3
TUGEN	102	12.7	11.8	5.9	21.6	3.9	5.9	13.9	10.9	23.8	7.9
KEYO	50	6.0	10.0	2.0	22.0	0.0	14.0	14.0	12.0	18.0	6.0
MARAKWET	56	12.5	8.9	7.1	19.6	7.1	10.7	8.9	12.5	32.1	14.3
POKOT	54	7.5	15.1	15.2	21.2	7.5	7.5	25.0	15.1	35.8	7.5
ITESO	47	21.3	27.7	19.1	23.4	4.3	6.5	25.5	17.0	31.9	4.3
TURKANA	43	14.0	14.3	11.9	28.6	4.7	9.5	18.6	14.0	25.6	4.7
LUO	107	10.3	26.2	13.1	29.0	8.4	11.2	23.4	17.8	26.2	9.3
GUSII	51	9.8	21.6	11.8	20.0	3.9	9.8	19.6	18.7	31.4	7.8
TIRIKI	25	12.0	28.0	8.0	20.0	8.0	8.0	16.0	16.0	20.0	8.0
MARAGOLI	24	16.7	4.2	12.5	25.0	0.0	12.5	20.8	16.7	33.3	4.2
BUNYORE	20	30.0	15.0	5.0	20.0	5.0	10.0	15.8	0.0	0.0	0.0
IDAKHO	15	6.7	20.0	6.7	26.7	0.0	13.3	6.7	6.7	33.3	0.0
MARAMA	25	16.0	24.0	12.0	28.0	12.0	16.0	24.0	20.0	20.0	24.0
WANGA	24	16.7	20.8	8.3	12.5	0.0	4.2	12.5	4.2	8.3	4.2
MARACH	24	4.2	25.0	4.2	16.7	4.2	4.2	16.7	12.5	29.2	4.2
BUKHAYO	26	3.8	11.5	7.7	19.4	7.7	15.4	11.5	11.5	26.9	11.5
SAMIA	26	11.5	23.1	11.5	30.8	7.7	3.8	26.9	11.5	26.9	3.8
BUTSOTSO	27	7.4	3.7	3.7	14.8	0.0	11.1	18.5	11.1	33.3	3.7
BUNYALA	25	16.0	16.0	12.0	16.0	8.0	16.0	12.5	8.0	8.0	4.0
KABRAS	26	3.8	3.8	3.8	0.0	0.0	3.8	11.5	3.8	7.7	0.0
BUKUSU	29	14.8	17.9	3.4	20.7	3.4	15.4	13.8	10.3	13.8	0.0
KIAMBU KIKUYU	39	13.2	26.3	10.5	18.4	5.3	13.2	15.8	13.2	21.1	13.2
MURANGA KIKUYU	46	15.2	13.0	6.7	8.7	4.3	6.7	13.0	8.7	21.7	2.2
NYERI KIKUYU	51	11.8	15.7	3.9	5.9	2.0	13.7	16.7	13.7	27.5	3.9
NDIA	66	13.6	16.7	6.1	22.7	6.1	10.6	19.7	13.6	27.3	10.6
KAMBA	42	12.2	16.7	11.9	21.4	2.4	14.3	21.4	11.9	21.4	4.8
EMBU	72	19.4	20.8	4.2	16.7	4.2	22.2	18.1	6.9	26.4	8.3
MBERE	66	9.1	12.1	3.0	10.6	0.0	13.6	12.3	7.7	17.2	1.5
CHUKA	61	19.7	21.3	3.3	21.7	6.7	15.0	23.7	13.3	25.0	8.5
MUTHAMBI	83	18.8	21.2	5.0	22.5	5.1	13.7	17.5	18.8	26.2	10.0
MWIMBI	43	20.9	23.3	4.7	16.3	4.7	16.6	27.9	4.7	20.9	9.3
IGOJI	95	11.6	16.0	5.3	21.1	4.2	5.3	18.9	13.7	24.2	10.6
IMENTI	39	15.4	23.1	7.7	23.1	0.0	12.8	15.4	12.8	28.2	2.6
TIGANIA	36	8.3	13.9	5.6	11.1	0.0	8.3	16.7	13.9	25.0	8.3
IGEMBE	33	0.0	18.2	0.0	12.1	0.0	3.0	12.1	3.0	15.2	6.1
THARAKA	46	19.6	15.2	6.5	21.7	2.2	21.7	13.0	10.9	23.9	0.0
POKOMO	90	16.7	13.3	7.8	25.6	3.3	16.7	21.1	16.7	21.1	4.4
GIRIAMA	38	11.8	17.6	8.8	14.7	0.0	11.8	20.6	8.6	20.0	7.9
CHONYI	14	0.0	7.7	7.7	23.1	0.0	7.7	7.7	15.4	15.4	7.7
MIJ MJI KENDA	27	14.8	18.5	3.7	11.1	0.0	7.4	26.9	3.7	25.9	7.4
DIGO	100	28.0	37.0	22.0	35.0	4.0	21.0	40.0	26.0	39.0	6.0
TAITA	45	13.3	13.3	6.7	17.8	2.2	13.3	17.8	8.9	28.9	11.1
TAVETA	48	17.0	25.0	10.4	25.0	4.2	12.8	22.9	16.7	25.0	6.3

Double Loops

POPULATION	NO	RIGHT HAND ONE %	TWO %	THREE %	FOUR %	FINGER FIVE %	ONE %	TWO %	LEFT HAND THREE %	FOUR %	FIVE %
SOMALI	103	13.6	10.7	1.9	4.9	1.9	28.2	16.5	1.9	6.8	1.0
RENDILLE	46	22.2	4.5	4.7	4.5	2.2	17.8	2.2	4.3	4.3	2.2
GABBRA	63	19.0	11.3	1.6	6.3	1.6	19.0	12.9	4.8	3.3	0.0
BORAN	60	17.5	5.3	3.5	0.0	1.8	17.2	5.2	3.4	3.4	3.4
BURJI	57	30.4	8.8	5.4	5.3	3.5	29.8	14.0	5.3	10.5	8.8
SAMBURU	46	11.4	6.8	2.3	9.1	2.3	19.6	6.8	15.6	2.2	2.2
KAJIADO MAASAI	150	20.7	6.0	2.7	1.3	3.3	18.0	10.7	6.0	3.4	4.0
KONY	23	8.7	0.0	0.0	4.3	0.0	4.3	0.0	0.0	0.0	0.0
NANDI	50	18.0	6.0	4.0	4.0	0.0	22.0	8.0	6.0	4.0	2.0
KIPSIGIS	43	18.6	9.3	0.0	2.3	2.3	27.9	4.7	2.3	0.0	2.3
TUGEN	102	23.5	7.8	2.0	4.9	1.0	28.7	5.0	1.0	4.0	3.0
KEYO	50	18.0	10.0	2.0	4.0	0.0	16.0	12.0	6.0	8.0	2.0
MARAKWET	56	14.3	5.4	1.8	3.6	1.8	16.1	7.1	1.8	0.0	1.8
POKOT	54	15.1	13.2	1.9	5.8	1.9	18.9	7.7	5.7	7.5	3.8
ITESO	47	21.3	0.0	0.0	0.0	2.1	12.8	2.1	0.0	2.1	2.1
TURKANA	43	14.0	4.6	2.4	4.8	2.3	19.0	4.7	2.3	2.3	4.7
LUO	107	17.8	7.5	4.7	3.7	1.9	26.2	6.5	3.7	2.8	0.9
GUSII	51	35.3	9.8	3.9	5.0	3.9	33.3	7.8	2.0	3.9	5.9
TIRIKI	25	16.0	8.0	4.0	8.0	4.0	28.0	12.0	4.0	8.0	0.0
MARAGOLI	24	20.8	12.5	0.0	0.0	4.2	33.3	0.0	0.0	0.0	0.0
BUNYORE	20	30.0	5.0	0.0	0.0	5.0	40.0	5.3	0.0	5.0	5.0
IDAKHO	15	33.3	0.0	0.0	0.0	0.0	26.7	6.7	0.0	0.0	6.7
MARAMA	25	24.0	12.0	4.0	0.0	0.0	28.0	12.0	8.0	8.0	0.0
WANGA	24	20.8	4.2	8.3	0.0	0.0	41.7	8.3	8.3	8.3	0.0
MARACH	24	25.0	4.2	0.0	0.0	0.0	29.2	8.3	0.0	4.2	0.0
BUKHAYO	26	23.1	7.7	3.8	0.0	0.0	11.5	3.8	0.0	0.0	0.0
SAMIA	26	15.4	15.4	3.8	3.8	3.8	19.2	19.2	7.7	7.7	15.4
BUTSOTSO	27	14.8	18.5	3.7	3.7	0.0	14.8	11.1	7.4	0.0	7.4
BUNYALA	25	16.0	8.0	4.0	4.0	0.0	24.0	0.0	4.0	4.0	0.0
KABRAS	26	30.8	11.5	0.0	7.7	3.8	11.5	3.8	0.0	3.8	0.0
BUKUSU	29	7.4	0.0	0.0	0.0	3.4	19.2	0.0	0.0	0.0	0.0
KIAMBU KIKUYU	39	13.2	5.3	5.3	5.3	2.6	18.4	10.5	2.6	5.3	2.6
MURANGA KIKUYU	46	19.6	13.0	2.2	8.7	2.2	30.4	10.9	4.3	4.3	4.3
NYERI KIKUYU	51	17.6	15.7	11.8	3.9	2.0	19.6	3.9	3.9	5.9	0.0
NDIA	66	31.8	7.6	4.5	1.5	1.5	27.3	7.6	1.5	4.5	3.0
KAMBA	42	28.6	9.5	2.4	9.5	0.0	26.2	11.9	7.1	9.5	7.1
EMBU	72	30.6	11.1	1.4	4.2	0.0	25.0	9.7	4.2	4.2	2.8
MBERE	66	22.7	9.1	0.0	0.0	0.0	18.5	6.2	1.5	0.0	3.1
CHUKA	61	26.2	13.1	6.7	3.3	3.3	41.7	16.9	6.7	15.0	8.5
MUTHAMBI	83	27.5	10.0	2.5	3.7	1.3	27.5	12.5	3.7	7.5	1.2
MWIMBI	43	23.3	9.3	4.7	2.3	2.3	23.3	4.7	4.7	7.0	2.3
IGOJI	95	29.5	12.8	5.3	8.4	0.0	41.1	11.6	3.2	7.4	2.1
IMENTI	39	23.1	10.3	5.1	2.6	0.0	23.1	7.7	0.0	2.6	7.7
TIGANIA	36	25.0	5.6	0.0	2.8	2.8	27.8	5.6	2.8	0.0	0.0
IGEMBE	33	25.0	3.0	0.0	12.1	0.0	24.2	9.1	3.0	12.1	3.0
THARAKA	46	34.8	13.0	6.5	8.7	4.3	39.1	13.0	8.7	13.0	10.9
POKOMO	90	20.0	7.8	3.3	4.4	1.1	22.2	6.7	1.1	7.8	3.3
GIRIAMA	38	26.5	14.7	0.0	0.0	0.0	35.3	8.8	2.9	0.0	0.0
CHONYI	14	38.5	7.7	23.1	7.7	0.0	23.1	23.1	7.7	0.0	0.0
MIJ MJI KENDA	27	25.9	22.2	3.7	11.1	3.7	22.2	7.7	11.1	18.5	3.7
DIGO	100	36.0	13.0	7.0	11.0	5.0	43.0	11.0	8.0	9.0	4.0
TAITA	45	28.9	2.2	0.0	4.4	4.4	33.3	6.7	0.0	2.2	0.0
TAVETA	48	27.7	4.2	2.1	10.4	4.2	25.5	10.4	4.2	6.3	2.1

Table AP. 1.4.29 : Distribution of radial loops in Kenyan minimal ethnic population samples (males and females).

Radial Loops (Males)

POPULATION	NO	RIGHT HAND FINGER ONE %	TWO %	THREE %	FOUR %	FIVE %	LEFT HAND FINGER ONE %	TWO %	THREE %	FOUR %	FIVE %
SOMALI	224	0.4	4.0	1.8	0.4	0.9	0.4	8.7	0.4	0.9	0.4
RENDILLE	153	0.7	5.9	0.0	0.0	0.0	0.7	6.0	1.3	1.3	0.0
GABBRA	27	0.0	0.0	0.0	0.0	0.0	3.7	0.0	0.0	0.0	0.0
BORAN	128	0.8	3.2	1.6	0.8	0.8	0.0	10.2	2.4	0.8	0.0
BURJI	64	0.0	4.7	1.6	0.0	0.0	0.0	6.3	1.6	0.0	0.0
SAMBURU	87	0.0	5.7	0.0	1.2	0.0	0.0	10.6	0.0	2.3	0.0
KADJIADO MAASAI	63	1.6	6.3	0.0	0.0	0.0	1.6	1.6	0.0	0.0	0.0
NAROK MAASAI	37	0.0	0.0	0.0	0.0	0.0	2.8	2.8	0.0	0.0	0.0
NGWESI	41	0.0	9.8	0.0	0.0	0.0	2.5	7.5	0.0	0.0	0.0
MUKOGODO	38	0.0	2.6	2.6	0.0	0.0	0.0	7.9	0.0	0.0	2.6
KONY	37	0.0	5.4	2.7	0.0	0.0	0.0	18.9	0.0	2.7	5.4
NANDI	52	0.0	1.9	0.0	1.9	0.0	0.0	5.8	1.9	0.0	0.0
KIPSIGIS	57	1.8	5.4	0.0	0.0	0.0	3.6	10.9	0.0	0.0	0.0
TUGEN	108	0.9	7.5	0.9	0.9	0.0	0.0	11.2	1.9	2.8	0.9
KEYO	50	0.0	4.0	0.0	4.0	0.0	0.0	12.0	6.1	2.0	0.0
MARAKWET	50	0.0	4.0	0.0	0.0	2.0	0.0	4.0	2.0	0.0	0.0
POKOT	45	0.0	0.0	0.0	0.0	0.0	0.0	9.1	0.0	2.3	0.0
ITESO	52	1.9	9.6	5.8	0.0	0.0	0.0	11.5	7.7	1.9	0.0
TURKANA	66	0.0	3.1	1.5	3.0	0.0	0.0	7.7	3.0	1.5	1.5
LUO	170	1.2	5.9	0.6	0.0	0.0	1.2	11.8	2.9	0.6	0.0
GUSII	50	0.0	12.2	0.0	0.0	0.0	0.0	14.0	2.0	4.0	0.0
TIRIKI	26	0.0	3.8	0.0	0.0	0.0	0.0	7.7	0.0	0.0	0.0
MARAGOLI	26	0.0	11.5	0.0	0.0	0.0	0.0	15.4	0.0	0.0	0.0
BUNYORE	30	0.0	13.3	0.0	0.0	0.0	0.0	3.6	3.3	0.0	0.0
IDAKHO	39	0.0	0.0	0.0	0.0	0.0	0.0	10.3	2.6	0.0	0.0
MARAMA	25	0.0	4.0	0.0	0.0	0.0	0.0	8.0	0.0	0.0	0.0
WANGA	25	0.0	16.0	4.0	0.0	0.0	0.0	20.0	8.0	0.0	0.0
MARACH	25	0.0	16.0	0.0	0.0	0.0	0.0	16.0	4.0	0.0	0.0
BUKHAYO	23	0.0	9.1	0.0	0.0	0.0	0.0	13.0	0.0	8.7	4.3
SAMIA	24	0.0	8.3	0.0	0.0	0.0	0.0	4.2	0.0	0.0	0.0
BUTSOTSO	20	0.0	5.0	0.0	0.0	0.0	0.0	15.0	0.0	0.0	0.0
BUNYALA	25	0.0	20.0	0.0	0.0	4.0	0.0	20.0	0.0	0.0	0.0
KABRAS	26	3.8	8.0	0.0	0.0	0.0	3.8	11.5	0.0	0.0	0.0
BUKUSU	61	0.0	1.7	0.0	0.0	0.0	1.7	14.8	1.6	0.0	0.0
KIAMBU KIKUYU	65	0.0	1.6	0.0	0.0	0.0	0.0	6.3	0.0	0.0	0.0
MURANGA KIKUYU	58	1.8	11.1	1.8	0.0	0.0	1.8	16.1	7.1	3.6	0.0
NYERI KIKUYU	49	0.0	4.2	0.0	0.0	0.0	0.0	20.4	6.1	0.0	0.0
NDIA	56	0.0	7.1	0.0	0.0	0.0	0.0	19.6	3.6	0.0	0.0
KAMBA	78	0.0	10.5	0.0	0.0	1.3	0.0	10.4	2.6	2.6	0.0
EMBU	87	2.3	4.6	0.0	0.0	0.0	2.3	16.1	1.1	3.4	1.1
MBERE	64	0.0	4.8	0.0	0.0	0.0	0.0	1.6	0.0	1.6	0.0
CHUKA	75	0.0	9.3	0.0	1.3	0.0	0.0	12.0	5.3	1.3	0.0
MUTHAMBI	76	1.3	10.5	0.0	0.0	0.0	1.3	16.0	1.3	0.0	0.0
MWIMBI	62	0.0	5.0	3.3	1.7	0.0	0.0	8.3	0.0	1.6	0.0
IGOJI	78	0.0	6.4	2.6	1.3	0.0	1.3	9.1	2.6	2.6	0.0
IMENTI	61	0.0	5.6	0.0	0.0	0.0	0.0	8.2	3.3	3.3	0.0
TIGANIA	64	0.0	9.4	0.0	1.6	0.0	0.0	14.3	0.0	0.0	0.0
IGEMBE	66	0.0	9.1	0.0	1.5	0.0	0.0	9.4	4.5	1.5	0.0
THARAKA	54	0.0	9.3	0.0	0.0	0.0	0.0	13.2	1.9	0.0	0.0
POKOMO	114	1.1	7.5	1.1	0.0	0.0	1.1	15.2	3.2	2.2	0.0
MALAKOTE	41	0.0	2.4	0.0	0.0	0.0	0.0	2.4	4.9	2.4	0.0
GIRIAMA	64	4.1	9.2	2.0	2.0	0.0	2.1	18.8	0.0	2.0	0.0
CHONYI	79	1.3	10.1	0.0	0.0	0.0	2.5	5.2	0.0	0.0	0.0
MID MJI KENDA	32	0.0	3.1	0.0	3.1	0.0	3.1	12.5	0.0	0.0	0.0
DIGO	116	0.0	4.3	0.0	0.0	0.0	0.9	10.3	0.9	0.0	0.9
TAITA	55	0.0	3.6	1.8	0.0	0.0	3.6	7.4	0.0	1.8	0.0
TAVETA	59	0.0	5.1	1.7	0.0	0.0	0.0	12.1	0.0	0.0	0.0

Radial Loops (Females)

POPULATION	NO	RIGHT HAND FINGER ONE %	TWO %	THREE %	FOUR %	FIVE %	LEFT HAND FINGER ONE %	TWO %	THREE %	FOUR %	FIVE %
SOMALI	103	0.0	2.9	0.0	1.9	1.0	0.0	1.0	0.0	0.0	0.0
RENDILLE	46	0.0	6.8	0.0	0.0	0.0	0.0	6.5	2.2	2.2	0.0
GABBRA	63	0.0	4.8	0.0	0.0	0.0	0.0	8.1	1.6	0.0	0.0
BORAN	60	0.0	5.3	1.8	0.0	0.0	0.0	13.8	1.7	0.0	0.0
BURJI	57	0.0	1.8	0.0	1.8	0.0	1.8	10.5	0.0	1.8	0.0
SAMBURU	46	2.3	4.5	0.0	0.0	0.0	2.2	11.4	0.0	2.2	0.0
KADJIADO MAASAI	150	0.0	4.0	0.0	1.3	0.0	0.7	10.1	3.3	2.0	1.3
KONY	23	4.3	4.3	0.0	4.3	0.0	0.0	17.4	0.0	0.0	0.0
NANDI	50	0.0	2.0	0.0	0.0	0.0	0.0	8.0	0.0	4.0	0.0
KIPSIGIS	43	0.0	2.3	0.0	2.3	0.0	0.0	0.0	0.0	0.0	2.3
TUGEN	102	0.0	3.9	1.0	2.0	0.0	0.0	12.9	5.0	3.0	2.0
KEYO	50	0.0	4.0	0.0	2.0	0.0	0.0	10.0	2.0	2.0	0.0
MARAKWET	55	0.0	1.8	0.0	0.0	0.0	0.0	5.4	1.8	0.0	1.8
POKOT	54	1.9	0.0	0.0	0.0	0.0	0.0	7.7	1.9	3.8	1.9
ITESO	47	0.0	10.6	0.0	2.1	0.0	4.3	12.8	2.1	2.1	0.0
TURKANA	43	4.7	4.8	0.0	0.0	0.0	4.8	9.3	0.0	0.0	2.3
LUO	107	0.0	4.7	0.0	0.9	0.9	0.9	8.4	0.0	0.9	0.0
GUSII	51	0.0	3.9	0.0	0.0	0.0	2.0	11.8	2.0	3.9	0.0
TIRIKI	25	0.0	12.0	0.0	0.0	0.0	8.0	24.0	4.0	0.0	0.0
MARAGOLI	24	0.0	8.3	0.0	0.0	0.0	0.0	20.8	0.0	0.0	0.0
BUNYORE	20	0.0	5.0	0.0	0.0	0.0	0.0	5.3	0.0	0.0	0.0
IDAKHO	15	0.0	6.7	0.0	0.0	0.0	0.0	6.7	0.0	0.0	0.0
MARAMA	25	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0
WANGA	24	0.0	8.3	0.0	0.0	0.0	0.0	16.7	0.0	4.2	0.0
MARACH	24	0.0	4.2	0.0	0.0	0.0	4.2	12.5	8.3	0.0	0.0
BUKHAYO	26	0.0	0.0	0.0	0.0	0.0	3.8	15.4	0.0	0.0	0.0
SAMIA	26	0.0	0.0	0.0	0.0	0.0	3.8	3.8	3.8	3.8	0.0
BUTSOTSO	27	7.4	3.7	0.0	0.0	0.0	3.7	11.1	0.0	0.0	0.0
BUNYALA	25	0.0	8.0	0.0	0.0	0.0	0.0	20.0	0.0	0.0	4.0
KABRAS	26	0.0	19.2	0.0	0.0	0.0	7.7	11.5	7.7	0.0	0.0
BUKUSU	29	0.0	7.1	0.0	0.0	0.0	0.0	10.3	6.9	0.0	3.6
KIAMBU KIKUYU	39	2.6	5.3	0.0	2.6	0.0	2.6	10.5	2.6	0.0	0.0
MURANGA KIKUYU	46	0.0	2.2	0.0	2.2	2.2	2.2	8.7	0.0	6.5	2.2
NYERI KIKUYU	51	0.0	0.0	0.0	2.0	0.0	0.0	15.7	5.9	3.9	0.0
NDIA	66	1.5	1.5	0.0	0.0	0.0	1.5	12.1	3.0	1.5	0.0
KAMBA	42	0.0	9.5	0.0	0.0	0.0	0.0	7.1	2.4	2.4	0.0
EMBU	72	0.0	6.9	0.0	0.0	0.0	1.4	15.3	0.0	0.0	0.0
MBERE	66	0.0	1.5	1.5	0.0	0.0	1.5	15.4	0.0	1.6	0.0
CHUKA	61	0.0	4.9	0.0	0.0	0.0	3.3	11.9	3.3	0.0	0.0
MUTHAMBI	83	0.0	5.0	0.0	0.0	0.0	0.0	12.5	1.2	1.2	0.0
MWIMBI	43	2.3	7.0	0.0	0.0	0.0	0.0	11.6	2.3	0.0	2.3
IGOJI	95	2.1	3.2	0.0	1.1	0.0	4.2	6.3	2.1	1.1	1.1
IMENTI	39	0.0	0.0	0.0	0.0	0.0	2.6	12.8	2.6	0.0	0.0
TIGANIA	36	0.0	2.8	0.0	2.8	0.0	0.0	8.3	0.0	2.8	0.0
IGEMBE	33	0.0	0.0	0.0	3.0	0.0	0.0	9.1	0.0	3.0	3.0
THARAKA	46	0.0	2.2	0.0	0.0	0.0	0.0	6.5	0.0	0.0	0.0
POKOMO	90	1.1	5.6	0.0	1.1	0.0	2.2	12.2	1.1	1.1	0.0
GIRIAMA	38	2.9	8.8	0.0	0.0	0.0	5.9	14.7	5.7	0.0	0.0
CHONYI	14	0.0	7.7	0.0	0.0	0.0	0.0	23.1	7.7	0.0	0.0
MID MJI KENDA	27	0.0	3.7	0.0	0.0	0.0	11.1	7.7	0.0	0.0	0.0
DIGO	100	3.0	3.0	0.0	1.0	0.0	4.0	4.0	1.0	0.0	1.0
TAITA	45	0.0	2.2	2.2	0.0	0.0	6.7	15.6	6.7	0.0	0.0
TAVETA	48	2.1	2.1	2.1	0.0	0.0	2.1	2.1	0.0	2.1	2.1

Table AP. 1.4.30 : Distribution of basic digital patterns on all fingers by hand in Kenyan minimal ethnic population samples (males).

		RIGHT HAND									LEFT HAND								
Pop	Sample No.	A %	AT %	UL %	RL %	CW %	DL %	UCP %	RCP %	ACC %	Sample No.	A %	AT %	UL %	RL %	CW %	DL %	UCP %	RCP %	ACC %
Somali	1110	2.1	0.0	58.7	1.5	25.8	6.7	3.7	0.9	0.1	1115	2.4	0.4	61.6	1.7	20.4	9.4	2.6	0.8	0.2
Gabbra	134	0.7	0.7	84.2	0.0	18.7	9.0	5.2	1.5	0.0	135	0.0	0.0	71.9	0.7	15.6	5.9	3.7	1.2	0.0
Boran	633	4.9	0.2	60.2	1.4	19.7	9.5	3.5	0.3	0.0	635	5.8	0.3	61.1	2.7	17.6	9.6	2.0	0.6	0.2
Burji	320	1.6	0.0	59.7	1.3	23.8	10.3	2.2	0.9	0.2	320	2.5	0.0	52.8	1.6	25.3	14.1	1.9	1.3	0.6
Rendille	758	2.4	0.0	58.7	1.3	23.8	8.3	5.4	0.3	0.0	757	2.7	0.5	59.4	1.8	23.9	6.7	3.0	0.8	0.0
Samburu	433	2.5	0.0	66.3	1.4	19.2	7.2	3.5	0.0	0.0	431	3.2	0.5	61.9	2.6	20.0	6.7	4.2	0.9	0.0
Kadjiado																				
Maasai	315	2.8	0.0	63.2	1.6	20.6	7.6	4.1	0.0	0.0	315	4.8	0.0	64.1	0.6	19.7	7.6	2.9	0.3	0.0
Narok																				
Maasai	179	6.1	0.0	63.1	0.0	16.8	9.5	3.9	0.6	0.0	180	7.8	0.0	65.0	1.1	17.8	8.6	1.7	1.1	0.0
Ngwesi	205	1.0	0.0	62.9	2.0	20.0	10.2	3.4	0.5	0.0	200	2.5	0.0	61.5	2.0	20.0	10.5	2.5	1.0	0.0
Nkongodo	190	2.6	0.5	55.8	1.1	29.5	10.0	0.5	0.0	0.0	190	4.2	0.0	54.2	2.1	24.7	11.6	2.6	0.5	0.0
Kony	185	8.1	0.0	70.3	1.6	12.4	3.2	4.3	0.0	0.0	185	11.9	0.0	62.7	3.4	11.9	5.4	2.7	0.0	0.0
Nandi	359	2.3	0.0	64.9	0.8	15.1	13.1	3.1	0.8	0.0	360	2.7	0.4	66.6	1.5	18.1	6.5	3.5	0.4	0.0
Kipsigis	279	3.6	0.4	60.2	1.4	21.1	8.8	3.9	0.7	0.0	276	5.8	0.0	55.1	2.9	21.7	8.7	4.0	1.8	0.0
Tugen	534	3.2	0.2	67.2	2.1	15.2	9.4	2.4	0.4	0.0	538	3.5	0.2	66.7	3.3	15.4	8.6	1.9	0.4	0.0
Keyo	255	2.4	0.0	68.6	1.6	15.7	6.3	4.3	0.8	0.4	254	2.4	0.4	67.7	4.3	16.5	8.7	0.8	1.2	0.0
Marakwet	250	0.8	0.0	66.0	1.2	18.4	5.8	6.9	0.0	0.0	250	3.6	0.0	64.4	1.2	20.8	4.8	4.8	0.4	0.0
Pokot	225	3.6	0.0	68.9	0.0	16.4	8.4	2.2	0.4	0.0	223	4.0	0.4	74.4	2.2	9.4	6.7	2.7	0.0	0.0
Iteso	260	3.8	0.0	70.4	3.5	12.3	5.4	3.8	0.8	0.0	260	5.0	0.0	68.8	4.2	11.5	5.8	3.1	0.8	0.0
Turkana	327	6.1	0.6	50.5	1.5	26.0	11.3	3.7	0.3	0.0	329	7.8	0.0	55.6	2.7	20.4	10.3	3.3	0.0	0.0
Luo	846	2.2	0.2	66.1	1.5	16.7	9.2	3.0	1.1	0.0	850	2.9	0.2	63.2	2.3	15.9	9.3	3.2	0.9	0.0
Gusii	246	2.8	0.0	64.2	2.4	15.4	12.6	2.4	0.0	0.0	250	2.8	0.0	65.6	4.0	15.6	9.6	2.0	0.4	0.0
Tiriki	130	6.2	0.0	59.2	0.8	13.1	16.2	4.6	0.0	0.0	130	7.7	1.5	63.1	1.5	11.5	12.2	2.3	0.0	0.0
Maragoli	130	5.4	0.0	69.2	2.3	16.2	3.1	3.1	0.8	0.0	130	8.2	0.0	66.2	3.1	16.9	7.7	0.0	0.0	0.0
Bunyore	149	0.7	0.0	59.7	2.7	21.5	10.1	3.4	2.0	0.0	148	1.4	0.0	68.2	1.4	15.5	10.1	2.0	1.4	0.0
Idakho	195	1.5	0.0	74.4	0.0	10.3	10.3	3.6	0.0	0.0	195	4.1	0.0	74.4	2.6	7.2	11.3	0.5	0.0	0.0
Marama	125	1.6	0.0	49.6	0.8	29.6	10.4	5.6	1.6	0.8	125	3.2	0.0	56.4	1.8	26.4	9.6	0.8	0.0	0.0
Wanga	125	1.6	0.0	72.0	4.0	8.8	8.8	4.8	0.0	0.0	125	1.6	0.0	72.6	5.6	8.8	8.0	0.8	1.6	0.8
Marach	125	5.6	0.0	57.6	3.2	22.4	7.2	3.2	0.8	0.0	125	8.4	0.0	60.0	4.0	15.2	10.4	3.2	0.8	0.0
Bukhayo	110	5.5	0.0	72.7	1.8	13.6	2.7	3.6	0.0	0.0	115	6.1	0.0	68.1	5.2	13.0	7.8	0.9	0.9	0.0
Samia	120	7.5	0.0	58.2	1.7	10.0	15.8	4.2	1.7	0.0	120	8.7	0.8	67.5	0.8	8.3	11.7	2.5	1.7	0.0
Butsotso	100	0.0	0.0	64.0	1.0	15.0	10.0	8.0	2.0	0.0	100	3.0	0.0	72.0	3.0	12.0	8.0	3.0	1.0	0.0
Bunyala	125	6.4	0.0	59.2	4.8	19.2	6.4	3.2	0.8	0.0	124	4.8	0.8	62.1	4.0	18.4	4.8	2.4	0.8	0.8
Kabras	128	1.6	0.0	57.8	2.3	25.8	10.2	2.3	0.0	0.0	130	3.1	0.8	68.1	3.1	12.3	13.8	3.1	0.8	0.0
Bukusu	301	5.0	0.0	64.1	0.3	14.0	9.3	5.6	1.7	0.0	303	8.3	0.3	67.2	3.6	11.9	9.2	1.7	0.7	0.0
Kisumbu																				
Kikuyu	320	2.5	0.0	66.3	0.3	17.8	9.4	3.1	0.6	0.0	319	4.4	0.3	63.9	1.3	17.6	10.0	2.5	0.0	0.0
Murang'a																				
Kikuyu	274	3.3	0.0	61.3	2.9	17.2	12.0	3.3	0.0	0.0	280	3.6	1.1	56.1	5.7	15.7	15.0	2.1	0.7	0.0
Nyeri																				
Kikuyu	244	7.0	0.0	59.8	0.8	16.0	10.7	3.3	0.4	0.0	244	7.8	1.6	56.1	5.3	15.2	11.1	1.6	0.4	0.8
Ndia	280	3.2	0.0	69.6	1.4	11.8	10.0	3.2	0.7	0.0	278	6.9	0.4	60.6	4.7	14.7	9.4	2.5	0.7	0.0
Kamba	380	2.9	0.3	66.3	2.4	13.2	11.6	3.2	0.3	0.0	382	4.5	0.3	60.5	3.1	14.9	14.4	1.6	0.5	0.0
Embu	435	2.1	0.0	71.7	1.4	10.3	13.1	1.1	0.2	0.0	435	6.4	0.5	66.9	4.8	6.7	12.9	0.9	0.5	0.4
Mbere	315	5.1	0.3	60.0	1.0	20.3	11.1	2.2	0.0	0.0	315	4.4	0.3	61.3	0.6	16.5	14.9	1.9	0.0	0.0
Chuka	375	2.4	0.3	63.7	2.1	17.6	10.9	2.4	0.5	0.0	372	1.6	0.0	64.0	3.7	13.1	13.6	2.7	1.3	0.0
Muthambe	380	1.8	0.5	63.9	2.4	17.4	10.8	2.6	0.5	0.0	379	2.4	1.1	64.4	3.7	12.4	12.4	2.6	1.1	0.0
Mwimbi	289	2.7	0.0	73.9	2.0	11.4	7.0	2.0	0.0	0.0	304	5.3	0.7	67.8	2.0	12.2	11.2	0.7	0.3	0.0
Igoji	387	3.9	0.3	66.1	2.1	15.0	10.6	1.8	0.3	0.0	389	4.6	0.3	62.2	3.1	15.9	11.1	1.3	1.3	0.3
Imenti	303	3.0	0.0	63.9	1.3	18.0	9.5	4.3	0.0	0.0	304	5.3	0.0	59.2	3.0	17.4	11.8	1.6	1.6	0.0
Tigania	320	4.7	0.0	64.4	2.2	15.6	8.8	3.4	0.6	0.3	319	8.0	0.0	59.6	2.8	13.2	8.2	0.3	0.9	0.0
Igembe	328	1.5	0.3	65.9	2.1	18.3	8.2	3.0	0.6	0.0	327	2.1	0.3	67.6	3.1	17.1	8.3	1.2	0.3	0.0
Tharaka	270	6.7	0.0	57.0	1.9	18.5	12.3	3.3	0.4	0.0	269	7.1	0.0	58.4	3.0	15.2	14.5	1.1	0.7	0.0
Pokomo	465	4.1	0.0	64.9	1.9	16.1	9.0	3.4	0.4	0.0	464	6.7	0.2	61.6	4.3	13.8	11.0	1.3	0.6	0.4
Malakote	162	2.5	0.6	58.0	0.6	20.4	15.4	1.2	1.2	0.0	170	2.9	0.0	71.2	0.0	10.0	14.1	1.2	0.6	0.0
Giriama	245	3.3	0.0	60.0	3.3	16.7	12.2	3.3	1.2	0.0	243	4.9	0.4	60.5	4.5	8.6	18.9	2.1	0.4	0.0
Chonyi	395	2.3	0.0	63.3	2.3	15.2	9.9	5.3	0.8	0.0	392	5.4	0.0	64.0	1.8	15.1	9.7	3.1	1.3	0.0
Mid Mji																				
Kenda	160	3.1	0.0	60.0	1.3	18.1	11.9	4.4	1.3	0.0	160	6.3	0.0	54.4	3.1	16.3	16.3	3.5	0.0	0.0
Digo	580	3.6	0.2	58.1	0.9	22.4	12.4	2.4	0.0	0.0	580	3.6	0.2	60.3	2.6	18.4	14.0	1.9	0.7	0.2
Taita	275	4.4	0.0	73.5	1.1	13.1	5.8	1.5	0.7	0.0	274	5.5	0.4	72.3	2.6	11.3	6.2	1.5	0.4	0.0
Taveta	292	9.6	0.0	62.8	1.4	13.3	9.6	3.1	0.3	0.0	290	10.7	0.0	65.2	2.4	8.6	9.3	2.4	1.4	0.0

Table AP. 1.4.31 : Distribution of basic digital patterns on all fingers by hand in Kenyan minimal ethnic population samples (females).

	RIGHT HAND										LEFT HAND									
Pop	No. of Fingers	A %	AT %	UL %	RL %	CW %	DL %	UCP %	RCP %	ACC %	No. of Fingers	A %	AT %	UL %	RL %	CW %	DL %	UCP %	RCP %	ACC %
Somali	515	2.1	0.2	65.6	1.2	19.2	6.6	4.5	0.6	0.0	515	3.5	0.2	63.5	0.2	17.9	10.9	2.1	0.8	0.0
Rendille	221	2.3	0.0	65.2	1.4	18.6	7.7	5.0	0.0	0.0	229	3.5	0.4	55.5	2.2	25.3	8.1	5.7	1.3	0.0
Gabbra	313	0.3	0.0	64.9	1.0	20.8	8.0	4.5	0.6	0.0	311	1.9	0.6	58.5	1.9	24.4	6.0	2.5	0.6	0.0
Boran	284	6.4	0.0	70.8	1.4	14.1	5.6	1.4	0.4	0.0	290	7.1	0.3	67.2	3.1	13.4	6.6	1.7	0.3	0.0
Burji	283	5.3	0.0	65.4	0.7	15.9	10.6	1.8	0.4	0.0	285	7.7	0.4	56.1	2.8	17.5	13.7	0.7	1.1	0.0
Samburu	220	1.8	0.0	69.5	1.4	16.8	6.4	3.2	0.9	0.0	225	4.4	0.0	60.9	3.1	17.8	9.3	3.6	0.9	0.0
Kenjiado Maasai	750	5.6	0.0	65.6	1.1	16.3	6.8	3.9	0.8	0.0	748	9.6	0.0	57.8	3.5	15.6	8.4	3.1	1.9	0.0
Kony	115	4.3	0.0	76.3	2.6	7.8	2.6	3.5	0.9	0.0	115	3.5	0.0	77.4	3.5	10.4	0.9	0.9	1.7	0.0
Nandi	250	7.2	0.0	68.4	0.4	14.4	6.4	3.2	0.0	0.0	250	8.4	0.4	58.8	2.4	18.4	8.4	2.4	0.8	0.0
Kipsigis	215	6.5	0.0	69.3	0.9	12.6	6.5	4.2	0.0	0.0	215	7.4	0.0	64.7	0.5	16.3	7.4	2.8	0.9	0.0
Tugen	510	1.0	0.2	75.5	1.4	11.2	7.8	2.5	0.4	0.0	505	2.4	0.2	68.5	4.8	12.5	8.3	2.4	1.2	0.0
Keyo	250	4.8	0.0	77.8	1.2	8.0	6.8	1.2	0.4	0.0	250	4.0	2.0	64.8	2.8	12.8	8.8	3.6	1.2	0.0
Marakwet	280	5.7	0.4	71.1	0.4	11.1	5.4	5.0	0.7	0.4	280	7.5	1.4	61.1	1.8	15.7	5.4	4.3	2.9	0.0
Pokot	264	3.4	0.0	72.3	0.4	12.9	7.6	3.0	0.4	0.0	264	4.5	0.4	58.7	3.0	18.2	8.0	3.0	0.4	0.0
Iteso	235	4.3	0.0	66.0	2.6	19.1	4.7	2.1	1.3	0.0	235	4.7	0.0	64.3	4.3	17.4	3.8	3.4	2.1	0.0
Turkana	212	3.3	0.0	70.3	1.9	14.6	5.7	4.2	0.0	0.0	214	7.0	0.9	65.0	3.3	14.5	6.5	2.3	0.5	0.0
Luo	535	3.7	0.0	66.7	1.3	17.4	7.1	3.6	0.0	0.2	535	5.6	0.0	61.9	2.1	17.6	8.0	3.4	1.5	0.0
Gusii	254	3.9	0.0	68.1	0.8	13.4	11.8	1.2	0.8	0.0	255	7.8	0.8	55.7	3.9	16.9	10.6	1.2	3.1	0.0
Tiriki	125	3.2	0.0	69.9	2.4	15.2	8.0	1.6	0.0	0.0	125	2.4	0.8	63.2	7.2	13.6	10.4	2.4	0.0	0.0
Maragoli	120	2.5	0.0	74.2	1.7	11.7	7.5	1.7	0.8	0.0	120	2.5	0.8	65.8	4.2	17.5	6.7	0.8	1.7	0.0
Bunyore	100	2.0	0.0	74.0	1.0	15.0	8.0	0.0	0.0	0.0	99	8.1	2.0	74.7	1.0	8.1	12.1	0.0	0.0	0.0
Idakho	75	4.0	0.0	74.7	1.3	12.0	6.7	1.3	0.0	0.0	73	5.3	2.7	68.7	1.3	12.0	8.0	1.3	2.7	0.0
Marama	125	4.8	0.0	68.8	0.0	16.4	8.0	2.4	0.8	0.0	125	5.6	0.0	59.2	0.8	20.8	11.2	1.6	0.8	0.0
Wanga	120	7.5	0.0	69.2	1.7	11.7	8.7	2.5	0.8	0.0	120	10.0	0.8	62.5	4.2	8.7	13.3	1.7	0.8	0.0
Marach	120	4.2	0.0	75.8	0.8	10.8	5.8	2.5	0.0	0.0	120	3.3	0.8	64.1	5.0	13.3	8.3	3.3	1.7	0.0
Bukhayo	130	2.3	0.0	78.5	0.0	9.2	6.9	2.3	0.8	0.0	130	4.6	0.0	68.5	3.8	15.4	3.1	4.6	0.0	0.0
Samia	130	3.1	0.0	66.9	0.0	16.9	8.5	3.8	0.8	0.0	130	5.4	0.0	60.0	3.1	14.6	13.8	2.3	0.8	0.0
Butsotso	135	3.7	0.0	79.3	2.2	5.9	8.1	0.7	0.0	0.0	136	7.4	0.0	63.0	5.0	15.6	8.1	2.2	0.7	0.0
Bunyala	125	7.2	0.0	66.4	3.2	13.6	7.2	1.6	0.8	0.0	124	8.9	0.0	64.5	6.5	9.7	6.5	3.2	0.8	0.0
Kabras	130	10.0	0.0	70.0	3.8	2.3	10.8	3.1	0.0	0.0	130	11.3	0.0	70.0	5.4	5.4	5.4	3.8	2.3	0.8
Bukusu Kimbu	142	4.2	0.0	78.1	1.4	12.0	2.1	3.5	0.7	0.0	141	8.4	0.0	70.2	4.3	10.6	3.5	3.5	1.4	0.0
Kikuyu Murunga	190	6.8	0.0	65.3	2.1	14.7	6.3	4.7	0.0	0.0	190	10.5	0.0	58.4	2.2	15.3	7.9	3.2	1.6	0.0
Kikuyu Nyeri	230	8.3	0.0	67.8	1.3	10.0	9.1	3.5	0.0	0.0	230	10.0	0.4	61.7	3.9	10.9	10.9	1.7	0.4	0.0
Kikuyu	255	4.7	0.4	73.7	0.4	7.8	10.2	2.0	0.8	0.0	255	6.7	0.4	62.7	5.1	14.9	6.7	0.0	1.2	0.4
Nzia	330	3.0	0.3	70.3	0.6	13.0	9.4	3.3	0.0	0.0	330	4.5	0.9	62.4	3.6	16.4	8.8	2.4	0.9	0.0
Kamba	209	1.4	0.0	71.8	1.9	12.9	9.1	1.9	1.0	0.0	210	2.9	0.5	55.2	2.4	14.8	12.4	1.4	0.5	0.0
Embu	360	4.2	0.0	68.1	1.4	13.1	9.4	3.6	0.0	0.3	360	5.6	0.0	60.6	3.3	16.4	9.2	3.3	1.4	0.0
Mbere	330	4.2	0.0	76.7	0.6	7.0	8.4	4.8	0.0	0.3	324	7.1	0.3	68.5	3.7	10.5	5.9	3.1	0.9	0.0
Chuka	302	3.6	0.0	67.9	1.0	14.6	10.6	2.3	0.0	0.0	298	5.0	0.0	55.0	3.7	17.1	17.8	0.7	0.7	0.0
Muthambi	399	2.5	0.3	69.7	1.0	14.5	9.0	3.8	0.3	0.0	400	4.3	0.5	60.5	3.0	17.3	10.5	2.3	1.8	0.0
Mwimbi	215	4.7	0.0	68.4	1.9	14.0	8.4	3.3	0.5	0.0	215	5.6	0.5	64.2	3.3	16.3	6.4	0.5	0.5	0.5
Igoji	474	7.0	0.0	66.5	1.3	11.6	11.2	2.5	0.0	0.0	474	8.6	0.2	58.4	3.0	14.6	13.1	1.5	0.8	0.2
Imenti	195	3.6	0.5	71.3	0.0	13.8	8.2	2.1	0.5	0.0	195	9.2	0.0	59.0	3.6	14.4	8.2	1.0	4.6	0.0
Tigania	180	4.4	0.0	77.2	1.1	7.8	7.2	1.7	0.6	0.0	180	6.7	0.0	66.7	2.2	14.4	7.2	2.8	0.0	0.0
Igembe	164	7.9	0.8	74.4	0.6	6.1	7.9	1.2	1.2	0.0	165	7.3	1.8	63.6	3.0	7.9	10.3	2.4	3.6	0.0
Tharaka	230	5.7	0.0	66.5	0.4	13.0	13.5	0.0	0.9	0.0	230	7.0	0.8	57.4	1.3	13.9	17.0	1.3	1.3	0.0
Pokomo	450	8.2	0.0	66.0	1.6	13.3	7.3	2.4	1.1	0.0	450	9.8	0.2	59.6	3.3	16.0	8.2	1.6	1.1	0.0
Giriama	173	7.5	0.8	65.3	2.3	10.4	8.1	5.8	0.0	0.0	176	8.0	0.0	61.9	5.1	13.6	9.1	1.1	1.1	0.0
Chonyi	65	7.7	1.5	63.1	1.5	7.7	15.4	3.1	0.0	0.0	65	9.2	0.0	63.1	6.2	10.8	10.8	0.0	0.0	0.0
Mid Nji Kenga	135	5.2	0.0	66.7	0.7	9.6	13.3	4.4	0.0	0.0	134	4.5	0.0	61.9	3.7	14.2	12.7	2.2	0.7	0.0
Digo	500	3.4	0.4	51.4	1.4	25.2	14.4	3.4	0.4	0.0	500	4.8	0.2	48.8	2.0	26.4	15.0	1.8	1.0	0.0
Taita	225	3.1	0.9	72.9	0.9	10.7	8.0	3.1	0.4	0.0	225	4.8	0.4	63.1	5.8	16.0	6.4	0.9	0.4	0.0
Taveta	239	6.3	0.0	62.8	1.3	16.3	9.6	3.8	0.0	0.0	239	7.9	0.0	56.9	1.7	16.7	9.5	2.9	4.2	0.0

Table AP. 1.4.32 : Distribution of total patterns on all fingers by hand in Kenyan minimal ethnic population samples (males).

Population	Right Hand				Left Hand			
	No	Arches %	Loops %	Whorls %	No	Arches %	Loops %	Whorls %
Somali	1110	2.7	61.3	36.7	1115	2.9	63.6	33.5
Gabbra	134	1.5	64.2	34.3	135	0.0	72.6	27.4
Boran	633	5.1	61.6	33.3	635	5.1	63.8	30.1
Burji	320	1.6	60.9	37.5	320	2.5	54.4	43.1
Rendille	758	2.4	60.0	37.6	757	4.2	61.3	34.5
Samburu	433	2.5	67.7	29.8	431	3.7	64.5	31.8
Kacjiado Maasai	315	2.9	64.8	32.4	315	4.8	64.8	30.5
Narok Maasai	179	6.1	63.1	30.7	180	7.8	66.1	26.1
Ogwesi	205	1.0	64.9	34.1	200	2.5	63.5	34.0
Mukogodo	190	3.2	56.8	40.0	190	4.2	56.3	39.5
Kony	185	6.1	71.9	20.0	185	11.9	68.1	20.0
Nandi	259	2.3	65.6	32.0	260	3.1	68.5	28.5
Kipsigis	279	3.6	61.6	34.4	276	5.8	58.0	36.2
Tugen	534	3.4	69.3	27.3	536	3.7	70.1	26.2
Keyo	255	2.4	70.2	27.5	254	2.8	72.0	25.2
Marakwet	250	0.8	67.2	32.0	250	3.6	65.6	30.8
Pokot	225	3.6	68.9	27.6	223	4.5	76.7	18.8
Iteso	260	3.8	73.8	22.3	260	5.0	73.8	21.2
Turkana	327	5.7	52.0	41.3	329	7.6	58.4	34.0
Luo	846	2.5	67.6	29.9	850	4.1	66.6	29.3
Gusii	245	2.8	66.7	30.5	250	3.6	69.6	27.6
Tiriki	130	6.2	60.0	33.8	130	8.2	64.6	26.2
Maragoli	130	5.4	71.5	23.1	130	6.2	69.2	24.6
Bunyore	149	0.7	62.4	36.9	148	1.6	69.6	28.7
Idakho	195	1.5	74.4	24.1	195	4.1	76.9	19.0
Marama	125	1.6	60.4	48.0	125	3.2	60.0	36.8
Wanga	125	1.6	76.0	22.4	125	1.6	78.4	20.0
Marach	125	5.6	60.8	33.6	125	6.4	64.0	29.6
Bukhayo	110	5.5	74.5	20.0	115	6.1	71.3	22.6
Samia	120	7.5	60.8	31.7	120	7.5	68.3	24.2
Butsotso	100	0.0	65.0	35.0	100	3.0	75.0	22.0
Bunyala	125	6.4	64.0	29.6	124	8.6	66.1	25.2
Kabras	126	1.6	60.2	38.3	130	3.5	66.2	30.0
Bukusu	301	5.0	64.5	30.5	303	5.6	71.0	23.4
Kiambu Kikuyu	320	2.5	66.6	30.9	319	4.7	65.2	30.1
Muranga Kikuyu	274	3.3	64.2	32.5	280	4.6	61.6	33.6
Nyeri Kikuyu	244	7.0	60.7	32.4	244	9.4	61.5	29.1
Ndia	280	3.2	71.1	25.7	278	7.2	65.5	27.3
Kamba	380	3.2	68.7	28.2	382	4.7	63.6	31.7
Embu	435	2.1	73.1	24.8	435	6.9	71.7	21.4
Mbere	315	5.4	61.0	33.7	315	4.8	61.9	33.3
Chuka	375	2.7	65.9	31.5	375	4.6	67.7	30.7
Muthambe	380	2.4	66.3	31.3	379	3.4	68.1	28.5
Mwimbi	299	3.7	75.9	20.4	304	5.6	69.7	24.3
Igoji	387	4.1	68.2	27.6	389	4.9	65.3	29.8
Imenti	305	3.0	65.2	31.8	304	5.3	62.2	32.6
Tigania	320	4.7	66.6	28.8	319	5.0	72.4	22.6
Igembe	328	1.8	68.0	30.2	327	2.4	70.6	26.9
Tharaka	270	6.7	58.9	34.4	269	7.1	61.3	31.6
Pokomo	465	4.1	66.9	29.0	464	5.9	65.9	27.2
Malakote	162	3.1	58.6	38.3	170	2.9	71.2	25.9
Giriama	254	3.3	63.3	33.5	243	5.3	65.0	29.6
Chonyi	395	3.3	65.6	31.1	392	5.4	65.6	29.1
Rabai	160	3.1	61.3	35.66	160	6.3	57.5	36.2
Digo	580	3.8	59.0	37.2	580	4.0	62.9	33.1
Taita	275	4.4	74.5	21.1	274	5.5	74.5	19.3
Taveta	293	5.6	64.2	26.3	290	10.7	67.6	21.7

No = Number of fingers

Table AP. 1.4.33 : Distribution of total patterns on all fingers by hand in Kenyan minimal ethnic population samples (females).

Population	Right Hand				Left Hand			
	No	Arches %	Loops %	Whorls %	No	Arches %	Loops %	Whorls %
Somali	515	2.3	66.8	30.9	515	3.7	63.7	32.6
Gabbra	313	0.3	65.8	33.9	311	2.6	60.8	36.7
Boran	284	5.3	72.2	21.5	290	7.6	70.3	22.*
Burji	283	5.3	66.1	28.6	285	9.1	58.9	33.0
Rendilla	221	2.3	66.5	31.2	229	3.9	57.6	38.4
Samburu	220	1.8	70.9	27.3	225	4.4	64.0	31.6
Kadjiado Maasai	750	5.6	66.7	27.7	746	8.8	61.2	29.0
Kony	115	4.3	80.9	14.8	116	6.2	80.9	13.9
Nandi	250	7.2	68.8	24.0	250	8.8	61.2	30.0
Kipsigis	215	6.5	70.2	23.3	215	7.4	65.1	27.4
Tugen	510	1.2	76.9	22.0	505	2.6	73.1	24.4
Kayo	250	4.8	78.8	16.4	250	6.0	67.6	26.4
Marakwet	280	6.1	71.4	22.5	280	8.9	62.9	28.2
Pokot	264	3.4	72.7	23.9	264	8.7	61.7	29.5
Iteso	235	4.3	68.5	27.2	235	4.7	68.5	26.8
Turkana	272	3.3	72.2	24.5	274	7.9	68.2	23.8
Luo	535	3.7	68.0	28.2	535	8.6	63.9	30.5
Gusii	254	3.9	68.9	27.2	255	8.6	59.6	31.8
Tiriki	125	3.2	72.0	24.8	125	3.2	70.4	26.4
Maragoli	120	2.5	75.8	21.7	120	3.3	70.0	26.7
Bunyore	100	2.0	75.0	23.0	99	8.1	75.9	16.2
Idakho	75	4.0	76.0	20.0	75	8.0	68.0	24.0
Marama	125	4.8	65.6	29.6	125	5.6	60.0	34.4
Wanga	120	7.5	70.8	21.7	120	10.8	66.7	22.5
Marach	120	4.2	76.7	19.2	120	4.2	69.2	26.7
Bukhayo	130	2.3	78.5	19.2	130	4.6	72.3	23.1
Samia	130	3.1	66.9	30.0	130	5.4	63.1	31.5
Butsotso	135	3.7	67.5	28.8	135	7.4	65.9	26.7
Bunyala	125	7.2	69.6	23.2	124	8.9	71.0	20.2
Kapras	130	10.0	73.8	16.2	130	12.3	75.4	12.3
Bukusu	142	4.2	77.5	18.3	141	6.4	74.5	19.1
Miambu Kikuyu	190	5.8	67.4	26.8	190	10.5	61.6	27.9
Murange Kikuyu	230	5.3	69.1	22.6	230	10.4	55.7	33.9
Nyeri Kikuyu	255	5.1	74.1	20.8	255	7.1	67.8	25.1
Idia	330	3.3	70.9	25.8	330	5.5	65.1	29.5
Kamba	209	7.4	73.7	24.9	210	8.3	67.6	29.2
Embu	360	4.2	69.4	26.4	360	5.6	64.2	30.3
Mbere	330	4.2	77.3	18.5	324	7.4	72.2	20.4
Chuka	302	3.6	68.9	27.5	299	8.0	58.7	33.2
Mutmambe	399	2.8	70.7	26.6	400	4.8	63.5	31.8
Mwimbi	215	4.7	70.2	25.1	215	6.0	57.4	26.6
Igoji	474	7.0	67.7	25.3	474	8.9	61.4	29.7
Imenti	195	6.1	71.3	24.6	195	9.2	62.6	28.2
Tigania	190	4.4	78.3	17.2	190	6.7	59.9	33.4
Igembe	164	8.5	75.3	16.5	165	9.1	66.7	24.2
Tharaka	330	5.7	67.0	27.4	330	7.8	58.7	33.5
Sokomo	450	9.2	67.5	24.2	450	10.0	62.9	27.1
Giriama	173	8.1	67.6	24.3	175	8.0	67.2	25.0
Chonyi	65	9.2	64.6	26.2	65	9.2	69.2	21.6
Mid Mijikenda	135	8.2	67.4	27.4	131	4.5	66.7	28.8
Digo	500	1.8	52.8	45.4	500	5.0	50.8	44.2
Taita	225	4.0	73.8	22.2	225	6.3	68.9	25.8
Taveta	239	6.3	64.0	29.7	239	7.9	58.4	33.5

Table AP. 1.4.34 : Distribution of indices of triradial intensity and the atd angle in Kenyan minimal ethnic population samples (right hand males).

POPULATION	INTERDIGITAL			HYPOTHENAR			TOTAL PALMAR			TOTAL FINGER.			ATD ANGLE.		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD.
SOMALI	222	4.243	0.676	222	1.342	0.546	222	5.635	0.936	222	6.739	1.763	220	36.5	4.9
RENDILLE	152	4.276	0.622	153	1.261	0.497	152	5.812	0.822	148	6.804	1.725	146	36.7	4.5
GABBRA	27	4.259	0.447	25	1.360	0.569	25	5.720	0.792	26	6.692	1.543	25	36.4	4.8
BORAN	127	4.191	0.526	127	1.315	0.499	127	5.622	0.835	125	6.400	1.980	124	37.6	4.6
BURJI	64	4.313	0.687	64	1.266	0.479	64	5.656	1.057	64	6.813	1.745	64	37.6	4.4
SAMBURU	87	4.172	0.595	87	1.276	0.475	87	5.517	0.847	86	6.349	1.767	80	38.4	5.0
KAOJIADO MAASAI	63	4.333	0.596	63	1.349	0.572	63	5.746	0.822	63	6.476	1.786	63	37.7	4.2
NAROK MAASAI	36	4.222	0.485	36	1.333	0.535	36	5.583	0.732	35	6.171	2.079	36	36.1	4.9
NGWESI	41	4.220	0.475	41	1.244	0.435	41	5.902	1.179	41	6.659	1.563	40	38.5	4.1
MUKOGODO	38	4.184	0.512	38	1.263	0.503	38	5.579	0.889	38	6.868	1.647	38	38.8	4.7
KONY	37	4.162	0.553	36	1.306	0.467	36	5.694	0.856	37	5.595	1.707	33	36.8	4.0
NANDI	52	4.250	0.519	52	1.365	0.486	52	5.712	0.750	51	6.490	1.678	52	38.0	4.5
KIPSIGIS	57	4.298	0.654	56	1.179	0.388	56	5.696	1.060	55	6.564	2.007	57	38.5	5.0
TUGEN	108	4.093	0.375	105	1.257	0.501	104	5.510	0.824	106	6.198	1.775	101	38.9	4.2
KEYO	50	4.180	0.523	50	1.280	0.497	50	5.540	0.908	50	6.240	1.673	50	37.8	3.2
MARAKWET	50	4.320	0.587	49	1.224	0.422	49	5.673	0.851	50	6.560	1.487	50	37.2	3.6
POKOT	45	4.267	0.580	42	1.238	0.431	40	5.800	1.067	45	6.200	1.673	45	36.8	3.6
ITESO	52	4.346	0.556	52	1.365	0.627	52	5.827	0.879	52	5.923	1.296	52	40.1	5.6
TURKANA	65	4.385	0.700	61	1.344	0.513	60	5.683	1.043	63	6.714	2.143	64	37.7	4.3
LUO	170	4.453	0.660	170	1.359	0.528	170	5.929	0.970	166	6.356	1.662	168	39.9	5.5
GUSII	50	4.280	0.607	49	1.224	0.422	49	5.551	0.709	49	6.367	1.550	49	38.3	6.0
TIRIKI	26	4.385	0.697	26	1.192	0.402	26	5.692	0.928	26	6.385	2.137	26	36.8	3.9
MARAGOLI	26	4.385	0.571	26	1.385	0.496	26	5.962	0.824	26	5.885	1.728	26	37.5	3.6
BUNYORE	30	4.533	0.819	30	1.067	0.254	30	5.633	0.809	29	6.793	1.424	30	38.6	4.9
IDAKHO	39	4.487	0.823	39	1.410	0.498	39	5.949	0.999	39	6.128	1.490	39	38.1	5.1
MARAMA	25	4.440	0.583	25	1.160	0.374	25	5.680	0.802	25	7.320	1.651	25	38.8	5.0
WANGA	25	4.360	0.700	25	1.200	0.500	25	5.680	1.030	25	6.040	1.172	25	36.8	3.9
MARACH	25	4.400	0.577	25	1.400	0.500	25	5.880	0.881	25	6.400	2.062	25	38.5	5.0
BUKHAYO	23	4.174	0.388	23	1.522	0.730	23	5.739	0.915	22	5.727	1.579	23	37.1	5.6
SAMIA	24	4.125	0.741	24	1.292	0.464	24	5.417	0.929	24	6.208	2.126	24	37.2	5.7
BUTSOTSO	20	4.550	0.759	20	1.400	0.598	20	6.000	1.214	20	6.750	1.070	20	38.1	6.0
KUNYALA	25	4.360	0.757	25	1.360	0.569	25	5.800	1.041	25	6.160	1.972	25	37.1	4.9
KABRAS	26	4.192	0.491	26	1.269	0.533	26	5.500	0.648	25	6.880	1.481	26	39.2	5.3
BUKUSU	61	4.381	0.606	60	1.250	0.437	60	5.750	0.968	57	6.228	1.964	55	38.0	4.5
KIAMBU KIKUYU	64	4.266	0.570	64	1.328	0.565	64	5.688	0.852	64	6.422	1.753	63	38.6	4.5
MURANGA KIKUYU	56	4.393	0.731	56	1.268	0.486	56	5.929	1.219	54	6.463	1.767	56	38.6	5.0
NYERI KIKUYU	49	4.265	0.670	49	1.224	0.468	49	5.571	0.866	48	6.333	2.137	48	38.6	4.7
NDIA	56	4.393	0.679	56	1.232	0.467	56	5.696	0.893	56	6.125	1.526	53	38.8	4.6
KAMBA	78	4.346	0.621	77	1.364	0.560	77	5.818	0.996	73	6.274	1.592	69	38.0	4.1
EMBU	87	4.264	0.516	87	1.195	0.399	87	5.563	0.742	87	6.138	1.456	81	39.3	4.5
MBERE	64	4.406	0.684	64	1.234	0.463	64	5.844	1.171	63	6.429	1.864	64	40.6	5.5
CHUKA	75	4.147	0.456	73	1.137	0.346	73	5.370	0.697	75	6.453	1.605	70	40.2	5.4
MUTHAMBI	76	4.316	0.716	70	1.243	0.464	70	5.771	0.966	76	6.474	1.701	72	40.2	5.2
MWIMBI	61	4.197	0.601	57	1.246	0.474	56	5.500	0.763	59	5.847	1.529	59	38.3	5.2
IGOJI	78	4.333	0.658	78	1.342	0.478	76	5.776	0.974	75	6.200	1.685	70	39.1	5.2
IMENTI	61	4.230	0.529	60	1.267	0.446	60	5.600	0.764	61	6.443	1.727	57	37.0	4.8
TIGANIA	64	4.203	0.568	64	1.281	0.487	64	5.625	0.882	64	6.219	1.732	62	37.3	4.2
IGEMBE	66	4.197	0.561	66	1.136	0.346	66	5.591	1.037	64	6.422	1.489	65	39.6	4.3
THARAKA	54	4.370	0.623	54	1.352	0.520	54	5.889	0.883	54	6.389	2.149	54	39.8	6.0
POKOMO	114	4.325	0.572	114	1.307	0.482	114	5.719	0.857	93	6.247	1.810	112	40.2	5.6
MALAKOTE	40	4.500	0.641	39	1.410	0.569	39	6.026	0.843	39	6.564	1.861	40	39.4	4.7
GINIAMA	64	4.391	0.704	64	1.219	0.417	64	5.766	1.020	49	6.510	1.745	62	38.8	6.1
CHONYI	79	4.582	0.672	79	1.228	0.530	79	6.038	1.148	79	6.392	1.613	75	39.4	5.2
MIJI MJI KENDA	32	4.469	0.879	32	1.281	0.457	32	6.031	1.150	32	6.625	2.075	30	38.5	5.1
DIGO	116	4.405	0.672	116	1.319	0.521	116	5.882	0.486	116	6.681	1.882	109	38.8	4.9
TAITA	52	4.462	0.727	52	1.615	0.661	52	6.231	1.022	55	5.836	1.500	50	38.9	4.1
TAVETA	59	4.407	0.646	56	1.304	0.502	56	5.839	0.910	57	5.807	2.175	57	37.8	4.7

Table AP. 1.3.35 : Distribution of indices of triradial intensity and the atd angle in Kenyan minimal ethnic population samples (left hand males).

POPULATION	INTERDIGITAL			HYPOTHENAR			TOTAL PALMAR			TOTAL FINGER.			ATD ANGLE.		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD.
SOMALI	224	4.228	0.612	224	1.272	0.494	223	5.731	1.031	224	6.554	1.743	221	36.9	5.0
RENDILLE	150	4.293	0.606	152	1.263	0.471	149	5.711	0.903	148	6.520	1.693	142	36.8	5.0
GABBRA	27	4.148	0.456	26	1.308	0.471	26	5.692	0.884	27	6.370	1.597	27	37.7	5.7
BORAN	127	4.220	0.590	127	1.307	0.512	127	5.756	0.974	127	6.220	2.019	125	37.8	4.8
BURJI	64	4.375	0.745	64	1.141	0.350	64	5.672	1.085	64	7.047	1.963	63	38.4	4.0
SAMBURU	87	4.195	0.662	86	1.233	0.425	86	5.570	0.965	85	6.435	1.700	84	38.7	5.2
KADJIADU MAASAI	63	4.302	0.526	63	1.206	0.481	63	5.778	0.924	63	6.286	1.670	63	37.1	3.8
NAROK MAASAI	36	4.167	0.447	36	1.167	0.378	36	5.528	0.941	36	5.917	1.933	36	35.9	4.4
NGWESI	41	4.244	0.489	40	1.250	0.439	40	6.025	1.165	40	6.575	1.693	39	38.4	4.1
MUKOGODO	38	4.342	0.627	38	1.289	0.460	38	5.895	1.134	38	6.763	1.822	37	37.2	4.1
KONY	37	4.216	0.417	36	1.167	0.378	36	5.944	0.984	37	5.405	1.936	37	38.5	6.9
NANDI	52	4.250	0.437	52	1.212	0.412	52	5.942	1.178	52	6.288	1.525	51	38.4	4.6
KIPSIGIS	57	4.298	0.597	57	1.158	0.368	57	5.982	1.203	55	6.527	2.168	57	38.0	4.9
TUGEN	108	4.120	0.524	107	1.178	0.384	106	5.726	1.038	106	6.132	1.735	104	38.1	3.9
KEYO	50	4.220	0.582	50	1.200	0.404	50	5.600	0.926	49	6.143	1.683	50	37.7	3.5
MARAKWET	50	4.260	0.565	49	1.143	0.354	49	5.776	1.123	50	6.360	1.549	50	36.5	3.9
POKOT	45	4.244	0.484	42	1.143	0.354	41	5.756	1.019	43	5.721	1.517	45	36.9	3.2
ITESO	52	4.442	0.839	52	1.327	0.513	52	6.250	1.312	52	5.808	1.715	52	41.2	7.4
TURKANA	66	4.424	0.634	59	1.271	0.485	59	6.102	1.389	65	6.308	2.038	66	37.4	4.4
LUO	169	4.491	0.725	169	1.243	0.457	169	6.302	1.340	170	6.271	1.839	168	40.0	5.6
GUSII	50	4.360	0.693	50	1.140	0.351	50	5.860	1.088	50	6.240	1.572	49	37.9	5.0
TIRIKI	26	4.308	0.618	26	1.192	0.402	26	5.885	1.143	26	5.923	1.998	26	36.4	3.9
KARAGOLI	26	4.077	0.688	26	1.192	0.402	26	5.885	1.395	26	5.923	1.978	26	36.7	3.5
BUNYORE	30	4.433	0.679	30	1.100	0.305	30	5.800	1.031	28	6.357	1.393	30	38.6	4.6
IDAKHO	39	4.308	0.696	39	1.282	0.510	39	6.256	1.446	39	5.744	1.499	39	37.2	4.3
MARAMA	25	4.480	0.714	25	1.080	0.277	25	6.160	0.987	25	6.680	1.520	25	39.7	4.0
WANGA	25	4.400	0.645	25	1.240	0.523	25	6.040	1.207	25	5.920	1.152	25	38.2	4.6
MARACH	25	4.440	0.768	25	1.200	0.408	25	6.080	1.382	25	6.160	2.154	25	40.0	7.6
BUKHAYO	23	4.304	0.635	23	1.304	0.635	23	5.652	0.832	23	5.826	1.800	23	38.2	4.0
SANIA	24	4.250	0.608	24	1.208	0.415	24	6.083	1.176	24	5.875	1.650	24	39.2	3.3
BUTSOTSO	20	4.450	0.605	20	1.500	0.688	20	6.200	1.105	20	5.950	0.826	20	38.8	5.2
BUNYALA	25	4.520	0.872	25	1.200	0.408	25	6.480	1.475	24	6.208	1.817	25	36.6	3.7
KABRAS	26	4.308	0.549	26	1.231	0.514	26	5.692	0.788	26	6.346	1.599	26	39.6	4.9
BUKUSU	61	4.279	0.488	60	1.200	0.443	60	5.883	1.121	59	5.847	1.874	60	37.6	4.5
KIAMBU KIKUYU	65	4.292	0.579	65	1.262	0.477	65	5.785	0.992	63	6.302	1.837	64	39.0	4.8
MURANGA KIKUYU	56	4.339	0.695	56	1.232	0.467	56	6.143	1.368	56	6.500	1.799	54	39.7	4.9
NYERI KIKUYU	49	4.204	0.577	49	1.143	0.354	49	5.735	0.953	48	6.125	2.199	48	39.4	4.7
NDIA	56	4.268	0.556	56	1.179	0.386	56	5.804	0.961	55	6.036	1.990	55	37.4	4.1
KAMBA	78	4.321	0.634	77	1.351	0.623	77	6.091	1.205	74	6.405	1.879	74	38.2	4.4
EMBU	87	4.310	0.535	86	1.244	0.484	86	5.837	1.027	87	5.759	1.880	86	38.2	5.9
MBERE	64	4.359	0.681	63	1.190	0.435	63	6.095	1.214	63	6.444	1.812	63	40.8	6.7
CHUKA	75	4.187	0.458	71	1.113	0.318	71	5.620	0.947	75	6.453	1.638	74	40.0	5.2
MUTHAMBI	75	4.200	0.735	72	1.250	0.496	71	5.873	1.298	75	6.320	1.710	72	39.3	5.5
MWIMBI	62	4.210	0.484	56	1.286	0.494	55	6.000	1.106	60	5.983	1.722	57	38.5	5.3
IGOJI	78	4.244	0.706	72	1.292	0.568	72	5.903	1.313	77	6.247	1.920	71	39.0	5.1
IMENTI	61	4.393	0.781	59	1.085	0.281	59	5.763	1.194	60	6.367	1.813	60	37.0	5.2
TIGANIA	64	4.313	0.687	64	1.188	0.432	64	5.781	1.076	63	5.889	1.733	63	37.0	4.5
IGEMBE	66	4.212	0.645	64	1.156	0.407	64	5.844	1.312	63	6.190	1.635	66	39.9	4.8
THARAKA	54	4.185	0.552	54	1.204	0.407	54	5.870	1.150	53	6.208	2.205	53	39.6	5.4
POKOMO	114	4.237	0.584	114	1.325	0.524	114	5.904	1.129	91	6.044	2.043	112	41.1	6.5
MALAKOTE	41	4.463	0.778	40	1.175	0.385	40	5.900	1.105	41	6.000	1.688	41	39.4	5.3
GIRIAMA	64	4.359	0.721	64	1.203	0.443	64	6.047	1.240	47	6.255	1.905	63	38.2	5.4
CHONYI	79	4.456	0.656	79	1.228	0.479	79	6.190	1.397	76	6.224	1.778	78	39.2	4.6
MID MJI KENDA	32	4.531	0.803	32	1.344	0.483	32	6.375	1.314	32	6.500	2.095	31	38.7	4.2
DIGO	116	4.310	0.624	114	1.298	0.478	114	6.035	1.204	116	6.474	1.752	115	38.9	5.3
TAITA	55	4.291	0.737	55	1.436	0.601	55	6.182	1.203	54	5.722	1.742	52	39.8	4.0
TAVETA	59	4.288	0.589	59	1.203	0.406	59	5.915	1.103	54	5.500	2.126	56	39.7	4.8

Table AP. 1.4.36 : Distribution of indices of triradial intensity and the atd angle in Kenyan minimal ethnic population samples (right hand females).

POPULATION	INTERDIGITAL			HYPOTHENAR			TOTAL PALMAR			TOTAL FINGER.			ATD ANGLE.		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD.
SOMALI	103	4.214	0.621	101	1.248	0.498	101	5.594	0.827	103	6.456	1.719	99	38.7	5.1
RENDILLE	46	4.283	0.621	46	1.435	0.620	46	5.761	0.923	45	6.778	1.808	46	38.9	5.1
GABBRA	63	4.111	0.512	63	1.270	0.482	63	5.492	0.780	60	6.733	1.645	61	39.6	4.3
BORAN	60	4.117	0.372	60	1.250	0.437	60	5.517	0.613	58	5.741	1.934	59	38.2	4.9
BURJI	57	4.193	0.515	57	1.351	0.551	57	5.719	0.774	57	6.263	2.224	57	41.0	4.0
SAMBURU	46	4.152	0.515	46	1.261	0.491	46	5.587	0.884	43	6.302	1.934	42	40.6	6.5
KADJIADO MAASAI	150	4.280	0.646	150	1.280	0.465	150	5.827	1.038	148	5.959	2.197	148	37.8	5.0
KONY	23	4.304	0.559	23	1.261	0.449	23	6.000	1.044	21	5.435	1.199	23	39.5	4.0
NANDI	50	4.180	0.596	48	1.229	0.472	48	5.875	1.084	50	6.080	2.146	50	40.7	4.7
KIPSIGIS	43	4.163	0.754	42	1.214	0.415	42	5.667	1.300	43	6.000	2.047	43	38.1	4.3
TUGEN	101	4.149	0.498	100	1.220	0.462	100	5.770	1.090	101	6.099	1.404	101	39.6	4.5
KEYO	50	4.240	0.517	50	1.220	0.465	50	5.960	1.087	50	6.120	1.698	50	40.8	5.2
MARAKWET	56	4.125	0.587	56	1.214	0.414	55	5.764	1.105	56	6.036	1.972	55	37.7	3.9
POKOT	53	4.113	0.423	50	1.180	0.436	49	5.510	0.916	52	6.038	2.223	52	39.4	5.7
ITESO	47	4.298	0.507	47	1.255	0.488	47	5.766	0.840	47	6.106	1.856	47	39.9	6.1
TURKANA	43	4.279	0.549	43	1.442	0.590	43	6.186	1.160	42	5.857	2.079	42	39.5	4.9
LUO	107	4.299	0.602	107	1.262	0.442	107	5.991	1.137	107	6.243	1.999	107	41.3	5.0
GUSII	51	4.275	0.638	51	1.255	0.483	51	5.843	1.007	51	6.196	2.289	51	39.3	4.0
TERIKI	25	4.400	0.577	25	1.200	0.500	25	6.200	1.080	25	6.200	1.683	25	40.2	5.9
NARAGOLI	24	4.333	0.565	24	1.292	0.550	24	5.792	0.779	24	6.208	1.532	23	40.6	5.1
KUNYORE	20	4.100	0.553	20	1.350	0.489	20	5.950	1.234	19	5.474	1.389	19	42.6	7.3
IDAKHO	15	4.333	0.816	15	1.267	0.458	15	6.067	1.387	15	5.933	1.710	15	38.0	5.7
NARAMA	25	4.160	0.624	25	1.360	0.638	25	5.680	0.988	25	6.440	2.142	24	38.9	4.2
WANGA	24	4.250	0.794	24	1.208	0.509	24	5.833	1.204	24	5.625	2.018	24	41.0	6.6
NARACH	24	4.167	0.482	24	1.167	0.381	24	6.583	0.830	24	6.167	1.579	24	40.6	4.0
BUKHAYO	26	4.269	0.667	26	1.231	0.430	26	6.000	1.058	26	5.923	1.765	26	39.0	5.1
SAMIA	26	4.154	0.732	26	1.231	0.514	26	5.654	1.058	26	6.308	2.112	26	40.8	5.8
NUTSOTSO	27	4.222	0.506	27	1.185	0.396	27	5.667	0.734	27	5.963	1.829	27	41.5	4.2
NUNYALA	25	4.200	0.408	25	1.040	0.200	25	5.480	0.653	24	5.542	1.865	25	38.2	4.6
KABRAS	26	4.385	0.637	26	1.192	0.402	26	5.846	1.008	26	5.000	1.766	26	40.8	6.1
BUKUSU	29	4.310	0.541	29	1.345	0.484	29	5.724	0.649	25	5.760	1.665	27	38.1	4.2
KIAMBU KIKUYU	39	4.103	0.552	39	1.231	0.427	39	5.641	0.932	38	5.868	2.549	39	41.4	6.9
MURANGA KIKUYU	46	4.217	0.864	46	1.348	0.604	46	5.804	1.067	46	5.696	2.075	46	41.2	6.0
NYERI KIKUYU	51	4.118	0.553	51	1.118	0.325	51	5.569	0.676	51	5.941	1.670	50	39.7	3.8
NOIA	66	4.182	0.524	66	1.167	0.414	66	5.788	1.157	66	6.197	1.808	64	39.0	4.7
KAMBA	42	4.190	0.505	37	1.216	0.479	37	5.784	1.228	42	6.310	1.554	40	41.0	5.6
EMBU	72	4.181	0.539	72	1.194	0.399	72	5.708	0.999	72	6.236	1.724	69	40.9	5.6
MBERE	66	4.167	0.571	66	1.258	0.474	66	5.652	0.953	64	5.672	1.691	66	41.0	5.9
CHUKA	61	4.164	0.522	59	1.203	0.446	59	5.678	0.973	58	6.603	1.991	60	42.4	5.3
MUTHAMBI	83	4.205	0.512	79	1.241	0.459	79	5.709	0.850	80	6.375	1.664	82	39.8	5.2
MWIMBI	40	4.200	0.516	35	1.343	0.539	35	5.629	0.808	43	6.070	1.668	39	39.5	4.7
IGOJI	95	4.147	0.412	95	1.263	0.443	95	5.758	1.069	94	6.021	2.016	91	41.9	5.5
IMENTI	39	4.179	0.556	39	1.333	0.478	39	5.821	1.048	39	5.949	2.178	39	39.5	4.7
TIGANIA	36	4.389	0.599	36	1.194	0.401	36	6.056	1.094	36	5.889	1.848	35	37.6	3.1
IGEMBE	33	4.152	0.364	33	1.242	0.435	33	5.667	0.957	33	5.848	1.805	33	42.7	4.4
THARAKA	46	4.174	0.486	46	1.130	0.341	46	5.674	0.920	46	6.326	2.001	46	40.6	4.8
POKOMO	90	4.256	0.439	90	1.233	0.425	90	5.889	1.043	90	5.867	2.142	89	42.3	5.2
GIRIAMA	38	4.237	0.590	38	1.368	0.489	38	6.079	1.266	34	5.882	1.981	36	40.6	5.7
CHONYI	14	4.357	0.633	14	1.143	0.535	14	6.143	1.231	13	5.615	2.142	14	41.9	7.3
MID MJI KENDA	27	4.222	0.577	27	1.148	0.362	27	5.963	1.224	26	6.308	1.871	27	39.6	4.3
DIGO	100	4.270	0.649	100	1.300	0.482	100	6.060	1.301	100	6.970	1.992	98	40.9	5.7
TAITA	45	4.400	0.618	45	1.467	0.548	45	6.178	1.284	45	6.044	1.731	44	41.2	4.2
TAVETA	48	4.167	0.781	48	1.208	0.410	48	5.563	1.029	47	6.298	2.349	48	42.8	5.0

Table AP. 1.4.37 : Distribution of indices of triradial intensity and the atd angle in Kenyan minimal ethnic population samples (left hand females).

POPULATION	PALMAR PATTERNS AND TRIRADII														
	INTERDIGITAL			HYPOTHENAR			TOTAL PALMAR			TOTAL FINGER.			ATD ANGLE.		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD.
SOMALI	103	4.165	0.544	103	1.369	0.524	103	5.583	0.786	103	6.437	1.667	102	38.1	4.5
RENDILLE	44	4.227	0.605	45	1.356	0.484	44	5.591	0.726	43	6.465	1.579	43	39.1	5.0
GABBRA	63	4.175	0.555	61	1.262	0.444	61	5.475	0.648	61	6.656	1.672	62	39.2	4.9
BORAN	59	4.220	0.589	59	1.237	0.429	59	5.593	1.116	56	5.750	1.861	57	36.5	5.0
BURJI	57	4.228	0.535	57	1.366	0.559	57	5.737	0.835	55	6.200	1.909	57	40.8	4.1
SAMBURU	45	4.244	0.570	45	1.333	0.564	45	5.600	0.837	44	6.273	1.561	45	39.8	5.8
KADJIADO MAASAI	150	4.200	0.591	150	1.347	0.567	150	5.680	0.936	150	6.107	1.977	150	38.3	5.4
KONY	23	4.087	0.288	22	1.318	0.568	22	5.682	0.945	23	5.522	1.238	22	39.4	4.1
NANDI	50	4.140	0.496	48	1.292	0.459	48	5.729	1.026	50	5.840	2.093	50	39.7	4.6
KIPSIGIS	43	4.256	0.759	42	1.238	0.431	42	5.643	1.100	43	5.837	1.838	43	38.4	4.3
TUGEN	102	4.167	0.447	102	1.284	0.495	102	5.598	0.893	102	6.049	1.277	98	39.6	4.2
KEYO	50	4.160	0.560	50	1.380	0.602	50	5.840	1.251	50	5.580	1.444	50	40.7	4.5
MARAKWET	56	4.161	0.565	56	1.286	0.494	56	5.696	1.159	56	5.839	1.627	54	38.0	3.7
POKOT	54	4.074	0.328	51	1.353	0.627	51	5.510	0.925	52	5.981	1.777	52	39.5	6.4
ITESO	47	4.213	0.463	47	1.340	0.522	47	5.617	0.709	47	6.149	1.853	45	39.4	6.4
TURKANA	42	4.286	0.636	42	1.357	0.577	42	5.714	0.891	40	6.000	1.935	40	40.0	5.6
LUO	107	4.374	0.694	107	1.336	0.475	107	5.935	1.066	107	6.224	1.850	107	41.4	5.3
GUSII	51	4.412	0.779	51	1.216	0.415	51	5.706	0.965	50	6.180	1.903	50	39.4	4.2
TERIK	25	4.320	0.557	25	1.400	0.645	25	5.960	0.889	25	6.080	1.382	25	40.8	5.4
MARAGOLI	24	4.292	0.550	24	1.208	0.415	24	5.583	0.776	24	5.958	1.601	24	40.8	5.7
HUNYORE	20	4.100	0.308	20	1.250	0.444	20	5.650	0.813	20	6.050	1.234	20	41.6	6.5
IDAKHO	15	4.333	0.816	15	1.467	0.743	15	6.267	1.438	15	5.800	1.207	15	37.5	4.9
MARAMA	25	4.160	0.638	25	1.400	0.645	25	5.760	1.012	25	6.240	1.943	24	37.6	4.2
WANGA	24	4.333	0.987	24	1.167	0.381	24	5.542	0.977	24	5.708	1.829	23	41.2	5.4
MARACH	24	4.083	0.504	24	1.292	0.550	24	5.417	0.881	24	5.750	1.452	23	38.3	4.4
BUKHAYO	26	4.308	0.618	26	1.231	0.430	26	5.769	0.981	26	5.846	1.617	26	38.9	6.0
SANIA	26	4.192	0.567	26	1.269	0.533	26	5.692	1.087	26	6.346	1.853	26	39.0	5.2
BUTSOTSO	27	4.185	0.557	27	1.222	0.424	27	5.556	0.751	27	5.556	1.311	27	41.0	4.5
BUNYALA	25	4.240	0.523	25	1.240	0.436	25	5.640	0.952	25	5.800	2.000	24	37.5	4.9
KABRAS	26	4.423	0.643	26	1.192	0.402	26	5.654	0.689	26	5.308	1.666	26	40.0	5.4
BUKUSU	29	4.138	0.441	29	1.448	0.572	29	5.690	0.891	27	5.704	1.463	26	36.8	3.3
KIAMBU KIKUYU	39	4.179	0.451	39	1.333	0.478	39	5.615	0.747	38	5.947	2.205	38	40.5	6.8
MURANGA KIKUYU	46	4.130	0.400	46	1.283	0.502	46	5.413	0.617	46	5.717	2.029	46	40.2	4.9
NYERI KIKUYU	51	4.137	0.633	51	1.176	0.385	51	5.412	0.829	51	5.804	1.600	50	39.1	3.9
NDIA	66	4.152	0.533	66	1.197	0.401	66	5.621	1.019	66	6.136	1.672	65	39.9	4.9
KAMBA	42	4.190	0.505	42	1.286	0.506	42	5.619	0.962	41	6.195	1.249	42	41.0	5.6
EMBU	72	4.167	0.475	71	1.225	0.453	71	5.521	0.753	72	6.111	1.478	69	40.7	5.6
MBERE	66	4.227	0.549	66	1.227	0.422	66	5.591	0.841	66	5.727	1.473	66	41.6	5.9
CHUKA	61	4.098	0.473	60	1.350	0.547	60	5.667	0.877	60	6.167	1.748	57	41.8	5.1
MUTHAMBI	83	4.266	0.586	80	1.212	0.441	80	5.512	0.811	79	6.165	1.454	82	40.9	4.5
MWIMBI	40	4.300	0.564	36	1.333	0.478	36	5.722	0.779	43	6.023	1.566	38	41.1	5.2
IGOJI	95	4.211	0.435	95	1.253	0.481	95	5.589	0.805	94	5.904	1.918	89	40.6	5.0
IMENTI	39	4.256	0.637	39	1.333	0.530	39	5.590	0.818	39	6.051	1.654	38	39.7	5.2
TIGANIA	36	4.278	0.701	36	1.278	0.454	36	5.639	0.899	36	5.639	1.397	34	37.6	3.8
IGEMBE	33	4.212	0.545	33	1.242	0.435	33	5.697	0.984	32	5.438	1.625	32	41.3	3.9
THARAKA	46	4.087	0.354	46	1.261	0.491	46	5.457	0.780	46	6.087	1.824	46	41.4	5.4
POKOMO	90	4.278	0.581	89	1.281	0.478	89	5.719	1.011	90	5.800	1.915	88	42.0	5.2
GIRIAMA	38	4.316	0.620	37	1.351	0.484	37	5.919	0.954	33	5.879	1.980	37	42.1	6.5
CHONYI	14	4.429	0.756	14	1.214	0.579	14	5.929	1.072	13	5.923	2.100	13	40.8	7.2
MIJIKENDA	27	4.259	0.594	27	1.259	0.447	27	5.741	1.023	27	6.111	1.577	27	39.2	4.9
DIGO	100	4.310	0.596	100	1.330	0.514	100	5.760	1.006	100	7.000	1.860	97	40.9	5.2
TAITA	45	4.467	0.661	45	1.489	0.549	45	6.044	0.999	45	5.956	1.537	45	39.5	4.7
TAVETA	47	4.234	0.666	47	1.340	0.562	47	5.617	0.945	47	6.191	2.028	46	40.9	5.0

Table AP. 1.4.38 : Distribution of palmar ridge counts in Kenyan minimal ethnic population samples (males).

Right Hand

POPULATION	AB RIDGE COUNT			BC RIDGE COUNT			CD RIDGE COUNT			TOTAL PALMAR RC		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD.
SOMALI	220	35.9	6.1	196	25.1	6.0	200	35.6	5.5	215	96.7	13.8
RENDILLE	139	35.9	5.7	132	24.7	5.0	130	35.0	4.6	130	95.4	10.5
GABBRA	25	36.4	8.0	23	25.9	6.4	23	35.5	7.1	25	96.3	17.5
BORAN	119	36.2	5.1	114	25.7	5.7	110	35.9	6.3	113	96.8	12.8
BURJI	61	34.5	4.8	60	24.9	5.0	60	36.2	4.7	59	95.2	10.8
SAMBURU	77	36.5	5.5	75	24.5	5.8	69	35.1	5.2	71	94.6	13.2
KADJIADO MAASAI	63	37.7	6.4	61	25.7	5.0	61	37.2	6.5	63	100.2	13.8
NAROK MAASAI	36	36.9	7.6	33	26.0	6.1	33	37.3	5.6	36	98.3	16.8
NGWESI	37	34.5	5.1	40	24.9	5.4	39	35.6	7.0	36	94.1	9.4
MUKOGODO	36	37.2	4.8	36	25.6	4.8	36	35.8	5.5	35	98.6	8.9
KONY	37	37.2	5.3	35	26.5	5.6	35	36.7	5.9	37	99.8	13.7
NANDI	52	36.0	4.8	50	26.0	5.9	50	35.7	5.8	52	97.7	12.9
KIPSIGIS	57	35.5	4.8	54	26.1	4.9	54	35.7	5.4	57	96.4	11.7
TUGEN	90	38.2	6.1	94	26.3	5.3	92	35.2	5.2	86	99.7	12.4
KEYO	49	38.2	5.8	45	25.9	5.9	45	37.2	6.3	49	100.3	14.4
MARAKWET	50	37.1	4.5	48	25.6	5.2	48	37.1	5.3	50	98.9	12.2
POKOT	42	37.8	4.6	40	27.8	5.6	40	35.0	5.2	42	100.6	12.1
ITESO	50	36.3	5.9	49	26.7	4.9	49	37.1	3.8	50	99.4	11.2
TURKANA	62	36.3	5.2	59	26.3	5.5	58	35.3	5.2	60	96.8	10.7
LUO	155	36.7	4.9	144	27.4	5.7	145	36.0	4.7	154	99.1	11.8
GUSII	50	37.7	5.6	44	26.5	4.7	44	35.4	5.3	47	98.6	11.3
TIRIKI	26	38.2	6.2	24	27.2	5.7	24	36.2	8.1	25	101.5	15.7
MARAGOLI	26	35.5	4.4	25	25.3	5.7	25	36.6	6.5	25	99.3	14.6
BUNYORE	29	34.8	3.4	30	25.7	6.1	30	33.9	5.9	29	94.4	7.9
IDAKHO	39	37.4	4.0	35	25.9	5.2	35	36.8	4.1	39	97.2	13.7
MARAMA	24	38.4	5.5	22	28.8	6.0	22	38.6	8.0	23	101.2	13.7
WANGA	25	37.0	4.9	23	28.7	5.4	22	37.5	6.7	24	101.2	11.7
MARACH	25	35.8	7.4	23	27.5	4.8	23	38.3	3.2	25	100.4	11.4
BUKHAYO	23	36.5	7.1	20	26.8	4.6	20	36.5	3.8	22	97.4	12.8
SAMIA	24	35.4	4.5	20	27.8	4.8	20	36.5	6.0	23	98.2	10.7
BUTSOTSO	20	38.3	5.1	20	27.5	5.2	19	36.6	4.9	19	102.2	12.1
BUNYALA	25	37.6	4.3	21	29.4	6.1	20	39.9	5.2	24	104.2	11.7
KABRAS	26	37.5	5.2	23	27.1	6.1	23	35.9	4.3	24	99.8	9.0
BUKUSU	51	34.5	4.4	44	25.6	4.7	43	33.2	4.9	47	92.7	11.0
KIAMBU KIKUYU	63	36.4	5.9	60	27.5	5.4	63	35.9	4.8	60	100.0	10.3
MURANGA KIKUYU	55	39.1	5.9	53	29.3	4.7	53	39.0	7.1	54	108.1	14.4
NYERI KIKUYU	48	36.4	6.0	46	28.6	5.4	45	36.7	6.1	48	99.0	13.1
NDIA	51	37.5	6.4	46	26.2	5.2	44	36.1	5.4	45	98.7	12.6
KAMBA	60	36.2	5.1	57	26.5	5.9	58	36.6	4.1	54	99.5	11.2
EMBU	84	35.4	5.1	79	25.8	5.5	78	34.3	5.1	80	95.2	11.3
MBERE	59	36.3	4.7	54	26.1	4.8	54	35.1	4.2	56	95.9	10.1
CHUKA	65	35.0	5.4	63	24.4	5.0	64	33.6	4.2	62	91.4	10.8
MUTHAMBI	72	37.2	5.7	65	26.9	5.9	66	36.5	6.0	70	99.1	13.1
MWIMBI	58	37.1	6.5	55	27.9	6.1	54	36.0	4.8	56	100.5	12.0
IGOJI	74	35.0	5.6	63	25.3	5.4	64	34.9	5.7	71	92.6	14.5
IMENTI	59	32.7	6.2	51	23.7	4.4	53	34.1	4.5	55	89.4	11.7
TIGANIA	64	36.9	6.1	61	27.2	5.2	60	37.2	5.7	63	100.7	12.5
IGEMBE	66	36.2	5.8	59	25.3	4.9	59	36.2	5.2	64	94.5	12.9
THARAKA	54	38.8	7.2	51	27.0	5.4	52	35.9	5.9	53	101.5	15.9
POKOMO	110	35.4	6.3	100	25.6	4.4	99	34.5	5.2	101	94.7	12.2
MALAKOTE	40	36.3	5.5	40	26.1	5.6	40	35.8	4.7	40	98.3	11.2
GIRIAMA	57	35.0	4.9	52	25.7	4.5	53	34.1	6.0	51	94.1	10.8
CHONYI	75	34.1	5.0	69	26.0	5.2	70	33.4	4.4	71	92.9	9.2
MIJ MJI KENDA	31	34.6	4.7	26	26.2	5.0	25	34.0	4.0	30	92.5	10.5
DIGO	106	36.5	5.1	105	27.1	4.8	106	36.7	4.4	99	99.9	11.1
TAITA	49	37.0	5.4	44	26.2	5.6	46	33.7	5.4	44	96.7	11.8
TAVETA	55	36.0	6.3	51	25.3	5.3	49	34.2	6.4	49	95.2	12.6

Left Hand

POPULATION	AB RIDGE COUNT			BC RIDGE COUNT			CD RIDGE COUNT			TOTAL PALMAR RC		
	NO	MEAN	SD	NO	MEAN	SD.	NO	MEAN	SD	NO	MEAN	SD.
SOMALI	223	36.0	6.3	205	25.8	6.0	204	35.5	6.3	222	95.3	15.1
RENDILLE	137	36.6	6.0	131	24.7	5.3	126	35.3	5.6	130	96.2	12.2
GABBRA	26	36.7	7.4	26	27.2	6.9	26	33.5	7.2	26	97.4	15.3
BORAN	127	36.9	4.9	115	26.1	5.9	115	36.5	6.1	122	98.4	13.0
BURJI	61	35.6	4.2	58	24.4	5.0	57	35.4	6.3	57	95.6	11.7
SAMBURU	81	36.3	5.7	73	24.7	5.5	72	34.6	5.9	77	93.9	12.3
KADJIADO MAASAI	63	37.8	6.3	56	25.1	5.3	56	37.0	7.1	63	99.0	14.2
NAROK MAASAI	35	37.6	5.6	34	24.8	6.4	34	37.0	6.6	34	98.8	14.6
NGWESI	38	36.4	5.3	35	25.5	5.0	35	37.6	6.0	36	98.3	11.4
MUKOGODO	38	37.1	5.2	37	24.8	5.2	36	36.1	5.1	37	97.6	10.1
KONY	36	38.5	4.6	34	27.3	6.3	34	34.6	5.7	36	99.3	14.0
NANDI	52	35.6	4.6	51	25.8	6.0	51	36.3	6.4	52	97.4	13.2
KIPSIGIS	57	36.5	4.7	54	25.4	5.1	54	34.5	6.6	57	96.1	11.7
TUGEN	101	38.6	6.3	92	27.6	5.1	93	35.6	5.1	96	101.0	13.0
KEYO	49	39.8	5.1	44	28.1	5.6	44	35.6	6.7	49	100.2	13.9
MARAKWET	50	37.9	4.9	49	25.8	5.9	49	36.9	6.3	50	98.0	14.6
POKOT	44	38.2	4.4	43	26.0	6.0	43	35.7	6.9	44	99.3	13.4
ITESO	52	37.8	5.0	48	26.7	4.9	48	35.5	5.2	52	98.5	11.7
TURKANA	64	37.2	5.4	58	27.0	4.7	59	36.2	4.8	61	98.8	11.3
LUO	156	37.9	4.4	140	26.9	5.9	139	36.1	5.6	155	99.2	13.0
GUSII	49	37.6	4.9	46	26.6	5.5	46	35.7	6.3	48	98.5	12.0
TIRIKI	26	39.2	5.3	26	27.4	5.3	25	35.3	7.6	25	102.2	15.6
MARAGOLI	26	35.3	4.1	21	28.3	5.1	19	38.1	7.3	24	96.9	13.0
BUNYORE	30	35.5	5.3	25	26.2	5.0	25	34.1	5.5	30	93.9	10.0
IDAKHO	39	37.9	3.9	34	25.1	4.5	34	33.7	6.0	39	95.0	12.3
MARAMA	25	38.3	5.3	23	28.2	6.6	23	35.8	8.3	25	101.4	11.7
WANGA	25	37.1	4.8	22	29.7	5.4	22	36.2	7.5	25	100.9	13.4
MARACH	25	37.6	5.2	22	26.7	4.4	22	37.5	4.9	25	100.1	11.5
BUKHAYO	23	37.0	5.4	20	27.0	4.2	20	35.4	6.5	23	98.3	8.0
SAMIA	24	36.0	4.0	21	27.2	4.8	21	34.3	6.4	24	95.0	12.8
BUTSOTSO	20	38.4	5.4	19	27.6	7.5	19	34.3	6.4	20	99.5	14.8
BUNYALA	25	38.9	4.7	22	28.5	5.9	22	38.7	7.4	25	104.1	13.5
KABRAS	26	38.5	4.6	23	25.8	5.0	23	34.3	4.4	25	97.7	10.0
BUKUSU	52	35.5	4.2	45	26.9	4.4	47	34.1	6.6	48	95.2	12.5
KIAMBU KIKUYU	63	38.6	5.7	59	27.6	5.4	60	36.6	6.3	62	101.7	12.3
MURANGA KIKUYU	56	38.7	6.2	54	29.1	5.2	53	40.2	7.0	55	107.2	14.4
NYERI KIKUYU	48	37.3	5.5	44	27.4	5.4	43	37.4	6.3	47	100.9	13.3
NDIA	51	37.0	4.8	46	25.5	5.5	47	35.5	5.6	48	96.4	11.9
KAMBA	65	37.3	5.1	58	27.0	5.2	58	35.6	5.4	60	99.0	12.9
EMBU	86	36.6	5.0	85	26.6	5.6	85	33.7	6.1	86	96.4	12.3
MBERE	63	36.7	4.1	53	26.7	5.2	54	35.3	4.1	62	96.0	12.1
CHUKA	71	35.2	5.2	69	25.1	4.8	71	33.9	6.5	71	93.7	12.2
MUTHAMBI	72	37.6	5.1	62	26.4	5.4	58	37.4	5.4	64	98.9	13.0
MWIMBI	60	37.4	5.7	57	26.9	5.7	54	35.8	6.5	56	100.0	13.4
IGOJI	78	35.8	5.5	61	24.4	5.9	61	34.7	7.1	73	92.1	15.7
IMENTI	60	34.3	5.4	51	24.5	4.9	52	33.2	5.8	59	90.0	11.3
TIGANIA	64	37.9	5.7	60	27.4	5.6	59	37.9	5.9	63	102.3	12.7
IGEMBE	64	36.7	5.7	58	25.8	4.2	59	34.0	6.5	63	95.2	13.2
THARAKA	53	40.0	6.6	49	27.1	4.9	49	36.0	7.3	53	102.1	14.8
POKOMO	111	36.5	6.3	100	26.7	4.3	100	35.4	6.3	103	97.1	13.0
MALAKOTE	40	35.5	5.2	38	25.5	5.4	39	35.4	3.8	39	95.9	9.9
GIRIAMA	62	35.5	4.7	52	25.9	4.2	56	35.3	6.1	55	95.6	11.4
CHONYI	76	35.9	4.2	71	26.7	4.5	74	33.8	4.9	75	95.5	9.9
MIJ MJI KENDA	31	35.7	4.9	26	25.7	6.1	26	33.7	5.0	31	93.3	11.4
DIGO	109	37.6	5.2	103	27.6	4.9	105	36.7	5.7	107	101.2	12.2
TAITA	52	36.8	4.9	43	26.8	5.7	46	35.9	6.5	48	98.1	12.1
TAVETA	55	37.4	5.6	50	26.1	5.5	51	34.3	5.8	54	97.6	11.0

Table AP. 1.4.39 : Distribution of palmar ridge counts in Kenyan minimal ethnic population samples (females).

Right Hand

POPULATION	AB RIDGE COUNT			BC RIDGE COUNT			CD RIDGE COUNT			TOTAL PALMAR RC		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD.
SOMALI	103	36.4	4.2	97	25.1	4.8	96	35.5	6.0	102	96.4	10.5
RENDILLE	40	35.8	5.2	38	23.9	6.1	40	35.6	4.7	39	94.5	12.6
GABBRA	61	34.9	4.7	60	25.3	4.8	59	35.2	5.1	60	94.8	9.9
BORAN	58	36.4	4.8	55	25.6	5.2	55	35.7	5.7	58	96.7	10.9
BURJI	54	37.8	5.1	53	25.8	5.2	53	36.6	5.8	54	100.4	11.3
SAMBURU	43	35.6	4.2	40	26.5	4.9	41	36.9	5.7	39	98.5	10.1
KADJIADO MAASAI	150	37.9	5.9	134	26.8	6.0	134	37.6	5.9	150	100.8	13.4
KONY	23	37.1	4.8	23	23.9	4.5	23	35.7	6.3	23	96.8	10.1
NANDI	50	36.8	4.5	46	25.8	5.2	46	36.8	4.9	50	97.9	11.7
KIPSIGIS	43	37.6	5.6	42	25.9	5.6	42	36.1	6.2	43	98.3	13.3
TUGEN	92	37.1	5.7	92	25.9	4.5	91	35.4	4.6	86	98.0	10.2
KEYO	50	38.7	5.4	46	26.4	5.9	46	36.2	5.2	50	100.4	11.1
MARAKWET	55	37.5	4.6	54	26.3	5.7	53	36.7	5.4	55	99.7	13.1
POKOT	52	39.1	5.4	50	26.9	5.6	50	37.4	6.1	52	102.9	11.1
ITESO	47	35.1	6.4	45	26.2	6.3	45	36.7	4.7	47	98.0	11.7
TURKANA	40	36.8	4.5	33	26.0	5.3	31	36.5	6.0	37	96.9	12.6
LUO	107	36.4	5.1	99	26.6	5.3	98	36.9	6.0	106	99.3	11.7
GUSII	50	37.0	4.9	44	27.8	4.4	44	37.5	4.5	49	101.0	9.8
TIRIKI	25	38.2	4.9	25	26.4	5.0	25	36.7	4.2	25	101.2	8.7
MARAGOLI	24	37.0	5.4	21	27.8	4.9	21	39.2	6.8	24	101.7	13.8
BUNYORE	20	38.3	4.8	19	29.1	6.5	19	35.5	6.4	20	102.2	13.9
IDAKHO	15	35.1	5.0	13	24.5	4.5	13	36.5	6.8	15	94.7	13.5
MARAMA	25	36.5	4.7	23	28.3	4.8	23	36.2	6.4	25	99.4	11.3
WANGA	24	38.3	4.5	21	27.6	7.3	21	36.5	5.4	23	101.5	13.4
MARACH	24	37.3	5.1	19	26.8	4.8	19	37.4	6.7	23	99.9	10.7
BUKHAYO	26	37.3	4.9	24	27.1	4.9	23	36.9	3.5	25	100.0	9.8
SAMIA	26	38.8	4.6	24	26.1	5.3	24	38.0	7.0	26	102.4	11.2
BUTSOTSO	27	37.7	6.5	22	27.3	5.0	22	33.8	6.1	26	99.5	13.4
BUNYALA	24	36.8	5.4	22	26.5	6.0	22	35.7	5.1	24	99.0	10.3
KABRAS	26	36.8	5.1	25	27.1	3.6	25	36.5	3.4	26	99.5	8.5
BUKUSU	24	32.0	5.4	20	24.6	4.1	18	31.7	4.9	20	86.1	12.1
KIAMBU KIKUYU	37	37.7	5.7	36	24.9	4.4	35	35.6	4.4	35	98.2	11.3
MURANGA KIKUYU	46	38.6	6.2	45	28.2	5.0	45	37.3	6.1	46	103.5	13.3
NYERI KIKUYU	51	36.1	4.6	45	24.9	4.7	45	37.0	4.4	51	96.2	12.3
NDIA	57	37.4	5.5	57	26.6	5.3	57	36.0	4.8	54	99.3	10.6
KAMBA	35	36.7	6.0	30	26.0	5.1	31	35.5	4.4	34	96.8	12.5
EMBU	67	35.7	4.9	59	26.1	5.2	58	34.4	3.9	62	94.7	10.6
MBERE	66	36.3	6.0	59	25.6	4.5	60	34.0	5.9	63	94.4	13.3
CHUKA	56	36.2	5.9	50	25.7	4.9	48	35.1	4.7	53	95.2	13.5
MUTHAMBI	80	36.9	4.9	75	27.0	4.7	75	37.4	4.6	78	100.5	10.2
MWIMBI	38	38.4	5.5	37	26.5	5.1	37	37.9	5.3	38	102.3	11.8
IGOJI	88	35.5	6.2	84	26.1	4.2	85	34.2	6.7	81	96.6	12.7
IMENTI	37	34.3	5.0	35	23.7	5.3	34	34.9	5.1	36	92.4	11.7
TIGANIA	36	35.7	5.0	34	26.9	4.5	34	36.2	5.3	35	98.7	8.6
IGEMBE	32	34.7	5.6	29	26.5	4.2	29	36.3	3.6	32	100.7	9.8
THARAKA	46	38.4	7.2	46	29.5	4.7	45	35.9	5.7	45	104.0	11.6
POKOMO	87	35.7	5.1	86	25.9	4.3	85	36.6	5.6	84	97.5	11.5
GIRIAMA	36	35.1	4.6	33	27.1	3.8	33	35.1	5.9	35	96.6	10.3
CHONYI	13	36.5	5.2	11	27.4	4.6	11	34.5	5.4	12	97.0	11.8
MID MJI KENDA	27	36.1	5.1	23	27.0	5.4	22	36.3	3.7	26	97.0	12.0
DIGO	92	38.0	4.5	86	26.6	5.2	88	34.8	5.4	89	99.3	11.0
TAITA	45	36.3	4.8	43	25.8	4.5	43	34.7	5.0	44	96.5	8.8
TAVETA	45	37.9	4.6	43	26.4	5.4	42	35.7	4.9	44	99.0	9.8

Left Hand

POPULATION	AB RIDGE COUNT			BC RIDGE COUNT			CD RIDGE COUNT			TOTAL PALMAR RC		
	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD	NO	MEAN	SD.
SOMALI	103	36.7	5.4	97	26.0	4.9	93	35.0	6.3	99	96.4	12.1
RENDILLE	42	35.3	5.2	39	24.1	6.2	39	35.3	5.0	40	93.8	11.4
GABBRA	62	36.2	4.9	56	26.3	4.6	52	34.6	5.9	57	95.6	11.3
BORAN	60	37.2	5.2	57	25.5	5.2	55	35.3	6.6	58	97.3	12.8
BURJI	54	36.9	4.6	53	26.2	5.2	51	36.9	6.3	52	99.4	12.4
SAMBURU	41	35.9	4.2	33	26.9	5.3	31	37.3	5.8	34	97.5	10.7
KADJIADO MAASAI	148	37.6	5.4	133	26.6	6.1	132	37.2	6.2	146	99.9	13.4
KONY	23	36.7	4.0	22	23.7	5.0	22	35.2	6.9	23	95.5	10.8
NANDI	50	36.2	4.9	45	25.8	4.1	45	36.5	6.1	50	96.4	11.9
KIPSIGIS	43	37.2	5.5	39	26.1	4.4	39	35.6	6.8	43	97.1	12.5
TUGEN	97	37.8	5.1	90	26.8	4.7	88	36.8	5.1	92	100.6	10.8
KEYO	49	39.5	5.4	42	26.8	5.7	42	36.2	5.9	49	100.2	13.1
MARAKWET	55	37.4	4.6	51	26.8	5.6	51	37.1	5.9	55	100.0	13.3
POKOT	51	39.9	5.8	47	27.1	5.6	47	37.9	5.7	51	103.8	12.7
ITESO	47	37.5	5.4	45	26.2	5.4	45	37.0	5.0	47	99.7	12.3
TURKANA	37	37.1	5.3	35	26.5	4.4	34	36.8	7.2	35	100.7	11.5
LUO	106	36.4	4.4	98	27.3	5.3	96	36.4	6.1	106	98.4	11.8
GUSII	51	37.6	4.9	44	27.5	5.1	44	37.2	4.8	51	100.7	10.2
TIRIKI	24	39.1	4.8	24	28.1	5.3	24	36.6	4.6	24	103.8	8.4
MARAGOLI	24	37.6	5.1	22	27.3	6.0	21	37.6	6.9	23	101.3	13.8
BUNYORE	20	38.8	4.2	18	26.5	5.8	17	36.5	7.7	19	103.3	13.8
IDAKHO	15	35.4	4.3	12	26.6	4.4	12	36.2	7.1	15	94.9	14.2
MARAMA	25	37.4	4.1	20	31.1	4.9	19	38.0	5.4	24	102.2	12.9
WANGA	23	39.3	3.4	20	28.5	5.2	20	38.3	6.9	23	103.8	12.2
MARACH	24	38.2	5.2	21	27.4	4.7	21	36.0	4.3	24	100.6	9.4
BUKHAYO	26	38.0	5.2	22	27.0	5.4	22	36.2	5.6	26	99.8	11.6
SAMIA	26	38.7	4.8	19	27.7	3.9	19	39.2	7.1	26	101.2	14.4
BUTSOTSO	27	39.5	5.6	23	27.4	4.7	23	35.3	7.4	27	100.9	14.2
BUNYALA	25	37.6	4.8	21	27.7	4.7	22	35.3	5.5	24	99.9	11.1
KABRAS	26	37.5	4.7	24	27.9	4.0	24	36.0	6.0	26	100.5	11.3
BUKUSU	26	33.8	5.3	22	24.8	3.9	22	34.1	5.9	25	90.5	12.8
KIAMBU KIKUYU	37	38.6	6.2	31	25.9	5.2	32	37.4	6.1	36	100.2	14.1
MURANGA KIKUYU	45	38.8	6.4	42	28.2	5.1	42	38.1	5.6	44	105.2	14.1
NYERI KIKUYU	51	36.6	5.4	43	25.5	5.4	43	36.8	5.8	51	96.4	13.9
NDIA	60	38.5	4.6	53	26.7	4.6	55	36.5	4.6	58	100.5	10.4
KAMBA	36	38.0	6.7	34	25.5	4.0	32	36.6	6.1	33	99.0	13.8
EMBU	70	37.0	4.9	61	27.0	4.7	59	34.3	4.2	68	96.4	10.2
MBERE	62	36.0	6.2	59	26.3	4.6	58	35.8	5.1	61	95.6	13.8
CHUKA	58	37.1	6.1	51	26.0	4.0	50	34.5	7.1	57	96.4	13.9
MUTHAMBI	81	37.7	4.7	73	27.2	4.8	72	37.0	5.6	78	100.3	11.5
MWIMBI	39	38.8	6.5	36	27.4	4.8	36	38.2	5.6	39	103.1	12.4
IGOJI	85	36.3	5.7	86	26.5	4.8	85	34.8	6.5	83	97.3	12.5
IMENTI	39	34.9	6.0	32	25.7	5.2	32	34.8	6.0	39	92.5	15.1
TIGANIA	36	36.0	4.7	35	27.0	4.5	34	37.1	4.6	35	99.6	10.4
IGEMBE	33	38.9	4.6	31	27.6	4.5	31	36.7	4.9	33	102.2	11.4
THARAKA	46	38.2	5.9	45	29.7	4.7	45	37.0	5.4	46	104.5	11.8
POKOMO	89	36.8	5.4	82	26.1	5.0	81	37.0	5.6	87	98.4	12.7
GIRIAMA	36	35.5	4.7	34	27.2	3.7	32	35.1	6.2	34	97.4	10.5
CHONYI	14	37.3	4.8	13	28.2	3.9	13	34.2	6.6	14	98.6	10.6
MID MJI KENDA	27	36.9	4.9	22	26.2	6.0	22	36.0	7.1	27	96.0	15.4
DIGO	96	37.7	5.0	91	26.5	5.2	89	36.2	5.6	93	99.3	11.3
TAITA	43	37.3	5.2	44	26.7	4.9	43	35.3	6.7	42	98.6	8.9
TAVETA	47	37.8	4.5	41	27.5	4.4	41	38.4	5.3	47	100.2	12.4

Table AP. 1.4.40 : Frequencies of palmar patterns and triradii in Kenyan minimal ethnic population samples (Right hand males).

POPULATION	NO	PALMAR PATTERNS AND TRIRADII												
		PT	RT	P2	P3	P3T	P4	PH	CH	TEF	T	T1	T2	T8
		%	%	%	%	%	%	%	%	%	%	%	%	%
SOMALI	224	1.8	3.2	10.4	41.9	8.1	50.5	6.8	27.5	5.0	62.6	44.8	1.4	25.7
REKDILLE	153	3.3	3.9	11.8	46.1	7.2	62.5	3.9	22.2	7.2	50.3	51.0	1.3	23.5
GABBRA	27	7.4	3.7	3.7	42.3	11.5	65.4	3.7	33.3	11.1	68.0	36.0	0.0	33.3
BORAN	128	4.7	7.9	6.3	40.2	5.5	63.8	3.9	26.8	12.6	55.1	47.2	1.6	27.6
BURJI	64	3.1	4.7	14.1	45.3	10.9	60.9	3.1	23.4	7.8	62.5	37.5	3.1	23.4
SAMBURU	87	3.4	3.4	8.0	49.4	5.7	54.0	5.7	21.8	6.9	58.6	47.1	1.1	20.7
KADJIADO MAASAI	63	3.2	3.2	9.5	60.3	9.5	49.2	9.5	25.4	6.3	50.8	57.1	3.2	23.8
NAROK MAASAI	37	2.8	0.0	5.6	47.2	11.1	58.3	8.3	25.0	2.8	53.0	61.1	0.0	22.2
NGWESI	41	19.5	24.4	7.3	34.1	12.2	58.3	0.0	24.4	43.9	48.8	51.2	0.0	24.4
MUKOGODO	38	7.9	5.3	10.5	55.3	7.9	44.7	2.6	23.7	13.2	53.2	39.5	0.0	23.7
KONY	37	16.2	10.8	5.4	45.9	10.8	54.1	2.7	27.0	27.0	47.2	55.6	0.0	27.0
NANDI	52	3.8	5.8	13.5	40.4	1.9	69.2	7.7	28.8	9.6	53.8	50.0	1.9	30.8
KIPSIGIS	57	8.8	12.3	10.5	57.9	3.5	56.1	3.5	15.8	21.1	25.0	78.6	1.8	14.0
TUGEN	108	7.5	8.4	0.9	38.9	6.5	62.6	5.6	19.4	15.9	52.9	40.0	1.9	20.4
KEYO	50	2.0	6.0	6.0	34.0	8.0	70.0	8.0	22.0	8.0	58.0	50.0	0.0	20.0
MARAKWET	50	5.0	5.0	8.0	52.0	14.0	58.0	2.0	20.0	12.0	44.9	55.1	2.0	20.0
POKOT	45	14.0	11.6	6.7	64.4	0.0	55.6	6.7	17.8	25.6	64.3	45.2	0.0	15.6
ITESO	52	7.7	3.8	5.8	48.1	11.5	69.2	9.6	26.9	11.5	30.8	73.1	5.8	26.9
TURKANA	66	6.3	4.7	10.9	46.2	6.2	73.8	3.1	32.3	10.9	42.6	60.7	0.0	32.3
LUO	170	5.3	6.5	15.3	45.3	9.4	72.9	5.9	30.6	11.8	49.4	54.7	2.9	28.8
GUSII	50	2.0	2.0	12.0	44.0	0.0	72.0	6.1	16.3	4.0	40.8	60.0	4.0	18.4
TIRIKI	26	7.7	3.8	15.4	50.0	3.8	69.2	0.0	19.2	11.5	53.8	50.0	0.0	15.4
MARAGOLI	26	7.7	11.5	19.2	53.8	11.5	53.8	3.8	34.6	19.2	53.8	50.0	0.0	34.6
SUNYORE	30	0.0	3.3	13.3	60.0	10.0	66.7	0.0	6.7	3.3	36.7	63.3	3.3	6.7
IDAKHO	39	2.6	2.6	15.4	56.4	10.3	56.7	12.8	28.2	5.1	35.9	74.4	2.6	28.2
MARAMA	25	8.0	0.0	16.0	56.0	4.0	68.0	8.0	8.0	8.0	48.0	60.0	0.0	8.0
WANGA	25	4.0	8.0	16.0	36.0	0.0	84.0	0.0	20.0	12.0	60.0	48.0	0.0	12.0
MARACH	25	4.0	4.0	20.0	52.0	8.0	60.0	4.0	36.0	8.0	64.0	40.0	0.0	36.0
BUKHAYO	23	0.0	4.3	4.3	39.1	13.0	60.9	17.4	34.8	4.3	43.5	69.6	4.3	34.8
SAMIA	24	0.0	0.0	12.5	29.2	8.3	62.5	0.0	29.2	0.0	37.5	62.5	0.0	29.2
BUTSOTSO	20	0.0	5.0	25.0	55.0	15.0	80.0	20.0	20.0	5.0	65.0	50.0	5.0	20.0
BUNYALA	25	4.0	4.0	16.0	48.0	4.0	68.0	12.0	24.0	8.0	64.0	52.0	0.0	20.0
KABRAS	26	3.8	0.0	11.5	46.2	0.0	61.5	11.5	15.4	3.8	46.2	61.5	3.8	15.4
BUKUSU	61	8.2	9.8	14.8	43.3	8.3	70.0	1.6	23.0	18.0	38.3	60.0	3.3	23.0
KIAMBU KIKUYU	65	3.1	6.3	7.8	35.9	9.4	73.4	6.3	25.0	9.4	48.3	57.8	4.7	25.0
MURANGA KIKUYU	56	12.5	14.3	16.1	42.9	3.6	73.2	3.6	23.2	26.8	55.4	48.2	0.0	23.2
NYERI KIKUYU	49	2.0	6.1	12.2	51.2	8.2	44.9	6.1	16.3	8.2	46.9	59.2	2.0	14.3
NDIA	56	3.6	3.6	16.1	39.3	5.4	78.6	1.8	21.4	7.1	57.1	44.6	0.0	21.4
KAMBA	78	3.8	6.4	11.5	39.7	5.1	78.2	6.4	30.8	10.3	61.0	45.5	2.6	28.2
EMBU	87	4.6	5.7	9.2	40.2	5.7	71.3	4.6	14.9	10.3	64.4	39.1	1.1	14.9
MBERE	64	10.9	9.4	12.5	48.4	1.6	78.1	4.7	18.8	20.3	45.3	56.3	4.7	17.2
CHUKA	75	2.7	5.3	2.7	40.0	9.3	82.7	8.0	5.3	8.0	54.8	52.1	1.3	5.3
MUTHAMBI	76	9.2	9.2	11.8	51.3	3.9	63.2	7.9	17.1	18.4	58.6	48.6	1.3	17.1
MWIMBI	62	3.2	3.2	8.1	44.3	4.8	62.3	4.8	19.4	6.5	56.9	45.6	0.0	21.0
IGOJI	78	3.8	6.4	7.7	46.8	5.1	72.7	10.3	23.1	10.3	58.4	36.8	6.4	23.1
IMENTI	61	6.6	4.9	14.8	45.9	16.4	45.9	6.6	19.7	11.5	46.7	56.7	0.0	23.0
TIGANIA	64	6.3	7.8	7.8	37.5	6.3	68.8	4.7	23.4	14.1	57.8	46.9	1.6	21.9
IGEMBE	66	10.6	15.2	13.6	30.3	6.1	69.7	1.5	12.1	25.8	54.5	47.0	0.0	12.1
THARAKA	54	7.4	9.3	13.0	42.6	7.4	72.2	5.6	29.6	16.7	38.9	66.7	1.9	27.8
POKOMO	114	4.4	4.4	7.9	48.2	3.5	72.8	5.3	24.6	8.8	42.1	58.8	3.5	26.3
MALAKOTE	41	5.0	5.0	12.5	55.0	7.5	72.5	7.5	32.5	10.0	43.6	64.1	2.5	30.0
GIRIAMA	64	7.8	7.8	12.5	45.3	4.7	76.6	3.1	17.2	15.6	53.1	46.9	4.7	17.2
CHONYI	79	11.4	10.1	21.5	48.7	3.8	85.9	7.6	15.2	22.8	32.9	69.6	5.1	15.2
MIJ MJI KENDA	32	12.5	15.6	21.9	43.8	6.3	75.0	6.3	21.9	28.1	34.4	71.9	0.0	21.9
DIGO	116	5.2	9.5	14.7	52.6	5.2	68.1	0.9	30.2	13.8	43.5	60.3	3.4	27.6
TAITA	55	7.7	7.7	17.0	61.5	3.8	61.5	17.3	40.4	15.4	48.1	67.3	5.8	40.4
TAVETA	59	5.1	5.1	16.9	49.2	0.0	74.6	3.4	28.8	10.2	33.9	67.9	1.7	28.8

TABLE 1.4.41 : FREQUENCIES OF PALMAR PATTERNS AND TRIRADII IN KENYAN MINIMAL ETHNIC POPULATION SAMPLES (LEFT HAND MALES).

POPULATION	SAMPLE NO	I %	IR %	P2 %	P3 %	P3I %	P4 %	PH %	CH %	TEF %	T %	T1 %	T2 %	TB %
SOMALI	224	10.0	12.1	5.4	22.3	8.9	83.9	4.5	21.9	22.9	20.3	42.4	0.9	21.9
RENDILLE	153	11.1	10.5	6.6	20.0	7.9	85.4	4.0	22.4	15.2	60.7	43.8	0.0	25.9
GABBRA	27	10.2	12.6	3.7	11.1	14.8	81.5	14.8	22.2	29.6	65.4	30.5	3.1	25.2
BORAN	128	7.8	7.8	2.4	20.5	7.1	89.0	5.5	24.4	22.0	61.4	40.9	3.1	12.5
BURJI	64	7.3	8.0	10.9	20.1	6.3	90.6	1.6	12.5	15.6	62.5	35.9	1.3	21.2
SAMBURU	87	8.0	5.7	4.6	16.1	8.1	90.8	5.8	17.2	13.8	54.3	49.7	4.6	10.4
KADJIADO MAASAI	63	11.1	15.9	1.6	20.6	20.6	79.4	6.4	14.3	27.0	58.1	43.0	1.6	14.3
NAROK MAASAI	37	11.1	8.3	0.0	16.7	19.4	80.6	5.6	11.1	19.4	57.1	47.6	0.0	8.3
NGUESI	41	25.0	30.0	0.0	29.3	4.9	90.2	5.0	20.0	55.0	58.3	50.0	0.0	20.0
MUKOGODO	38	13.5	13.5	13.2	26.3	13.2	81.6	7.9	21.1	26.3	40.0	65.0	0.0	21.6
KONY	37	26.3	26.3	0.0	10.9	8.1	94.6	0.0	16.2	54.0	54.1	54.1	2.6	15.0
NANDI	52	23.1	25.0	3.0	23.1	11.5	86.5	3.0	17.3	40.1	56.0	40.5	1.9	17.3
KIPSIGIS	57	26.3	26.3	5.3	29.0	7.0	86.0	5.3	0.0	52.6	61.5	40.4	5.3	10.5
TUGEN	100	21.5	25.0	1.9	13.9	0.3	87.0	3.7	13.9	42.1	33.3	66.7	1.9	13.9
KEYO	50	0.0	26.3	4.0	22.0	4.0	92.0	4.0	16.0	10.0	64.5	37.4	0.0	14.0
MARAKWET	50	20.0	20.6	6.0	24.0	6.0	90.0	4.0	12.0	36.0	56.0	50.0	0.0	12.0
POKOT	45	20.5	10.0	2.2	20.0	6.7	84.4	0.0	13.3	30.6	46.0	55.1	0.0	13.3
ITESO	52	23.1	16.0	7.7	32.7	9.6	94.2	9.6	23.1	40.1	53.5	42.0	5.0	23.1
TURKANA	66	22.7	10.2	7.6	24.2	10.6	100.0	4.5	19.7	39.4	34.6	69.2	1.5	10.2
LUO	170	26.6	25.0	10.1	27.0	11.0	94.7	0.3	16.0	56.0	45.0	59.3	0.6	15.4
GUSII	50	10.0	16.7	0.0	22.0	4.0	102.0	6.0	0.0	36.0	51.5	56.0	6.0	0.0
TIRIKI	26	19.2	30.2	7.7	15.4	15.4	92.3	11.5	7.7	30.5	44.0	56.0	7.7	7.7
NARAGOLI	26	36.0	10.0	7.7	11.5	7.7	00.0	3.0	15.4	61.5	57.7	46.2	0.0	16.0
BUNYORE	30	6.5	19.2	10.0	23.3	16.7	93.3	3.3	6.7	26.7	56.0	40.0	0.0	6.5
IDAKHO	39	34.2	20.0	5.1	25.6	12.0	07.2	15.4	12.0	66.7	35.5	07.7	2.6	13.2
NARAMA	25	24.0	19.4	12.0	20.0	24.0	92.0	4.0	4.0	60.0	52.6	60.5	0.0	4.0
WANGA	25	20.0	34.2	16.0	24.0	0.0	00.0	0.0	24.0	40.0	60.0	44.0	0.0	20.0
NARACH	25	20.0	36.0	12.0	20.0	20.0	92.0	0.0	20.0	44.0	56.0	40.0	4.0	20.0
BUKHAYO	23	0.0	20.0	0.7	0.7	0.7	104.3	17.4	13.0	4.3	56.0	40.0	4.3	13.0
SAMIA	24	20.0	24.0	0.3	20.0	0.3	07.5	0.0	20.0	62.5	43.5	69.6	0.0	20.0
BUTSOTSO	20	5.0	4.3	15.0	10.0	20.0	100.0	10.0	40.0	25.0	40.0	52.0	5.0	35.0
BUNYALA	25	32.0	32.0	12.0	16.0	20.0	104.0	0.0	12.0	76.0	65.0	45.0	0.0	0.0
KABRAS	26	7.7	20.0	7.7	42.3	7.7	73.1	7.7	15.4	15.4	72.0	40.0	3.0	15.4
BUKUSU	61	10.0	44.0	1.6	19.7	4.9	101.6	4.9	14.7	39.3	53.0	50.0	3.3	14.0
KIAMBU KIKUYU	65	10.9	7.7	4.6	23.1	6.2	95.4	7.7	10.5	23.1	45.0	56.7	3.1	10.0
MURANGA KIKUYU	56	30.4	21.3	10.7	32.1	3.6	95.7	3.6	19.6	57.1	40.4	56.3	0.0	19.6
NYERI KIKUYU	49	16.3	12.5	4.1	32.7	10.2	73.5	2.0	12.2	30.0	46.4	57.1	2.0	12.2
NDIA	56	15.0	26.0	5.4	23.2	7.1	91.1	3.6	14.3	35.7	51.0	40.9	0.0	14.0
KAMBA	70	16.9	22.4	7.7	29.5	10.3	03.3	9.0	25.6	39.7	63.2	40.4	2.6	23.4
EMBU	07	13.6	21.1	0.1	24.1	9.2	07.4	6.9	17.2	27.6	69.7	39.5	2.3	17.0
MBERE	64	25.0	22.1	6.3	35.9	4.7	09.1	3.1	15.6	53.1	64.4	40.2	9.1	15.2
CHUKA	75	14.7	17.1	1.3	9.3	13.3	93.3	2.7	0.0	34.7	44.6	47.7	2.7	0.0
MUTHAMBE	76	10.4	25.0	6.6	26.3	7.9	77.3	10.5	13.2	30.2	52.1	47.9	5.3	13.2
MWIMBI	62	21.3	20.0	1.6	27.4	9.7	02.3	6.4	22.6	45.9	50.0	55.6	0.0	19.4
IBOJI	70	15.4	19.7	7.7	34.6	5.1	76.9	16.7	12.0	33.3	64.3	56.4	3.0	12.0
IMENTI	61	14.0	24.6	13.1	24.6	16.4	05.3	3.3	4.9	31.2	62.5	50.0	0.0	4.9
TIGANIA	64	15.6	17.9	7.0	25.0	1.6	95.3	4.7	14.1	20.1	45.0	57.6	0.0	12.5
IGEMBE	66	19.7	16.4	10.6	16.7	4.5	09.4	6.1	9.1	47.0	54.7	51.6	0.0	9.1
THARAKA	54	10.9	12.5	3.7	16.7	5.6	90.7	1.9	10.5	40.2	57.0	40.4	0.0	10.9
POKOMO	114	17.5	27.3	3.5	22.0	9.7	06.0	7.0	25.4	34.2	41.5	60.4	2.6	15.4
MALAKOTE	41	14.7	24.5	12.2	39.0	7.3	05.4	2.4	14.6	29.3	50.0	54.4	0.0	14.7
GIRIAMA	64	21.9	17.5	7.0	32.0	3.1	90.6	3.1	17.2	40.4	36.4	69.7	4.7	17.2
CHONYI	79	24.1	14.7	11.4	35.4	3.0	94.9	6.3	15.2	50.6	57.0	40.6	2.5	15.2
MID NJI KENDA	32	25.0	26.6	15.6	20.1	9.4	96.9	6.3	20.1	50.0	41.0	63.3	0.0	20.1
DIGO	116	17.9	26.6	0.6	21.5	6.9	94.0	3.4	25.9	41.4	40.6	65.6	1.7	24.0
TAITA	55	26.4	25.0	9.1	25.5	10.9	00.0	12.7	30.9	45.5	47.0	55.7	3.0	32.1
TAVETA	59	22.0	23.1	6.0	27.1	5.1	09.0	3.4	16.9	42.4	49.1	60.4	0.0	16.9

Table AP. 1.4.42 : Frequencies of palmar patterns and triradii in Kenyan minimal ethnic population samples (Right hand females).

POPULATION	NO	PALMAR PATTERNS AND TRIRADII												
		P1	P'	P2	P3	P3I	P4	PH	CH	TFF	T	T'	T2	T4
		%	%	%	%	%	%	%	%	%	%	%	%	%
SOMALI	103	1.9	2.9	5.8	35.9	6.7	85.0	8.7	27.2	4.9	50.5	59.2	0.0	27.2
REND1LE	46	0.0	0.0	2.3	45.5	2.3	56.2	15.6	22.0	0.0	55.6	53.3	6.7	20.0
GABBRA	62	0.0	3.2	3.2	33.3	3.2	76.2	3.2	22.2	3.2	39.7	62.3	0.0	23.8
BORAN	60	6.8	6.8	5.1	32.2	3.4	76.0	1.7	18.6	13.6	44.4	37.3	0.0	20.0
BURJI	57	7.0	5.3	5.3	36.8	5.3	73.7	5.3	33.3	12.3	57.9	45.6	0.0	35.1
SAMBURU	46	0.0	2.2	6.7	40.0	6.7	71.1	8.9	22.2	2.2	60.0	62.2	6.7	24.4
KADJIADO MAASAI	150	6.0	7.3	5.3	33.3	5.3	75.3	5.7	26.0	13.3	45.0	44.0	1.3	23.3
KONY	23	17.4	13.0	0.0	43.5	0.0	65.2	4.3	30.4	30.4	36.4	43.5	4.3	30.4
NANDI	50	14.0	16.0	4.0	36.0	6.0	66.0	6.0	24.0	30.0	27.1	79.2	0.0	24.0
KIPSIGIS	43	4.7	9.3	7.0	32.6	4.7	76.7	4.7	18.6	14.0	33.3	64.0	2.3	18.6
TUGEN	102	5.9	8.8	4.9	38.2	9.8	53.7	6.9	21.6	14.7	51.0	54.9	3.9	19.6
KEYO	50	12.0	16.0	6.0	28.0	8.0	76.0	6.0	32.0	28.0	44.0	40.0	4.0	30.0
MARAKWET	56	12.5	12.5	3.6	36.3	3.6	69.6	5.4	23.2	25.0	41.1	62.5	1.8	23.2
POKOT	54	3.7	5.6	0.0	29.6	13.0	63.0	7.4	25.9	9.3	40.0	60.8	3.7	22.4
ITESO	47	4.3	2.1	2.1	40.4	2.1	76.6	10.6	23.4	6.4	46.5	61.7	0.0	25.5
TURKANA	43	2.4	4.6	9.5	23.8	4.8	90.5	7.1	26.6	7.1	47.6	56.5	0.0	26.6
LUO	107	11.2	11.2	11.2	40.2	6.5	79.4	2.8	30.8	22.4	34.6	66.4	1.8	32.4
GUSII	51	3.9	3.9	15.7	37.3	5.9	82.4	2.0	19.6	7.8	35.3	64.7	0.0	21.6
TIRIKI	25	8.0	16.0	4.0	40.0	8.0	80.0	20.0	16.0	24.0	32.0	80.0	9.7	20.0
MARAGOLI	24	4.2	4.2	0.0	37.5	4.2	87.5	0.0	20.8	8.3	33.3	62.5	4.2	20.8
SUNYORE	20	15.0	15.0	0.0	25.0	5.0	80.0	0.0	25.0	30.0	30.0	70.0	0.0	25.0
IDAKHO	15	20.0	26.7	6.7	46.7	6.7	73.3	13.3	33.3	46.7	46.7	73.3	0.0	26.7
MARAMA	25	0.0	0.0	12.0	40.0	8.0	76.0	12.0	28.0	0.0	32.0	72.0	4.0	32.0
WANGA	24	0.0	4.2	12.5	33.3	4.2	75.0	4.2	12.5	4.2	41.7	58.3	0.0	16.7
MARACH	24	4.2	0.0	0.0	29.2	0.0	79.2	12.5	16.7	4.2	50.0	54.2	4.2	20.8
BUKHAYO	26	7.7	15.4	7.7	42.3	15.4	65.4	0.0	23.1	23.1	38.5	61.5	0.0	23.1
SAMIA	26	11.5	11.5	7.7	34.6	11.5	65.4	7.7	19.2	23.1	34.6	59.2	7.7	15.4
BUTSOTSO	27	7.4	7.4	3.7	37.0	3.7	74.1	3.7	18.5	14.8	29.6	77.8	0.0	14.8
BUNYALA	25	8.0	8.0	8.0	36.0	0.0	80.0	4.0	20.0	16.0	40.0	60.0	0.0	24.0
KABRAS	26	3.8	0.0	11.5	53.8	0.0	76.9	7.7	7.7	3.8	42.3	65.4	3.8	7.7
SUKUSU	29	3.4	6.9	3.4	24.1	0.0	86.2	6.9	27.9	10.3	48.3	58.6	0.0	27.6
KIAMBU KIKUYU	39	5.1	5.1	2.6	43.6	5.1	66.7	7.7	23.1	10.3	35.9	66.7	5.1	25.6
MURANGA KIKUYU	46	0.0	0.0	2.2	34.8	6.5	69.6	4.3	23.9	0.0	43.5	58.7	2.2	23.9
NYERI KIKUYU	51	3.9	5.9	9.8	45.1	2.0	55.9	2.0	15.7	9.8	29.2	68.8	2.0	17.6
NDIA	66	10.6	16.7	4.5	39.4	1.5	69.7	4.5	15.2	27.3	59.1	40.9	4.5	15.2
KAMBA	42	9.5	9.5	7.1	31.0	9.5	71.4	4.8	19.0	14.3	40.5	61.9	7.1	19.0
EMBU	72	5.6	6.3	4.2	36.1	1.4	75.0	4.2	18.1	15.3	42.3	57.7	4.2	16.1
MBERE	66	4.5	9.1	3.0	31.8	10.6	77.3	0.0	21.2	13.6	45.5	51.5	3.0	22.7
CHUKA	61	9.2	13.1	3.3	26.2	3.3	77.0	6.6	27.9	21.3	60.0	46.3	0.0	26.2
MUTHAMBI	83	4.8	3.6	6.4	36.1	9.6	72.3	4.8	15.7	8.4	53.7	50.0	1.2	15.7
MWIMBI	43	5.0	5.0	5.0	27.5	5.0	92.5	2.5	27.5	10.0	63.9	36.1	2.5	30.0
IGOJI	95	5.3	7.4	3.2	30.5	4.2	82.1	7.4	17.9	12.6	62.1	46.3	0.0	16.8
IMENTI	39	0.0	0.0	12.8	43.6	5.1	64.1	2.6	30.8	0.0	41.0	61.8	0.0	30.8
TIGANIA	36	2.8	5.6	5.6	47.2	2.8	66.7	11.1	16.7	8.3	55.6	55.6	2.8	13.9
IGEMBE	33	12.1	12.1	6.1	27.3	3.0	84.8	15.2	9.1	24.2	63.6	48.5	3.0	9.1
THARAKA	46	4.3	6.5	4.3	28.3	8.7	67.4	2.2	21.7	10.9	34.8	67.4	2.2	21.7
POKOMO	90	7.8	7.8	3.3	43.3	7.8	72.2	6.7	21.1	15.6	37.1	65.2	3.3	22.2
GIRIAMA	38	10.5	13.2	5.3	36.8	0.0	89.5	2.6	31.6	23.7	42.5	59.5	2.6	31.6
CHONYI	14	14.3	14.3	14.3	42.9	0.0	85.7	7.1	14.3	28.6	57.1	42.9	7.1	14.3
MID MJI KENDA	27	11.1	11.1	3.7	37.0	0.0	81.5	14.8	11.1	22.2	51.9	63.0	0.0	11.1
DIGO	100	5.0	7.0	5.0	37.0	4.0	83.0	5.0	25.0	12.0	33.0	71.0	1.0	28.0
TAITA	45	4.4	4.4	11.1	42.2	11.1	82.2	4.4	44.4	8.9	28.9	71.1	6.7	42.2
TAVETA	48	2.1	2.1	8.5	36.2	10.6	88.0	10.6	23.4	4.3	34.0	74.5	2.0	25.5

Table AP. 1.4.43 : Frequencies of palmar patterns and triradii in Kenyan minimal ethnic population samples (Left hand females)

POPULATION	NO	PALMAR PATTERNS AND TRIRADII												
		PT	RT	P2	P3	P3T	P4	PH	CH	TEF	T	T1	T2	T3
		%	%	%	%	%	%	%	%	%	%	%	%	%
SOMALI	103	5.8	6.8	0.0	18.4	7.8	89.3	5.8	17.5	12.6	60.4	44.6	1.0	15.4
PENDILLE	46	2.2	2.2	0.0	28.3	6.5	87.0	19.6	23.9	4.3	52.2	60.9	6.5	23.9
GABBRA	63	4.8	6.3	0.0	20.6	6.3	82.5	3.2	23.8	11.1	50.8	52.4	0.0	23.8
BORAN	60	6.7	8.3	0.0	21.7	1.7	86.7	0.0	25.0	15.0	58.3	41.7	0.0	25.0
BURJI	57	3.8	3.8	0.0	24.6	5.3	86.0	8.8	24.6	17.5	52.6	56.1	0.0	26.3
SAMBURU	46	6.5	10.9	0.0	17.4	4.3	93.5	6.5	17.4	17.4	55.5	45.7	4.3	19.6
KADJIADO MAASAI	150	11.3	15.3	0.0	21.3	8.0	92.0	11.3	16.7	26.7	48.7	61.3	1.3	16.7
KONY	23	21.7	21.7	0.0	34.8	0.0	95.7	0.0	26.1	43.5	43.5	56.5	0.0	24.1
NANDI	50	22.0	24.0	0.0	16.0	8.0	92.0	2.0	20.0	46.0	22.9	79.2	0.0	20.0
KIPSIGIS	43	14.0	14.0	0.0	27.9	2.3	79.1	4.7	16.3	27.9	42.9	61.9	2.3	14.0
TUGEN	102	19.6	20.8	0.0	16.8	11.9	83.2	7.9	13.9	40.6	58.0	47.0	4.0	12.9
KEYO	50	26.0	24.0	0.0	14.0	8.0	98.0	2.0	20.0	50.0	42.0	62.0	0.0	18.0
MARAKWET	56	21.8	20.0	0.0	25.0	8.9	75.0	3.6	17.9	41.8	58.9	46.4	0.0	16.1
POKOT	54	11.3	13.0	0.0	16.9	7.5	83.0	3.7	16.7	24.1	50.0	54.0	1.9	14.8
ITESO	47	10.6	10.6	0.0	21.3	12.8	93.6	10.6	14.9	21.3	46.8	59.6	2.1	17.0
TURKANA	43	25.6	20.9	0.0	16.3	9.3	97.7	9.3	34.9	46.5	58.1	48.8	4.7	32.6
LUO	107	21.5	21.5	0.1	21.5	7.5	93.5	4.7	21.5	43.0	42.1	61.7	1.9	20.6
GUSII	51	11.8	19.6	0.0	19.6	11.8	90.2	2.0	23.5	31.4	41.2	60.8	2.0	21.6
TIRIKI	25	28.0	32.0	0.0	24.0	0.0	112.0	8.0	12.0	60.0	36.0	68.0	4.0	12.0
MARAGOLI	24	8.3	8.3	0.0	8.3	8.3	112.5	12.5	16.7	16.7	41.7	66.7	4.2	16.7
BUNYORE	20	25.0	25.0	0.0	30.0	0.0	80.0	5.0	30.0	50.0	30.0	80.0	0.0	25.0
IDAKHO	15	20.0	26.7	0.1	20.0	6.7	93.3	6.7	20.0	46.7	46.7	60.0	0.0	20.0
MARAMA	25	8.0	8.0	0.0	12.0	4.0	100.0	16.0	20.0	16.0	44.0	68.0	4.0	20.0
WANGA	24	20.8	16.7	0.0	20.8	12.5	75.0	8.3	12.5	37.5	50.0	58.3	0.0	12.5
MARACH	24	16.7	8.3	0.0	4.2	12.5	100.0	8.3	8.3	25.0	50.0	58.3	0.0	8.3
BUKHAYO	26	19.2	30.8	0.0	15.4	23.1	84.6	7.7	15.4	50.0	46.2	61.5	0.0	15.4
SAMIA	26	15.4	11.5	0.1	15.4	3.8	88.5	7.7	15.4	26.9	30.8	69.2	7.7	15.4
BUTSOTSO	27	7.4	18.5	0.0	22.2	18.5	77.8	7.4	11.1	25.9	22.2	85.2	0.0	11.1
BUNYALA	25	12.0	12.0	0.0	12.0	4.0	104.0	4.0	0.0	24.0	44.0	60.0	0.0	0.0
KABRAS	26	15.4	11.5	0.1	23.1	11.5	96.2	0.0	19.2	26.9	34.6	61.5	3.8	19.2
BUKUSU	29	3.4	3.4	0.0	13.8	0.0	113.8	6.9	27.6	6.9	51.7	55.2	0.0	27.6
KIAMBU KIKUYU	39	15.4	15.4	0.0	28.2	5.1	74.4	10.3	12.8	30.8	30.8	69.2	10.3	12.8
MURANGA KIKUYU	46	13.0	10.9	0.1	21.7	4.3	89.1	6.5	28.3	23.9	32.6	71.7	2.2	28.3
NYERI KIKUYU	51	13.7	19.6	0.0	13.7	7.8	86.3	2.0	9.8	33.3	29.4	70.6	0.0	11.8
NDIA	66	19.7	24.2	0.0	28.8	9.1	77.3	4.5	12.1	43.9	60.6	40.9	3.0	12.1
KAMBA	42	19.0	21.4	0.0	11.9	16.7	85.7	11.9	9.5	40.5	35.1	70.3	7.1	9.5
EMBU	72	16.7	16.7	0.0	11.1	5.6	98.6	4.2	13.9	33.3	44.4	56.9	4.2	13.9
MBERE	66	9.1	13.6	0.0	16.7	7.6	89.4	4.5	21.2	22.7	45.5	50.0	9.1	21.2
CHUKA	61	14.8	14.8	0.0	23.0	3.3	86.9	6.6	13.1	29.5	55.9	50.8	0.0	13.1
MUTHAMBI	83	15.7	14.5	0.0	21.7	2.4	94.0	4.8	18.1	27.7	53.2	49.4	2.4	19.1
MWIMBI	43	7.5	5.0	0.0	17.5	2.5	95.0	7.5	25.0	12.5	65.7	40.0	2.5	25.0
IGOJI	95	16.8	17.9	0.0	20.0	7.4	86.3	10.5	15.8	34.7	60.0	50.5	2.1	13.7
IMENTI	39	15.4	15.4	0.1	20.5	7.7	82.1	10.3	23.1	30.8	53.8	53.8	5.1	20.5
TIGANIA	36	22.2	25.0	0.0	16.7	8.3	108.3	5.6	13.9	47.2	58.3	47.2	2.8	11.1
IGEMBE	33	12.1	15.2	0.0	18.2	9.1	97.9	6.1	18.2	27.3	54.5	48.5	6.1	15.2
THARAKA	46	19.6	17.4	0.0	13.0	13.0	84.8	2.2	10.9	37.0	32.6	67.4	2.2	10.9
POKOMO	90	20.0	20.0	0.0	31.1	4.4	85.6	4.4	18.9	40.0	45.6	56.7	2.2	19.9
GIRIAMA	38	13.4	28.9	0.0	26.3	7.9	99.5	15.8	21.1	47.4	55.3	55.3	5.3	21.1
CHONYI	14	28.6	35.7	0.1	21.4	0.0	107.1	7.1	7.1	64.3	57.1	42.9	7.1	7.1
MID MJI KENDA	27	29.6	29.6	0.0	18.5	3.7	96.3	3.7	11.1	59.3	55.6	48.1	0.0	11.1
DIGO	100	22.0	27.0	0.0	27.0	4.0	99.0	3.0	26.0	49.0	37.0	62.0	4.0	27.0
TAITA	45	15.6	15.6	0.0	33.3	2.2	100.0	6.7	40.0	31.1	31.1	73.3	4.4	37.8
TAVETA	48	10.4	8.3	0.0	18.8	4.2	97.5	0.0	22.9	18.8	27.1	72.9	0.0	20.8

Table AP. 1.4.44 : Frequency of interdigital triradii in Kenyan minimal ethnic population samples.

Males

		RIGHT HAND							LEFT HAND					
Pop	No	3	4	5	6	7	8	No	3	4	5	6	7	8
		%	%	%	%	%	%		%	%	%	%	%	%
Somali	221	5.4	71.9	16.3	5.4	0.0	0.0	223	4.9	71.7	19.3	3.6	0.4	0.0
Rendille	152	1.3	77.0	15.1	5.9	0.7	0.0	150	2.7	70.7	21.3	5.3	0.0	0.0
Gabbra	27	0.0	74.1	25.9	0.0	0.0	0.0	27	0.0	88.9	7.4	3.7	0.0	0.0
Boran	127	0.8	85.0	10.3	3.1	0.8	0.0	127	3.1	76.4	16.5	3.1	0.8	0.0
Burji	64	0.0	75.0	25.0	0.0	0.0	0.0	64	3.1	68.8	15.6	12.5	0.0	0.0
Samburu	87	5.7	75.9	13.8	4.6	0.0	0.0	87	10.3	63.2	23.0	3.4	0.0	0.0
Kadjiado														
Maasai	63	1.6	68.3	25.4	4.8	0.0	0.0	63	3.2	63.5	33.3	0.0	0.0	0.0
Narok Maasai	36	2.8	72.2	25.0	0.0	0.0	0.0	30	2.8	77.8	19.4	0.0	0.0	0.0
Ngwesi	41	2.4	73.2	24.4	0.0	0.0	0.0	41	2.4	70.7	26.8	0.0	0.0	0.0
Mukogodo	38	2.6	78.9	15.8	2.6	0.0	0.0	38	0.0	73.7	18.4	7.9	0.0	0.0
Kony	37	5.4	75.7	16.2	2.7	0.0	0.0	37	0.0	78.4	21.6	0.0	0.0	0.0
Nandi	52	1.9	73.1	23.1	1.9	0.0	0.0	52	0.0	75.0	25.0	0.0	0.0	0.0
Kipsigis	57	3.5	88.4	24.6	1.8	1.8	0.0	57	1.8	71.9	21.1	5.3	0.0	0.0
Tugen	108	1.9	88.0	9.3	0.9	0.0	0.0	108	6.5	78.9	14.8	1.9	0.0	0.0
Keyo	51	3.9	76.5	17.6	2.0	0.0	0.0	51	5.9	68.6	23.5	2.0	0.0	0.0
Marakwet	50	2.0	68.0	26.0	4.0	0.0	0.0	50	7.0	74.0	20.0	4.0	0.0	0.0
Pokot	45	2.2	73.3	20.0	4.4	0.0	0.0	45	4.2	71.1	16.7	0.0	0.0	0.0
Iteso	52	0.0	69.2	28.9	1.9	0.0	0.0	52	0.0	83.5	28.8	7.7	0.0	0.0
Turkana	65	1.5	87.7	23.1	6.2	1.5	0.0	66	1.5	60.6	31.8	6.1	0.0	0.0
Luo	170	1.8	80.0	29.4	8.8	0.0	0.0	169	1.8	58.0	30.8	8.3	1.2	0.0
Gusii	50	4.0	88.0	24.0	4.0	0.0	0.0	50	8.0	58.0	30.0	6.0	0.0	0.0
Tiriki	26	3.8	61.5	26.9	7.7	0.0	0.0	26	3.8	65.4	26.9	3.8	0.0	0.0
Maragoli	26	0.0	65.4	30.8	3.8	0.0	0.0	26	15.4	65.4	15.4	3.8	0.0	0.0
Bunyore	30	0.0	63.3	23.3	10.0	3.3	0.0	30	3.3	56.7	33.3	6.7	0.0	0.0
Idakho	39	5.1	56.4	23.1	15.4	0.0	0.0	39	10.3	51.3	35.9	2.6	0.0	0.0
Maraba	25	0.0	80.0	16.0	4.0	0.0	0.0	25	0.0	84.0	24.0	12.0	0.0	0.0
Wanga	25	4.0	64.0	24.0	8.0	0.0	0.0	25	0.0	68.0	24.0	8.0	0.0	0.0
Maraco	25	0.0	64.0	32.0	4.0	0.0	0.0	25	8.0	48.0	36.0	8.0	0.0	0.0
Bukhayo	23	0.0	82.6	17.4	0.0	0.0	0.0	23	4.3	65.2	26.1	4.3	0.0	0.0
Samia	24	12.5	70.8	8.3	8.3	0.0	0.0	24	4.2	70.8	20.8	4.2	0.0	0.0
Butsotso	20	0.0	60.0	25.0	15.0	0.0	0.0	20	0.0	60.0	35.0	5.0	0.0	0.0
Bunyala	25	8.0	56.0	28.0	8.0	0.0	0.0	25	4.0	56.0	28.0	8.0	4.0	0.0
Kabras	28	3.6	73.1	23.1	0.0	0.0	0.0	28	3.6	61.5	34.6	0.0	0.0	0.0
Bukusu	61	1.6	65.6	27.9	4.9	0.0	0.0	61	1.6	68.9	29.5	0.0	0.0	0.0
Kiambu														
Kikuyu	64	0.0	79.7	14.1	6.3	0.0	0.0	65	3.1	67.7	26.2	3.1	0.0	0.0
Muranga														
Kikuyu	56	1.8	67.9	21.4	7.1	1.8	0.0	56	3.6	67.9	19.6	8.9	0.0	0.0
Nyeri														
Kikuyu	49	8.1	67.3	20.4	4.1	0.0	0.0	49	4.1	75.5	16.3	4.1	0.0	0.0
Ndia	58	1.8	66.1	25.2	6.9	0.0	0.0	58	3.6	67.9	26.8	1.8	0.0	0.0
Kamba	78	1.3	69.2	23.1	6.4	0.0	0.0	78	2.6	67.9	25.6	2.6	1.3	0.0
Embu	87	0.0	77.0	19.5	3.4	0.0	0.0	87	0.0	72.4	24.1	3.4	0.0	0.0
Mbere	64	1.6	65.6	23.4	9.4	0.0	0.0	64	4.7	59.4	31.3	4.7	0.0	0.0
Chuka	75	4.0	77.3	18.7	0.0	0.0	0.0	75	2.7	76.0	21.3	0.0	0.0	0.0
Muthambe	76	3.9	69.7	18.4	6.6	1.3	0.0	75	12.0	61.3	22.7	2.7	1.3	0.0
Mwimbi	61	4.9	75.4	14.8	4.9	0.0	0.0	62	1.8	77.4	19.4	1.6	0.0	0.0
Igoji	78	5.1	61.5	28.2	5.1	0.0	0.0	78	11.5	56.4	28.2	3.8	0.0	0.0
Imenti	61	1.6	77.0	16.0	5.3	0.0	0.0	61	4.9	63.9	18.0	13.1	0.0	0.0
Tigania	64	4.7	73.4	18.8	3.1	0.0	0.0	64	4.7	67.2	20.3	7.8	0.0	0.0
Igembe	66	3.0	78.8	13.6	4.5	0.0	0.0	66	6.1	72.7	15.2	6.1	0.0	0.0
Tharaka	54	1.9	64.8	27.8	5.6	0.0	0.0	54	5.6	72.2	20.4	1.9	0.0	0.0
Pokomo	114	1.8	67.5	27.2	3.5	0.0	0.0	114	5.3	68.4	23.7	2.6	0.0	0.0
Malakote	33	0.0	60.6	36.4	3.0	0.0	0.0	34	5.9	61.8	23.5	8.8	0.0	0.0
Giriama	64	3.1	64.1	23.4	9.4	0.0	0.0	64	4.7	64.1	21.9	9.4	0.0	0.0
Chonyi	79	8.0	51.9	36.0	10.1	0.0	0.0	79	1.3	59.5	31.6	7.6	0.0	0.0
Mid Mji														
Kwnda	32	9.4	50.0	25.0	15.6	0.0	0.0	32	3.1	53.1	34.4	6.3	3.1	0.0
Digo	116	1.7	64.7	25.0	8.6	0.0	0.0	116	2.6	69.8	21.6	6.0	0.0	0.0
Taita	52	0.0	67.3	19.2	13.5	0.0	0.0	55	7.3	63.6	23.6	3.6	1.8	0.0
Taveta	59	0.0	67.8	23.7	8.5	0.0	0.0	59	1.7	72.9	20.3	5.1	0.0	0.0

Females

		RIGHT HAND							LEFT HAND					
Pop	No	3	4	5	6	7	8	No	3	4	5	6	7	8
		%	%	%	%	%	%		%	%	%	%	%	%
Somali	103	3.9	78.6	15.5	1.0	1.0	0.0	103	4.9	73.8	17.5	2.9	1.0	0.0
Rendille	44	4.5	72.7	18.2	4.5	0.0	0.0	46	2.2	73.9	17.4	6.5	0.0	0.0
Gabbra	63	3.2	81.0	11.1	4.8	0.0	0.0	63	7.9	73.0	19.0	0.0	0.0	0.0
Boran	59	1.7	79.7	15.3	1.7	1.7	0.0	60	1.7	86.0	13.3	0.0	0.0	0.0
Burji	57	1.8	77.2	17.5	3.5	0.0	0.0	57	3.5	75.4	19.3	1.8	0.0	0.0
Samburu	45	2.2	75.6	17.8	4.4	0.0	0.0	46	8.5	71.7	21.7	0.0	0.0	0.0
Kadjiado														
Maasai	150	6.0	71.3	19.3	3.3	0.0	0.0	150	4.7	68.7	20.7	6.0	0.0	0.0
Kony	23	0.0	91.3	8.7	0.0	0.0	0.0	23	0.0	73.9	21.7	4.3	0.0	0.0
Nandi	50	4.0	80.0	14.0	2.0	0.0	0.0	50	8.0	68.0	22.0	2.0	0.0	0.0
Kipsigis	43	2.3	79.1	14.0	2.3	0.0	0.1	43	7.0	76.7	14.0	0.0	0.0	2.3
Tugen	102	2.0	80.4	16.7	1.0	0.0	0.0	101	3.0	81.2	14.9	0.0	1.0	0.0
Keyo	50	6.0	72.0	20.0	2.0	0.0	0.0	50	2.0	74.0	22.0	2.0	0.0	0.0
Marakwet	56	5.4	76.8	14.3	3.6	0.0	0.0	56	5.4	76.8	14.3	1.8	0.0	0.0
Pokot	54	1.9	88.9	9.3	0.0	0.0	0.0	53	3.8	81.1	15.1	0.0	0.0	0.0
Iteso	47	2.1	74.5	23.4	0.0	0.0	0.0	47	0.0	72.3	25.5	2.1	0.0	0.0
Turkana	42	4.8	66.7	23.8	4.8	0.0	0.0	43	2.3	69.8	25.6	2.3	0.0	0.0
Luo	107	4.7	60.7	27.1	7.5	0.0	0.0	107	3.7	66.4	26.2	3.7	0.0	0.0
Gusii	51	5.9	58.8	23.5	11.8	0.0	0.0	51	3.9	70.6	19.6	5.9	0.0	0.0
Tiriki	25	0.0	72.0	24.0	4.0	0.0	0.0	25	3.9	70.6	19.6	5.9	0.0	0.0
Maragoli	24	4.2	62.5	33.3	0.0	0.0	0.0	24	0.0	70.8	25.0	4.2	0.0	0.0
Bunyore	20	0.0	90.0	10.0	0.0	0.0	0.0	20	10.0	70.0	20.0	0.0	0.0	0.0
Idakho	15	13.3	46.7	33.3	6.7	0.0	0.0	15	13.3	46.7	33.3	6.7	0.0	0.0
Maraba	25	4.0	60.0	32.0	4.0	0.0	0.0	25	8.0	72.0	16.0	4.0	0.0	0.0
Wanga	24	4.2	70.8	20.8	0.0	0.0	4.2	24	8.3	66.7	20.8	0.0	4.2	0.0
Maraco	24	8.3	75.0	16.7	0.0	0.0	0.0	24	4.2	75.0	20.8	0.0	0.0	0.0
Bukhayo	26	0.0	76.9	15.4	7.7	0.0	0.0	26	7.7	61.5	26.9	3.8	0.0	0.0
Samia	26	3.8	76.9	15.4	3.8	0.0	0.0	26	15.4	57.7	23.1	3.8	0.0	0.0
Butsotso	27	7.4	66.7	25.9	0.0	0.0	0.0	27	3.7	70.4	25.9	0.0	0.0	0.0
Bunyala	25	0.0	80.0	16.0	4.0	0.0	0.0	25	0.0	80.0	20.0	0.0	0.0	0.0
Kabras	26	0.0	65.4	26.9	7.7	0.0	0.0	26	3.8	57.7	34.6	3.8	0.0	0.0
Bukusu	29	3.4	79.3	17.2	0.0	0.0	0.0	29	0.0	72.4	24.1	3.4	0.0	0.0
Kiambu Kikuyu	39	2.6	76.9	20.5	0.0	0.0	0.0	39	10.3	69.2	20.5	0.0	0.0	0.0
Murangu														
Kikuyu	46	2.2	82.6	15.2	0.0	0.0	0.0	46	8.5	71.7	13.6	6.5	0.0	0.0
Nyeri Kikuyu	51	9.8	70.6	15.7	3.9	0.0	0.0	51	7.8	74.5	15.7	2.0	0.0	0.0
Ndia	66	4.5	78.8	13.6	3.0	0.0	0.0	66	4.5	74.2	19.7	1.5	0.0	0.0
Kamba	42	2.4	78.6	16.7	2.4	0.0	0.0	42	2.4	78.6	16.7	2.4	0.0	0.0
Embu	72	1.4	83.3	12.5	2.8	0.0	0.0	72	5.6	72.2	20.8	1.4	0.0	0.0
Mbere	66	3.0	74.2	19.7	3.0	0.0	0.0	66	6.1	74.2	16.7	3.0	0.0	0.0
Chuka	61	4.9	82.0	11.5	1.6	0.0	0.0	61	3.3	80.3	13.1	3.3	0.0	0.0
Muthambe	83	2.4	73.5	19.3	4.8	0.0	0.0	83	1.2	80.7	14.5	3.6	0.0	0.0
Mwimbi	40	0.0	75.0	20.0	5.0	0.0	0.0	40	2.5	77.5	17.5	2.5	0.0	0.0
Igoji	95	0.0	80.0	18.9	1.1	0.0	0.0	95	2.1	81.1	16.8	0.0	0.0	0.0
Imenti	39	5.1	69.2	20.5	5.1	0.0	0.0	39	5.1	74.4	17.9	2.6	0.0	0.0
Tigania	36	0.0	83.3	8.3	5.6	0.0	0.0	36	0.0	66.7	27.8	5.6	0.0	0.0
Igembe	33	3.0	75.8	18.2	3.0	0.0	0.0	33	0.0	84.8	15.2	0.0	0.0	0.0
Tharaka	46	0.0	93.5	4.3	2.2	0.0	0.0	46	2.2	80.4	15.2	2.2	0.0	0.0
Pokomo	90	1.1	74.4	21.1	3.2	1.1	0.0	90	0.0	74.4	25.6	0.0	0.0	0.0
Giriama	38	2.6	88.4	23.7	5.3	0.0	0.0	38	7.9	60.5	31.6	0.0	0.0	0.0
Chonyi	14	0.0	71.4	14.3	0.0	0.0	0.0	14	0.0	71.4	21.4	7.1	0.0	0.0
Mid Mji														
Kwnda	27	0.0	81.5	11.1	7.4	0.0	0.0	27	3.7	74.1	18.5	3.7	0.0	0.0
Digo	100	0.0	75.0	20.0	4.0	1.0	0.0	100	2.0	75.0	19.0	3.0	0.0	1.0
Taita	45	0.0	82.2	28.9	8.9	0.0	0.0	45	2.2	80.0	33.3	4.4	0.0	0.0
Taveta	47	4.3	74.5	17.0	2.1	2.1	0.0	48	12.5	68.7	14.6	4.2	2.1	0.0

Appendix 2: Program for the computation of Hiernaux's statistic (Δg).


```
      PROGRAM DELTA
C     PROGRAM DELTA CALCULATES HIERNAUX'S DELTA G DISTANCES BETWEEN .
C     POPULATION SAMPLES. MAXIMUM PARAMATERS HERE ARE 60 SAMPLES,200
C     ATTRIBUTES. LANGUAGE IS FORTRAN 77.
C     PROGRAM FORMULA AS GIVEN BY CONSTANDSE-WESTERMANN (1972) FROM
C     HIERNAUX (1964,1965).
      DIMENSION DIST(60,60),DATA(200,60),GAMMA(200),INO(60)
C DIST=ARRAY TO HOLD DISTANCES;DATA= INPUT DATA OF POPULATION SAMPLE
C      MEANS AND FREQUENCIES;GAMMA= ARRAY CONTAINING ATTRIBUTE GAMMAS
C      OF VARIATION.
      CHARACTER*80 TITLE,TIT1
      CHARACTER*20 PLAB(60)
      CHARACTER*72 FMT
      CHARACTER*50 GAMFT
C     TITLE=ARRAY HOLDING FIRST LINE OF TITLE.
C     TIT1=ARRAY HOLDING SECOND LINE OF TITLE.
C     FMT IS VARIABLE CONTAINING FORMAT OF DATA.
C     GAMFT IS VARIABLE CONTAINING FORMAT FOR GAMMAS.
      OPEN(UNIT=4,NAME='CON',STATUS='OLD')
C     'CON' IS DATA FILE CONTAINING PARAMETERS AND GAMMAS.
C     PLAB IS AN ARRAY CONTAINING POPULATION SAMPLE LABELS.
      READ(4,994)TITLE,TIT1
  994 FORMAT(A/A)
      WRITE(6,993)TITLE,TIT1
993   FORMAT(3X,A/3X,A///)
      READ(4,814)FMT
814   FORMAT(A)
      READ(4,815)GAMFT
815   FORMAT(A)
      READ(4,884)IPOP,NVAR
  884 FORMAT(2I3)
C     IPOP=NO OF SAMPLES;NVAR=NO OF ATTRIBUTES.
      IPIP=IPOP-1
      READ(1,999)(PLAB(J),J=1,IPOP)
999     FORMAT(A)
      DO 77 K=1,IPOP
      READ(5,FMT)(INO(K),(DATA(J,K),J=1,NVAR))
 77   CONTINUE
      READ(4,GAMFT) (GAMMA(J),J=1,NVAR)
      DO 771 J=1,IPOP
      DO 771 K=1,IPOP
      DIST(J,K)=0.0
 771  CONTINUE
      DO 333 M=1,IPIP
      MOD=M+1
      DO 444 K=MOD,IPOP
      TOTAL=0.0
      DO 555 J=1,NVAR
      W=DATA(J,M)-DATA(J,K)
      W=W/GAMMA(J)
      W=W*W
      TOTAL=TOTAL+W
 555  CONTINUE
      TOTAL=TOTAL*10000
      TOTAL=TOTAL/NVAR
      DIST(M,K)=TOTAL
 444  CONTINUE
 333  CONTINUE
        CALL WRITEDG(PLAB,DIST,IPOP,INO)
      STOP
      END
        SUBROUTINE WRITEDG(PLAB,DMAT,IPOP,NO)
C       SUBROUTINE TO WRITE OUT THE DISTANCES IN A LOWER TRIANGULAR
C       MATRIX,SECTIONED OFF INTO BLOCKS OF 15.
        DIMENSION NO(60),DMAT(60,60)
        CHARACTER*20 PLAB(60)
        WRITE(6,11)PLAB(1),NO(1)
11      FORMAT(2X,A,I2)
        IPIP=IPOP-1
        I=IPOP/15+1
        DO 56 N=1,I
        IEND=0
        IEND=N*15
        IBEG=IEND-14
        IF (IEND .GT. IPOP)IEND=IPOP
        DO 41 M=IBEG,IPIP
        IEN=M
         IF (M .GE. IEND)IEN=IEND
         WRITE(6,988)(PLAB(M+1),NO(M+1),(DMAT(K,M+1),K=IBEG,IEN))
988     FORMAT(2X,A,I2,15F6.0)
41      CONTINUE
        WRITE(6,887)(NO(J),J=IBEG,IEND)
887     FORMAT(/22X,15I6/)
56      CONTINUE
        WRITE(6,75)
75      FORMAT(////)
        RETURN
        END
```

APPENDIX 3: MULTIVARIATE VARIATION IN KENYAN MINIMAL ETHNIC POPULATION SAMPLES.

Table AP. 3.1. : Δg distances between Kenyan minimal ethnic population samples (males): analysis based on 26 summary attributes.

SOMALI	1															
RENDILLE	2	67.														
GABBRA	3	276.	323.													
BORAN	4	194.	176.	299.												
BURJI	7	264.	232.	881.	529.											
SAMBURU	8	288.	248.	252.	288.	636.										
KADJIADO MAASAI	9	266.	285.	273.	166.	524.	287.									
NAROK MAASAI	10	754.	654.	681.	329.	1191.	288.	286.								
NGWESI	11	172.	173.	287.	239.	339.	395.	383.	856.							
NUKOGODO	12	248.	241.	861.	455.	194.	796.	649.	1347.	353.						
KONY	13	2641.	2581.	2231.	1782.	3357.	1552.	1548.	883.	2635.	3688.					
NANDI	14	424.	365.	211.	248.	768.	235.	161.	328.	314.	898.	1564.				
KIPSIGIS	15	222.	128.	524.	198.	258.	319.	288.	597.	182.	331.	2125.	368.			
TUGEN	16	613.	688.	378.	287.	1871.	288.	312.	194.	584.	1161.	1157.	219.	578.		
KEYO	17	522.	488.	284.	312.	973.	168.	218.	234.	558.	1111.	1268.	222.	531.	76.	
MARAKWET	18	344.	243.	239.	381.	624.	163.	86.	367.	336.	818.	1625.	182.	248.	296.	174.
POKOT	19	989.	951.	514.	685.	1572.	493.	392.	288.	985.	1798.	862.	328.	862.	261.	218.
ITESO	20	1388.	1383.	971.	945.	1959.	869.	618.	663.	1248.	2153.	723.	598.	1119.	734.	637.
TURKANA	21	599.	482.	924.	419.	656.	757.	347.	683.	689.	689.	1877.	562.	343.	927.	926.
LUO	22	781.	613.	636.	561.	865.	696.	265.	788.	495.	1852.	1731.	328.	458.	757.	626.
GUSII	23	452.	354.	331.	243.	615.	272.	167.	383.	339.	882.	1672.	116.	288.	257.	234.
TIRIKI	24	1818.	866.	875.	484.	1164.	768.	442.	399.	853.	1329.	1314.	417.	634.	512.	628.
MARAGOLI	25	986.	994.	758.	673.	1545.	554.	414.	318.	1815.	1884.	724.	558.	828.	486.	455.
BUNYORE	26	583.	433.	597.	695.	533.	748.	521.	1175.	485.	796.	3888.	652.	444.	1868.	881.
IDAKHO	27	1138.	1195.	789.	948.	1734.	937.	651.	1816.	943.	1966.	1623.	653.	1856.	916.	763.
MARAMA	28	638.	499.	1158.	985.	484.	1247.	742.	1649.	618.	391.	3837.	1862.	474.	1557.	1415.
WANGA	29	1287.	1179.	789.	884.	1698.	773.	582.	742.	1825.	1988.	1293.	522.	1818.	583.	491.
MARACH	30	469.	438.	685.	338.	648.	667.	282.	646.	468.	668.	1842.	461.	293.	756.	668.
BUKHAYO	31	1112.	1114.	812.	672.	1765.	537.	564.	362.	1188.	1948.	643.	684.	1869.	465.	377.
SAMIA	32	987.	952.	888.	434.	1399.	688.	676.	583.	882.	1381.	1468.	446.	774.	453.	678.
BUTSOTSO	33	943.	998.	663.	986.	1382.	1248.	781.	1495.	745.	1316.	3828.	768.	996.	1378.	1144.
BUNYALA	34	965.	832.	1877.	711.	1163.	982.	433.	838.	878.	1144.	1588.	634.	696.	998.	888.
KABRAS	35	259.	312.	394.	252.	461.	435.	341.	745.	378.	445.	2485.	484.	387.	543.	548.
BUKUSU	36	1323.	1232.	978.	869.	1757.	675.	634.	383.	1273.	2163.	588.	558.	1825.	579.	613.
KIAMBU KIKUYU	37	252.	211.	228.	112.	512.	269.	99.	458.	185.	539.	1926.	182.	236.	385.	235.
MURANGA KIKUYU	38	742.	674.	818.	523.	789.	985.	394.	984.	489.	786.	2289.	531.	467.	742.	732.
NYERI KIKUYU	39	981.	783.	918.	421.	1893.	487.	393.	178.	923.	1296.	862.	498.	549.	344.	462.
NDIA	41	819.	685.	688.	445.	1866.	357.	268.	249.	697.	1394.	951.	278.	483.	332.	386.
KAMBA	42	558.	523.	482.	296.	736.	484.	241.	578.	366.	873.	1643.	227.	393.	466.	465.
EMBU	43	1113.	1049.	745.	626.	1463.	578.	582.	465.	931.	1747.	1863.	425.	862.	398.	471.
MBERE	44	399.	364.	586.	298.	451.	527.	254.	662.	291.	618.	2884.	333.	193.	651.	639.
CHUKA	45	761.	759.	623.	568.	1813.	288.	584.	468.	795.	1369.	1467.	451.	692.	294.	393.
MUTHAMBE	46	628.	613.	372.	382.	929.	346.	242.	375.	522.	1176.	1385.	219.	515.	258.	291.
MWIMBI	47	1289.	1161.	795.	684.	1752.	543.	574.	386.	1086.	1929.	622.	488.	988.	267.	315.
IGOJI	48	485.	398.	368.	223.	695.	238.	222.	383.	363.	918.	1586.	194.	317.	418.	417.
IMENTI	49	729.	644.	788.	556.	822.	326.	445.	465.	747.	1242.	1322.	449.	498.	568.	564.
TIGANIA	50	796.	723.	523.	375.	1249.	385.	258.	165.	759.	1373.	834.	244.	643.	152.	151.
IGEMBE	51	523.	478.	326.	376.	885.	146.	273.	339.	481.	1117.	1323.	224.	428.	186.	192.
THARAKA	52	584.	552.	676.	258.	741.	629.	283.	433.	512.	816.	1688.	489.	377.	521.	599.
POKOMO	53	584.	469.	427.	198.	859.	276.	189.	263.	458.	994.	1153.	239.	352.	316.	332.
NALAKOTE	54	648.	668.	467.	516.	863.	739.	395.	775.	563.	1888.	2266.	367.	668.	774.	757.
GIRIAMA	56	849.	842.	869.	595.	898.	727.	515.	742.	719.	1214.	1677.	563.	576.	738.	812.
CHONYI	57	928.	796.	848.	758.	1943.	825.	433.	827.	723.	1399.	1688.	521.	567.	991.	886.
KID MJI KENDA	58	885.	884.	1154.	782.	786.	1855.	678.	1269.	662.	1893.	2389.	776.	548.	1343.	1386.
DIGO	59	337.	329.	528.	294.	388.	699.	385.	781.	235.	383.	2668.	463.	273.	884.	788.
TAITA	60	1548.	1569.	1843.	1168.	2297.	1196.	848.	954.	1393.	2478.	1176.	888.	1474.	1118.	999.
TAVETA	61	1615.	1582.	1388.	926.	2884.	1843.	889.	436.	1557.	2338.	528.	851.	1167.	842.	921.
		1	2	3	4	7	8	9	10	11	12	13	14	15	16	17

Table AP. 3.1 (continued)

POKOT	19	379.													
ITESO	20	696.	348.												
TURKANA	21	632.	984.	937.											
LUO	22	393.	581.	392.	397.										
GUSII	23	180.	346.	664.	541.	312.									
TIRIKI	24	628.	458.	717.	464.	513.	306.								
NAROSOLI	25	501.	350.	452.	879.	668.	709.	722.							
BUNYORE	26	465.	996.	1427.	833.	607.	410.	913.	1391.						
IDAKHO	27	697.	503.	391.	1217.	489.	703.	968.	573.	1002.					
NARAMA	28	836.	1830.	2122.	648.	877.	851.	1284.	1986.	529.	1963.				
WANGA	29	537.	286.	279.	1169.	457.	397.	626.	704.	998.	419.	1854.			
NARACH	30	455.	719.	731.	183.	213.	381.	468.	695.	609.	724.	626.	849.		
BUKHAYO	31	673.	369.	344.	1121.	774.	715.	895.	332.	1673.	637.	2422.	631.	829.	
SAMIA	32	815.	572.	881.	837.	843.	382.	351.	966.	1148.	1023.	1719.	776.	742.	858.
BUTSOTSO	33	833.	1109.	909.	998.	445.	806.	1106.	1385.	769.	590.	1183.	848.	644.	1441.
BUNYALA	34	651.	845.	555.	393.	276.	592.	660.	804.	1109.	961.	912.	807.	250.	935.
KABRAS	35	441.	814.	1309.	616.	728.	321.	691.	1167.	488.	1161.	698.	965.	480.	1176.
BUKUSU	36	685.	294.	322.	851.	688.	599.	494.	374.	1326.	745.	2189.	503.	907.	480.
KIAMBU KIKUYU	37	182.	506.	812.	536.	351.	151.	494.	682.	532.	686.	781.	620.	289.	666.
MURANGA KIKUYU	38	612.	897.	1012.	456.	341.	430.	417.	955.	852.	1012.	720.	847.	310.	1218.
NYERI KIKUYU	39	537.	481.	757.	487.	743.	417.	234.	465.	1201.	1203.	1470.	793.	578.	637.
MDIA	41	277.	251.	398.	650.	369.	230.	291.	312.	810.	521.	1480.	348.	527.	429.
KAMBA	42	415.	556.	536.	421.	181.	241.	341.	586.	760.	511.	1088.	510.	304.	640.
EMBU	43	606.	286.	474.	986.	614.	331.	359.	675.	1030.	607.	1979.	312.	860.	558.
MBERE	44	420.	699.	860.	253.	244.	243.	379.	740.	400.	727.	642.	823.	183.	987.
CHUKA	45	505.	511.	1019.	1037.	902.	362.	685.	823.	927.	1180.	1694.	769.	1059.	837.
MUTHAMBE	46	286.	266.	507.	503.	393.	216.	325.	421.	750.	603.	1200.	343.	532.	606.
MWIMBI	47	503.	253.	304.	1147.	705.	499.	586.	395.	1404.	620.	2237.	322.	949.	286.
IGOJI	48	319.	473.	594.	463.	348.	241.	456.	436.	633.	523.	1234.	603.	404.	546.
IMENTI	49	450.	606.	763.	638.	629.	365.	675.	713.	818.	995.	1417.	776.	710.	698.
TIGANIA	50	331.	195.	353.	600.	481.	225.	295.	400.	990.	678.	1499.	356.	504.	304.
IGEMBE	51	164.	277.	631.	789.	570.	201.	600.	503.	660.	746.	1202.	446.	713.	617.
THARAKA	52	547.	662.	974.	305.	500.	389.	225.	502.	801.	959.	966.	960.	245.	874.
POKOMO	53	314.	350.	443.	406.	336.	250.	314.	329.	774.	503.	1209.	484.	345.	404.
MALAKOTE	54	504.	601.	914.	532.	414.	343.	446.	930.	515.	694.	1022.	714.	419.	1077.
GIRIAMA	56	602.	679.	756.	465.	441.	390.	346.	805.	721.	704.	1229.	631.	495.	1009.
CHONYI	57	537.	651.	405.	420.	161.	470.	504.	659.	506.	490.	1110.	560.	302.	963.
MID MJI KENDA	58	909.	1200.	971.	339.	310.	697.	751.	1201.	805.	940.	969.	1096.	439.	1400.
DIGO	59	533.	999.	1216.	320.	306.	306.	541.	1046.	500.	979.	464.	1022.	223.	1312.
TAITA	60	1045.	646.	295.	1197.	601.	1106.	1006.	470.	1023.	353.	2615.	730.	921.	472.
TAVETA	61	1031.	484.	467.	831.	932.	939.	410.	641.	1653.	875.	2406.	787.	903.	539.

		18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
BUNYALA	34	931.														
KABRAS	35	950.	996.													
BUKUSU	36	1570.	959.	1201.												
KIAMBU KIKUYU	37	602.	612.	275.	930.											
MURANGA KIKUYU	38	804.	461.	617.	1153.	341.										
NYERI KIKUYU	39	1600.	733.	710.	370.	571.	647.									
MDIA	41	1035.	717.	757.	262.	375.	613.	271.								
KAMBA	42	603.	531.	523.	632.	207.	241.	500.	266.							
EMBU	43	1211.	1101.	706.	297.	509.	901.	456.	193.	399.						
MBERE	44	705..	528.	445.	759.	287.	313.	531.	407.	196.	643.					
CHUKA	45	1046.	1379.	509.	400.	670.	1124.	436.	445.	682.	373.	679.				
MUTHAMBE	46	920.	750.	444.	338.	329.	455.	311.	197.	211.	263.	374.	300.			
MWIMBI	47	1430.	917.	1041.	330.	629.	953.	450.	260.	405.	245.	850.	510.	324.		
IGOJI	48	823.	764.	503.	450.	284.	637.	445.	211.	170.	350.	216.	430.	220.	517.	
IMENTI	49	1596.	997.	600.	302.	652.	1050.	420.	329.	563.	424.	401.	246.	410.	646.	200.
TIGANIA	50	1107.	560.	626.	330.	330.	637.	271.	227.	309.	291.	543.	451.	240.	207.	410.
IGEMBE	51	1209.	900.	401.	412.	379.	047.	433.	273.	474.	350.	500.	162.	170.	369.	272.
THARAKA	52	1015.	613.	525.	003.	305.	243.	303.	421.	250.	700.	227.	029.	371.	797.	364.
POKOMO	53	031.	620.	497.	344.	254.	524.	265.	139.	147.	256.	271.	447.	162.	333.	75.
MALAKOTE	54	509.	917.	409.	003.	424.	572.	704.	575.	356.	602.	325.	794.	350.	1019.	365.
GIRIAMA	56	1121.	037.	546.	401.	621.	541.	431.	390.	302.	355.	279.	499.	249.	714.	305.
CHONYI	57	670.	549.	940.	491.	633.	621.	722.	360.	354.	596.	206.	953.	430.	050.	333.
MID MJI KENDA	58	060.	730.	902.	1000.	765.	591.	967.	732.	359.	912.	277.	1206.	704.	1206.	457.
DIGO	59	573.	633.	320.	1262.	235.	190.	767.	707.	262.	960.	170.	1040.	495.	1190.	425.
TAITA	60	917.	960.	1733.	660.	1011.	1259.	1217.	700.	677.	005.	1070.	1599.	000.	713.	709.
TAVETA	61	1603.	913.	1457.	242.	1062.	1107.	390.	399.	760.	497.	037.	900.	671.	530.	627.

		33	34	35	36	37	38	39	41	42	43	44	45	46	47	48
TIGANIA	50	500.														
IGEMBE	51	262.	273.													
THARAKA	52	765.	452.	600.												
POKOMO	53	343.	254.	271.	274.											
MALAKOTE	54	609.	593.	632.	420.	434.										
GIRIAMA	56	369.	500.	490.	439.	274.	357.									
CHONYI	57	537.	649.	616.	597.	347.	440.	320.								
MID MJI KENDA	58	602.	1002.	972.	664.	517.	590.	333.	261.							
DIGO	59	922.	774.	762.	239.	432.	330.	491.	560.	446.						
TAITA	60	1266.	756.	1107.	1059.	623.	904.	1141.	677.	1174.	1331.					
TAVETA	61	740.	455.	600.	665.	431.	974.	665.	630.	1110.	1310.	671.				

		49	50	51	52	53	54	56	57	50	59	60	61

Table AP. 3.2 : Δg distances between Kenyan minimal ethnic population samples (females): analysis based on 26 summary attributes.

SOMALI	1															
RENDILLE	2	290.														
GABBRA	3	170.	234.													
BORAN	4	425.	933.	730.												
BURJI	7	339.	637.	613.	484.											
SAMBURU	8	57.	345.	220.	302.	277.										
KADJIADO MAASAI	9	377.	697.	792.	224.	153.	258.									
KONY	13	1730.	2566.	2272.	793.	1477.	1466.	1182.								
NANDI	14	424.	777.	733.	168.	221.	310.	108.	977.							
KIPSIGIS	15	343.	769.	676.	81.	303.	212.	156.	949.	98.						
TUGEN	16	410.	1011.	683.	291.	541.	266.	467.	744.	424.	292.					
KEYO	17	764.	1373.	1229.	363.	543.	557.	417.	482.	309.	327.	219.				
MARAKWET	18	687.	1262.	1043.	210.	450.	468.	279.	558.	164.	169.	274.	162.			
POKOT	19	464.	1022.	711.	283.	325.	307.	267.	1147.	266.	275.	317.	408.	223.		
ITESO	20	259.	564.	475.	198.	339.	172.	152.	988.	219.	171.	307.	406.	305.	352.	
TURKANA	21	463.	563.	773.	458.	496.	346.	265.	1312.	417.	375.	493.	578.	610.	688.	256.
LUO	22	287.	468.	669.	469.	355.	228.	199.	1428.	306.	277.	485.	563.	536.	594.	183.
GUSII	23	454.	629.	649.	486.	265.	334.	184.	1685.	371.	353.	584.	638.	626.	522.	326.
TIRIKI	24	497.	749.	901.	773.	685.	438.	480.	1755.	638.	569.	567.	694.	848.	835.	436.
MARAGOLI	25	473.	816.	695.	357.	459.	272.	361.	933.	418.	261.	187.	293.	341.	443.	285.
BUNYORE	26	1039.	1923.	1527.	558.	877.	826.	725.	675.	767.	631.	330.	452.	469.	666.	734.
IDAKHO	27	894.	1358.	1477.	648.	790.	755.	585.	787.	523.	554.	565.	268.	515.	928.	570.
MARAMA	28	257.	368.	411.	497.	255.	249.	226.	1881.	394.	436.	665.	754.	749.	510.	260.
WANGA	29	1237.	2041.	1817.	584.	641.	977.	472.	811.	528.	494.	681.	425.	369.	648.	695.
MARACH	30	421.	1015.	690.	292.	451.	250.	397.	931.	315.	189.	137.	287.	216.	281.	297.
BUKHAYO	31	791.	1253.	1112.	391.	719.	532.	465.	483.	445.	339.	211.	169.	254.	544.	323.
SAMIA	32	284.	488.	372.	544.	447.	218.	392.	2224.	542.	467.	597.	932.	884.	520.	459.
BUTSOTSO	33	849.	1446.	1171.	321.	536.	554.	448.	652.	357.	285.	273.	292.	154.	319.	481.
BUNYALA	34	584.	1244.	1097.	166.	549.	472.	289.	1158.	396.	174.	520.	557.	374.	373.	351.
KABRAS	35	1683.	2258.	2291.	657.	1161.	1346.	881.	957.	841.	644.	992.	785.	738.	1135.	970.
BUKUSU	36	1699.	2485.	2267.	1011.	1449.	1463.	1351.	427.	1095.	1053.	1002.	788.	723.	1488.	1177.
KIAMBU KIKUYU	37	428.	839.	722.	148.	216.	387.	78.	1162.	82.	148.	476.	455.	228.	176.	224.
MURANGA KIKUYU	38	1026.	1663.	1535.	425.	438.	788.	372.	977.	485.	376.	591.	435.	271.	486.	623.
NYERI KIKUYU	39	617.	1201.	834.	187.	489.	434.	437.	826.	281.	198.	253.	378.	285.	263.	435.
MDIA	41	241.	682.	434.	231.	394.	131.	237.	1159.	219.	142.	137.	339.	279.	211.	199.
KAMBA	42	172.	448.	317.	594.	549.	168.	508.	1885.	574.	439.	374.	773.	849.	595.	422.
EMBU	43	235.	625.	422.	177.	287.	151.	216.	1193.	144.	112.	223.	383.	257.	258.	293.
MBERE	44	883.	1527.	1269.	222.	695.	646.	536.	332.	493.	398.	274.	241.	192.	586.	492.
CHUKA	45	288.	678.	489.	532.	292.	255.	494.	1758.	331.	464.	477.	692.	569.	422.	522.
MUTHAMBE	46	492.	1005.	696.	361.	279.	323.	318.	885.	329.	292.	212.	282.	232.	294.	278.
MWIMBI	47	426.	842.	715.	218.	244.	268.	147.	951.	254.	194.	267.	267.	239.	262.	151.
IGOJI	48	476.	895.	787.	216.	146.	372.	178.	1174.	119.	167.	434.	398.	288.	323.	373.
IMENTI	49	746.	1168.	1058.	374.	369.	564.	363.	658.	294.	372.	469.	379.	271.	541.	438.
TIGANIA	50	754.	1219.	1228.	382.	592.	527.	391.	664.	354.	254.	296.	176.	264.	524.	386.
IGEMBE	51	848.	1499.	1331.	212.	545.	627.	373.	802.	310.	247.	378.	228.	221.	374.	519.
THARAKA	52	584.	1033.	881.	617.	338.	449.	448.	2111.	499.	471.	638.	798.	787.	358.	686.
POKOMO	53	569.	938.	967.	288.	281.	425.	87.	1089.	84.	184.	529.	364.	227.	418.	239.
GIRIAMA	56	786.	1134.	1247.	398.	353.	638.	225.	827.	225.	316.	597.	382.	321.	665.	372.
CHONYI	57	1169.	1654.	1711.	733.	718.	1023.	539.	1268.	589.	573.	873.	685.	698.	1018.	781.
MID MJI KENDA	58	418.	826.	714.	399.	279.	352.	318.	1259.	268.	261.	354.	366.	443.	589.	384.
DIGO	59	994.	678.	896.	2055.	1152.	1161.	1389.	4412.	1685.	1722.	2151.	2583.	2416.	1928.	1433.
TAITA	60	941.	1883.	1375.	842.	678.	763.	551.	1883.	679.	714.	728.	462.	748.	1068.	545.
TAVETA	61	345.	756.	597.	255.	197.	262.	191.	1324.	145.	184.	468.	469.	288.	212.	217.
		1	2	3	4	7	8	9	13	14	15	16	17	18	19	20

Table AP. 3.2 (continued)

LUO	22	286.													
GUSII	23	356.	207.												
TIRIKI	24	313.	166.	377.											
MARAGOLI	25	359.	296.	331.	425.										
BUNYORE	26	760.	962.	1013.	1078.	594.									
IDAKHO	27	593.	415.	779.	585.	582.	832.								
MARAMA	28	347.	241.	213.	428.	487.	1180.	894.							
WANGA	29	904.	863.	691.	1093.	602.	538.	805.	1068.						
MARACH	30	599.	564.	598.	713.	249.	532.	813.	634.	602.					
BUKHAYO	31	452.	438.	547.	594.	142.	474.	367.	819.	548.	369.				
SAMIA	32	488.	386.	327.	428.	611.	1104.	1202.	238.	1238.	554.	977.			
BUTSOTSO	33	738.	603.	598.	938.	276.	541.	642.	883.	348.	218.	223.	997.		
BUNYALA	34	687.	538.	485.	759.	564.	799.	825.	651.	487.	357.	599.	578.	478.	
KABRAS	35	1002.	1048.	928.	1165.	858.	968.	859.	1445.	448.	987.	677.	1559.	783.	539.
BUKUSU	36	1568.	1519.	1951.	2052.	1193.	1095.	735.	2064.	1107.	1116.	861.	2503.	828.	1443. 1409.
KIAMBU KIKUYU	37	453.	407.	374.	738.	503.	767.	757.	351.	512.	385.	594.	454.	498.	281. 859.
MURANGA KIKUYU	38	733.	822.	687.	1059.	567.	464.	944.	887.	283.	449.	616.	1014.	348.	512. 589.
NYERI KIKUYU	39	789.	717.	595.	1015.	402.	635.	837.	835.	548.	179.	396.	779.	166.	398. 758.
NDIA	41	489.	273.	265.	424.	185.	563.	688.	376.	646.	159.	328.	291.	312.	329. 968.
KAMBA	42	397.	374.	394.	358.	454.	984.	996.	352.	1282.	436.	738.	122.	839.	636. 1463.
EMBU	43	454.	321.	384.	685.	273.	781.	668.	399.	619.	183.	412.	488.	299.	312. 949.
MBERE	44	722.	784.	817.	1099.	414.	448.	589.	1051.	422.	327.	243.	1163.	167.	485. 574.
CHUKA	45	719.	478.	444.	693.	584.	1026.	859.	429.	934.	489.	856.	397.	591.	672. 1556.
MUTHAMBE	46	619.	441.	368.	714.	159.	523.	658.	532.	426.	254.	282.	692.	215.	548. 1096.
MWIMBI	47	333.	278.	252.	486.	156.	488.	538.	263.	444.	283.	285.	479.	318.	384. 765.
IGOJI	48	511.	436.	292.	725.	461.	788.	671.	428.	421.	356.	568.	511.	351.	323. 727.
IMENTI	49	635.	607.	622.	1087.	587.	668.	479.	885.	583.	524.	419.	1112.	312.	662. 933.
TIGANIA	50	428.	387.	498.	498.	215.	611.	346.	884.	422.	364.	131.	915.	216.	491. 461.
IGEMBE	51	646.	684.	587.	791.	449.	485.	639.	771.	276.	288.	417.	776.	247.	382. 413.
THARAKA	52	858.	651.	422.	782.	691.	1005.	1331.	521.	838.	463.	1036.	295.	719.	518. 1289.
POKOMO	53	363.	279.	281.	579.	481.	766.	498.	438.	358.	432.	421.	625.	378.	234. 511.
GIRIAMA	56	387.	349.	426.	654.	464.	692.	383.	556.	398.	634.	488.	922.	465.	557. 619.
CHONYI	57	888.	586.	478.	738.	731.	1013.	557.	966.	488.	1008.	633.	1137.	789.	587. 364.
MID MJI KENDA	58	523.	291.	243.	428.	362.	798.	524.	456.	629.	411.	465.	467.	457.	428. 824.
DIGO	59	1366.	1824.	932.	1185.	1789.	2981.	2459.	745.	2823.	2127.	2452.	887.	2623.	2814. 3312.
TAITA	60	381.	362.	562.	587.	457.	1007.	244.	664.	896.	974.	425.	1163.	758.	1126. 1024.
TAVETA	61	554.	333.	258.	661.	415.	845.	748.	265.	523.	337.	684.	429.	425.	277. 966.

	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
KIAMBU KIKUYU	37 1296.														
MURANGA KIKUYU	38 1197.	349.													
NYERI KIKUYU	39 1012.	384.	459.												
NDIA	41 1399.	253.	523.	285.											
KAMBA	42 2108.	571.	1102.	632.	225.										
EMBU	43 1136.	185.	512.	139.	71.	328.									
MBERE	44 481.	472.	468.	192.	447.	927.	359.								
CHUKA	45 1575.	378.	778.	473.	267.	384.	182.	793.							
MUTHAMBE	46 1049.	393.	438.	278.	177.	623.	183.	367.	376.						
MWIMBI	47 1219.	234.	333.	398.	288.	584.	252.	414.	474.	167.					
IGOJI	48 1242.	148.	387.	232.	228.	533.	119.	485.	235.	291.	259.				
IMENTI	49 517.	393.	528.	349.	487.	978.	293.	226.	534.	292.	489.	284.			
TIGANIA	50 881.	581.	468.	378.	334.	786.	362.	268.	722.	349.	345.	416.	418.		
IGEMBE	51 1146.	382.	224.	279.	369.	755.	383.	256.	653.	437.	298.	251.	538.	385.	
THARAKA	52 2344.	486.	573.	555.	298.	454.	368.	1058.	381.	547.	513.	324.	1084.	811.	562.
POKOMO	53 1138.	132.	328.	365.	391.	669.	232.	428.	585.	376.	226.	134.	333.	282.	275.
GIRIAMA	56 921.	341.	482.	593.	498.	898.	482.	444.	619.	425.	278.	256.	267.	358.	391.
CHONYI	57 1546.	785.	665.	729.	665.	1089.	631.	726.	921.	698.	686.	426.	678.	442.	557.
MID MJI KENDA	58 1426.	381.	617.	336.	168.	372.	142.	546.	236.	292.	328.	159.	454.	367.	422.
DIGO	59 4489.	1597.	2516.	2339.	1486.	1863.	1446.	3834.	1181.	1822.	1628.	1557.	2388.	2357.	2555.
TAITA	60 1128.	866.	952.	1091.	773.	988.	765.	765.	942.	635.	449.	746.	555.	438.	842.
TAVETA	61 1378.	92.	491.	334.	289.	551.	148.	575.	258.	236.	174.	126.	383.	533.	487.

	36	37	38	39	41	42	43	44	45	46	47	48	49	50	51
POKOMO	53 561.														
GIRIAMA	56 871.	142.													
CHONYI	57 882.	339.	331.												
MID MJI KENDA	58 364.	274.	332.	328.											
DIGO	59 1248.	1653.	1874.	2065.	1322.										
TAITA	60 1379.	563.	298.	649.	622.	1963.									
TAVETA	61 388.	173.	341.	684.	248.	1298.	779.								

	52	53	56	57	58	59	60	61

Table AP. 3.3 : Δg distances between Kenyan minimal ethnic population samples (males): analysis based on 110 non summary attributes.

SOMALI	1														
RENDILLE	2	173.													
GABBRA	3	434.	436.												
BORAN	4	223.	234.	458.											
BURJI	7	337.	462.	924.	543.										
SAMBURU	8	287.	388.	562.	287.	579.									
KADJIADO MAASAI	9	337.	477.	639.	417.	646.	363.								
NAROK MAASAI	10	644.	625.	684.	446.	1213.	616.	479.							
NGWESI	11	384.	334.	497.	448.	711.	563.	610.	751.						
NUKOGODO	12	350.	483.	911.	549.	454.	652.	727.	1104.	695.					
KONY	13	1400.	1558.	1601.	1899.	2094.	1150.	1199.	972.	1636.	2020.				
NANDI	14	372.	428.	457.	335.	733.	370.	498.	582.	451.	833.	1195.			
KIPSIGIS	15	337.	356.	638.	322.	492.	464.	382.	567.	448.	510.	1327.	412.		
TUGEN	16	436.	487.	474.	254.	879.	322.	475.	458.	529.	895.	811.	343.	586.	
KEYO	17	506.	568.	654.	489.	1014.	391.	593.	623.	659.	991.	1047.	378.	652.	297.
MARAKWET	18	314.	329.	416.	383.	694.	368.	386.	643.	436.	658.	1158.	355.	488.	388.	392.
POKOT	19	729.	721.	718.	617.	1386.	567.	626.	540.	794.	1263.	894.	495.	717.	448.	469.
ITESO	20	841.	873.	921.	674.	1385.	686.	664.	775.	1042.	1398.	842.	729.	913.	563.	593.
TURKANA	21	466.	525.	980.	484.	631.	583.	514.	662.	889.	684.	1277.	583.	484.	664.	701.
LUO	22	415.	481.	567.	415.	637.	431.	481.	639.	526.	827.	1214.	356.	444.	480.	498.
GUSII	23	455.	467.	672.	378.	738.	362.	476.	656.	558.	913.	1249.	372.	468.	356.	447.
TIRIKI	24	885.	746.	888.	532.	1095.	760.	752.	645.	854.	1137.	1234.	658.	735.	619.	827.
MARAGOLI	25	764.	780.	841.	666.	1285.	661.	733.	588.	819.	1386.	868.	729.	732.	570.	705.
BUNYORE	26	568.	411.	697.	684.	813.	732.	728.	982.	561.	875.	1985.	687.	660.	824.	839.
IDAKHO	27	942.	971.	941.	915.	1479.	813.	788.	992.	974.	1528.	1584.	712.	969.	799.	733.
MARAMA	28	719.	778.	1091.	927.	783.	1093.	832.	1264.	938.	688.	2468.	885.	696.	1177.	1193.
WANGA	29	1162.	1181.	1155.	965.	1624.	1042.	1258.	1266.	1239.	1617.	1373.	962.	1298.	866.	713.
MARACH	30	714.	694.	1178.	665.	918.	833.	722.	922.	886.	839.	1486.	719.	616.	880.	866.
BUKHAYO	31	1068.	1115.	1145.	920.	1888.	776.	1018.	877.	1298.	1513.	945.	1124.	1289.	764.	793.
SAMIA	32	996.	878.	1064.	667.	1435.	943.	1185.	1021.	1128.	1465.	1338.	938.	1171.	788.	1081.
BUTSOTSO	33	928.	1061.	1085.	1097.	1338.	1088.	811.	1213.	1283.	1481.	2085.	926.	1094.	1142.	1012.
BUNYALA	34	1056.	1067.	1489.	1011.	1524.	1062.	1188.	1117.	1393.	1475.	1614.	1253.	1128.	1107.	1255.
KABRAS	35	621.	613.	869.	786.	1096.	797.	764.	878.	699.	993.	2085.	846.	788.	889.	889.
BUKUSU	36	694.	683.	769.	518.	1173.	542.	669.	542.	747.	1273.	657.	463.	685.	588.	542.
KIAMBU KIKUYU	37	301.	287.	451.	232.	665.	484.	417.	526.	392.	637.	1229.	343.	449.	399.	376.
MURANGA KIKUYU	38	688.	648.	1025.	587.	696.	787.	787.	1096.	741.	886.	1486.	657.	658.	646.	693.
NYERI KIKUYU	39	688.	676.	971.	499.	1045.	626.	786.	585.	876.	1038.	892.	621.	681.	528.	679.
NDIA	41	645.	561.	738.	399.	1026.	486.	628.	579.	676.	1178.	869.	488.	589.	429.	481.
KAMBA	42	413.	472.	652.	384.	636.	483.	459.	688.	542.	812.	1195.	393.	558.	481.	585.
EMBU	43	761.	686.	674.	521.	1289.	584.	791.	654.	771.	1286.	958.	556.	782.	425.	625.
MBERE	44	387.	389.	722.	366.	684.	512.	473.	744.	453.	713.	1419.	461.	499.	551.	781.
CHUKA	45	687.	611.	628.	494.	978.	558.	729.	661.	615.	1238.	1263.	568.	788.	371.	578.
MUTHAMBE	46	438.	516.	659.	435.	799.	321.	475.	788.	688.	926.	1178.	482.	687.	343.	533.
MWIMBI	47	783.	788.	724.	519.	1322.	493.	723.	524.	985.	1244.	748.	525.	827.	335.	489.
IGOJI	48	458.	464.	672.	432.	858.	488.	552.	683.	618.	961.	1338.	484.	563.	585.	538.
IMENTI	49	522.	493.	738.	518.	617.	423.	682.	741.	778.	878.	1199.	646.	683.	574.	727.
TIGANIA	50	553.	557.	678.	384.	1021.	415.	573.	515.	678.	1035.	812.	471.	669.	298.	352.
IGEMBE	51	425.	454.	511.	481.	729.	382.	624.	739.	551.	912.	1132.	418.	531.	255.	396.
THARAKA	52	588.	545.	798.	358.	798.	568.	556.	571.	685.	925.	1131.	584.	497.	477.	634.
POKOMO	53	394.	391.	541.	213.	757.	321.	414.	464.	529.	872.	887.	361.	414.	288.	416.
MALAKOTE	54	686.	724.	867.	689.	754.	754.	633.	931.	987.	1841.	1699.	596.	747.	794.	822.
GIRIAMA	56	853.	789.	1102.	744.	1133.	867.	1085.	1098.	875.	1328.	1624.	928.	998.	829.	1008.
CHONYI	57	789.	642.	918.	678.	971.	711.	671.	914.	796.	1148.	1419.	663.	665.	988.	828.
MID MJI KENDA	58	719.	781.	1216.	779.	816.	828.	985.	1171.	838.	972.	1791.	888.	734.	1072.	998.
DIGO	59	323.	318.	577.	338.	516.	558.	571.	788.	387.	585.	1636.	499.	453.	573.	688.
TAITA	60	943.	917.	889.	848.	1599.	881.	768.	749.	1128.	1573.	1117.	838.	1188.	733.	955.
TAVETA	61	1112.	958.	1181.	743.	1609.	947.	1186.	769.	1239.	1619.	735.	923.	1028.	792.	978.
		1	2	3	4	7	8	9	10	11	12	13	14	15	16	17

Table AP. 3.3 (continued)

POKOT	19	567.													
ITESO	20	652.	696.												
TURKANA	21	710.	927.	929.											
LUO	22	364.	559.	383.	475.										
GUSII	23	479.	568.	585.	541.	298.									
TIRIKI	24	764.	911.	882.	681.	492.	478.								
MARAGOLI	25	663.	710.	692.	939.	593.	712.	850.							
BUNYORE	26	576.	917.	1013.	830.	488.	516.	788.	981.						
IDAKHO	27	779.	682.	668.	1264.	481.	651.	695.	845.	824.					
MARAMA	28	813.	1311.	1568.	847.	725.	889.	1127.	1532.	730.	1491.				
WANGA	29	1095.	888.	611.	1248.	695.	689.	1015.	997.	1022.	999.	1729.			
MARACH	30	699.	911.	962.	719.	513.	749.	903.	857.	882.	1076.	748.	1207.		
BUKHAYO	31	1074.	926.	661.	1227.	876.	864.	1199.	911.	1479.	1052.	1939.	1139.	1360.	
SAMIA	32	1083.	1112.	1098.	1074.	867.	796.	648.	1024.	1053.	1171.	1728.	1022.	1229.	1412.
BUTSOTSO	33	982.	1169.	1057.	1178.	657.	822.	1137.	1272.	855.	786.	1038.	1278.	1233.	1386.
BUNYALA	34	1192.	1377.	978.	918.	747.	918.	1048.	992.	1283.	1497.	1461.	1238.	1135.	1243.
KABRAS	35	878.	965.	1151.	889.	732.	689.	775.	1098.	726.	1053.	1041.	1384.	1232.	1428.
BUKUSU	36	569.	471.	514.	668.	459.	483.	563.	505.	855.	711.	1458.	732.	875.	837.
KIAMBU KIKUYU	37	339.	539.	787.	596.	332.	391.	637.	728.	582.	677.	812.	849.	647.	839.
MURANGA KIKUYU	38	739.	983.	758.	573.	396.	424.	768.	871.	867.	1092.	953.	714.	775.	1291.
NYERI KIKUYU	39	682.	611.	662.	658.	541.	675.	625.	571.	1005.	944.	1228.	994.	752.	1097.
NDIA	41	568.	595.	483.	681.	327.	343.	588.	468.	756.	626.	1317.	544.	811.	921.
KAMBA	42	466.	694.	499.	571.	245.	388.	482.	743.	719.	618.	1004.	729.	721.	927.
EMBU	43	711.	532.	479.	871.	438.	441.	589.	694.	832.	641.	1549.	652.	1185.	722.
MBERE	44	525.	698.	786.	498.	317.	355.	448.	775.	498.	713.	794.	989.	681.	1142.
CHUKA	45	652.	752.	733.	822.	626.	487.	785.	798.	739.	965.	1333.	923.	1156.	1041.
MUTHAMBE	46	531.	586.	588.	675.	352.	388.	524.	573.	751.	642.	1143.	753.	848.	915.
MWIMBI	47	668.	424.	456.	883.	517.	591.	689.	618.	1072.	689.	1648.	684.	1063.	683.
IGOJI	48	684.	689.	563.	619.	338.	396.	589.	583.	731.	559.	1282.	915.	871.	798.
IMENTI	49	542.	896.	638.	625.	466.	495.	752.	658.	673.	976.	1161.	983.	914.	927.
TIGANIA	50	545.	449.	416.	564.	368.	348.	541.	469.	797.	763.	1288.	531.	846.	628.
IGEMBE	51	482.	695.	594.	649.	425.	345.	781.	592.	675.	821.	1199.	699.	986.	1012.
THARAKA	52	677.	746.	883.	424.	465.	413.	465.	582.	814.	947.	1033.	1051.	798.	1119.
POKOMO	53	417.	478.	478.	471.	269.	278.	451.	466.	638.	672.	1006.	716.	618.	769.
MALAKOTE	54	692.	842.	768.	692.	473.	582.	722.	1066.	671.	761.	1123.	936.	823.	1381.
GIRIAMA	56	1038.	1039.	886.	878.	682.	624.	688.	982.	761.	957.	1385.	943.	1229.	1353.
CHONYI	57	731.	818.	689.	618.	337.	429.	573.	771.	689.	749.	1056.	787.	927.	1074.
MID MJI KENDA	58	961.	1188.	1146.	663.	521.	734.	673.	1162.	742.	956.	1949.	1188.	863.	1541.
DIGO	59	581.	741.	898.	444.	294.	398.	468.	767.	476.	838.	581.	1089.	651.	1244.
TAITA	60	922.	654.	529.	1138.	582.	768.	815.	612.	1155.	528.	1783.	925.	1258.	679.
TAVETA	61	1041.	697.	695.	874.	719.	857.	663.	642.	1288.	1073.	1876.	933.	1079.	1003.

	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
BUNYALA	34	1386.													
KABRAS	35	1122.	1287.												
BUKUSU	36	1197.	1165.	1015.											
KIAMBU KIKUYU	37	882.	1184.	743.	493.										
MURANGA KIKUYU	38	1178.	939.	884.	786.	550.									
NYERI KIKUYU	39	1418.	1034.	949.	597.	781.	642.								
NDIA	41	1069.	923.	848.	323.	464.	553.	434.							
KAMBA	42	911.	869.	721.	486.	335.	423.	574.	360.						
EMBU	43	1142.	1161.	789.	369.	558.	751.	559.	266.	377.					
MBERE	44	1086.	1076.	653.	549.	379.	581.	650.	474.	317.	592.				
CHUKA	45	1388.	1311.	888.	514.	637.	871.	619.	519.	493.	445.	642.			
MUTHAMBE	46	1025.	828.	581.	492.	493.	488.	513.	381.	275.	414.	475.	481.		
MWIMBI	47	1329.	1057.	1011.	396.	535.	814.	523.	383.	463.	325.	669.	564.	415.	
IGOJI	48	1016.	941.	637.	543.	465.	667.	551.	394.	325.	438.	394.	529.	382.	464.
IMENTI	49	1207.	1178.	929.	539.	666.	754.	597.	529.	515.	582.	592.	516.	586.	715.
TIGANIA	50	1047.	775.	788.	397.	485.	536.	485.	315.	424.	348.	514.	536.	354.	335.
IGEMBE	51	1042.	1112.	853.	482.	518.	624.	682.	487.	437.	466.	488.	376.	335.	498.
THARAKA	52	1122.	823.	644.	575.	499.	438.	487.	392.	423.	611.	446.	668.	441.	788.
POKOMO	53	1035.	975.	661.	328.	361.	484.	481.	236.	245.	321.	368.	432.	283.	402.
MALAKOTE	54	971.	1274.	942.	776.	634.	788.	1011.	769.	588.	749.	568.	944.	597.	961.
GIRIAMA	56	1373.	1219.	673.	688.	851.	686.	786.	596.	525.	495.	566.	653.	596.	791.
CHONYI	57	893.	951.	915.	596.	658.	679.	858.	423.	462.	589.	348.	769.	529.	742.
MID MJI KENDA	58	1164.	1196.	1073.	789.	749.	824.	875.	733.	568.	935.	463.	958.	769.	993.
DIGO	59	835.	988.	581.	689.	369.	428.	686.	548.	361.	639.	264.	631.	468.	757.
TAITA	60	973.	1124.	1128.	652.	723.	1081.	848.	584.	626.	579.	759.	983.	688.	581.
TAVETA	61	1648.	1142.	1312.	467.	898.	1051.	563.	463.	785.	499.	768.	989.	792.	521.

	33	34	35	36	37	38	39	41	42	43	44	45	46	47	48
TIGANIA	50	534.													
IGEMBE	51	394.	365.												
THARAKA	52	687.	446.	612.											
POKOMO	53	411.	326.	483.	322.										
MALAKOTE	54	647.	695.	678.	756.	628.									
GIRIAMA	56	658.	583.	768.	657.	533.	997.								
CHONYI	57	551.	473.	556.	625.	453.	574.	551.							
MID MJI KENDA	58	775.	857.	832.	778.	688.	857.	637.	593.						
DIGO	59	645.	544.	576.	326.	372.	639.	510.	521.	542.					
TAITA	60	881.	541.	778.	903.	595.	891.	939.	631.	1085.	980.				
TAVETA	61	897.	582.	858.	648.	527.	1158.	838.	685.	1056.	970.	629.			

	49	50	51	52	53	54	56	57	58	59	60	61

Table AP. 3.4 : Δg distances between Kenyan minimal ethnic population samples (females): analysis based on 110 non summary attributes.

SOMALI	1															
RENDILLE	2	512.														
GABBRA	3	273.	525.													
BORAN	4	632.	964.	682.												
BURJI	7	381.	616.	515.	428.											
SAMBURU	8	366.	507.	324.	547.	388.										
KAOJIADO MAASAI	9	477.	600.	636.	417.	269.	411.									
KONY	13	1347.	1881.	1628.	892.	1195.	1295.	1272.								
NANDI	14	611.	803.	683.	376.	366.	436.	269.	1016.							
KIPSIGIS	15	452.	785.	636.	272.	379.	502.	319.	939.	350.						
TUGEN	16	470.	783.	603.	488.	466.	457.	520.	799.	573.	402.					
KEYO	17	656.	1081.	858.	462.	503.	605.	472.	636.	374.	428.	309.				
MARAKWET	18	664.	1075.	717.	501.	493.	573.	472.	799.	467.	447.	443.	456.			
POKOT	19	613.	925.	666.	547.	481.	448.	363.	1157.	389.	390.	440.	454.	468.		
ITESO	20	530.	575.	621.	398.	466.	465.	332.	1036.	486.	376.	420.	543.	675.	573.	
TURKANA	21	547.	685.	606.	512.	450.	363.	340.	1198.	503.	408.	510.	567.	583.	509.	382.
LUO	22	414.	723.	438.	469.	394.	400.	288.	1228.	347.	390.	561.	495.	543.	550.	321.
GUSII	23	621.	799.	596.	478.	320.	478.	340.	1512.	492.	523.	501.	637.	599.	649.	499.
TIRIKI	24	795.	942.	912.	790.	795.	710.	638.	1607.	840.	879.	757.	784.	1105.	924.	595.
MARAGOLI	25	774.	911.	895.	668.	692.	684.	703.	1171.	823.	786.	531.	580.	834.	919.	477.
BUNYORE	26	986.	1583.	1360.	747.	849.	1099.	998.	1331.	1099.	793.	742.	913.	1014.	1194.	1038.
IDAKHO	27	1095.	1265.	1394.	1013.	920.	1053.	855.	1263.	859.	882.	836.	737.	1018.	1240.	847.
MARAMA	28	576.	789.	666.	833.	546.	522.	544.	2057.	795.	793.	967.	966.	816.	887.	746.
WANGA	29	1136.	1538.	1403.	599.	739.	977.	784.	1230.	724.	658.	768.	667.	757.	954.	776.
MARACH	30	773.	961.	864.	551.	784.	738.	553.	1133.	543.	624.	445.	434.	723.	681.	481.
BUKHAYO	31	759.	1193.	816.	607.	646.	663.	622.	989.	627.	612.	409.	490.	492.	664.	613.
SAMIA	32	726.	999.	702.	951.	705.	600.	573.	2091.	695.	860.	912.	998.	967.	662.	912.
BUTSOTSO	33	1002.	1317.	1103.	611.	721.	719.	656.	991.	649.	634.	646.	454.	652.	649.	734.
BUNYALA	34	983.	1338.	1160.	509.	701.	838.	643.	1348.	668.	632.	789.	859.	820.	969.	733.
KABRAS	35	1595.	1840.	1891.	847.	1207.	1385.	964.	1404.	1063.	983.	1210.	1019.	1199.	1398.	1008.
BUKUSU	36	1071.	1377.	1264.	716.	1000.	1069.	783.	901.	860.	775.	795.	751.	891.	1037.	825.
KIAMBU KIKUYU	37	654.	950.	779.	530.	382.	617.	284.	1239.	400.	395.	678.	681.	573.	463.	553.
MURANGA KIKUYU	38	828.	1235.	1166.	627.	483.	784.	440.	1150.	544.	455.	674.	604.	668.	510.	717.
NYERI KIKUYU	39	767.	1105.	925.	358.	629.	675.	512.	957.	480.	442.	448.	449.	559.	645.	570.
NDIA	41	392.	642.	414.	353.	306.	390.	361.	951.	359.	338.	243.	381.	367.	440.	361.
KAMBA	42	451.	584.	504.	563.	490.	394.	519.	1511.	607.	548.	335.	563.	796.	615.	470.
EMBU	43	434.	762.	508.	340.	339.	437.	431.	1025.	406.	377.	386.	403.	602.	628.	399.
MBERE	44	732.	1138.	890.	301.	539.	660.	520.	771.	497.	382.	386.	365.	515.	614.	574.
CHUKA	45	388.	673.	465.	499.	285.	495.	454.	1462.	591.	541.	520.	594.	661.	643.	607.
MUTHAMBE	46	400.	714.	467.	321.	389.	396.	389.	1031.	453.	443.	303.	369.	442.	482.	446.
MWIMBI	47	610.	885.	702.	364.	365.	520.	355.	1161.	467.	435.	400.	459.	629.	580.	469.
IGOJI	48	525.	756.	679.	381.	260.	496.	322.	1176.	392.	275.	432.	503.	492.	508.	440.
IMENTI	49	740.	862.	822.	436.	431.	643.	422.	1088.	512.	476.	518.	605.	606.	717.	493.
TIGANIA	50	771.	903.	1010.	566.	609.	608.	495.	870.	585.	493.	472.	495.	674.	695.	459.
IGEMBE	51	994.	1307.	1250.	621.	615.	845.	598.	1077.	648.	527.	555.	486.	550.	688.	779.
THARAKA	52	609.	1006.	820.	617.	386.	629.	577.	1637.	567.	579.	646.	666.	854.	678.	783.
POKOMO	53	598.	842.	815.	280.	291.	545.	326.	950.	286.	325.	541.	446.	469.	587.	381.
GIRIAMA	56	1018.	1204.	1129.	675.	669.	932.	634.	1252.	698.	727.	956.	753.	839.	1095.	675.
CHONYI.	57	1555.	1593.	1577.	974.	1024.	1295.	810.	1781.	938.	1077.	1249.	1047.	1256.	1246.	1102.
MID MJI KENDA	58	870.	1125.	944.	752.	660.	650.	799.	1462.	782.	784.	785.	774.	865.	933.	746.
DIGO	59	822.	828.	721.	1198.	816.	893.	951.	2616.	1074.	1033.	1360.	1500.	1622.	1237.	911.
TAITA	60	789.	956.	902.	792.	538.	729.	643.	1154.	786.	754.	576.	668.	811.	970.	612.
TAVETA	61	550.	853.	671.	500.	396.	492.	315.	1470.	403.	345.	647.	633.	606.	454.	534.

	1	2	3	4	7	8	9	13	14	15	16	17	18	19	20

Table AP. 3.4 (continued)

LUO	22	292.														
GUSII	23	429.	386.													
TIRIKI	24	674.	585.	763.												
MARAGOLI	25	578.	585.	616.	868.											
BUNYORE	26	1063.	1149.	1007.	1347.	884.										
IDAKHO	27	850.	825.	892.	1103.	924.	1201.									
MARAMA	28	669.	546.	577.	882.	850.	1379.	1347.								
WANGA	29	934.	888.	687.	1164.	773.	828.	1146.	1025.							
MARACH	30	799.	690.	733.	759.	615.	1095.	1028.	914.	814.						
BUKHAYO	31	580.	496.	541.	865.	615.	852.	854.	935.	777.	773.					
SAMIA	32	693.	596.	728.	889.	1340.	1576.	1348.	886.	1502.	1007.	1924.				
BUTSOTSO	33	648.	737.	762.	1053.	735.	1097.	981.	1075.	745.	699.	615.	1265.			
BUNYALA	34	724.	728.	736.	1065.	912.	1110.	1375.	1179.	838.	1047.	892.	1344.	1041.		
KABRAS	35	1116.	1192.	975.	1125.	1217.	1314.	1159.	1666.	864.	1110.	1107.	1788.	1053.	1086.	
BUKUSU	36	857.	942.	1197.	1253.	950.	1134.	1124.	1557.	1191.	831.	997.	1731.	1066.	936.	1165.
KIAMBU KIKUYU	37	545.	520.	689.	984.	1109.	1228.	1115.	869.	874.	777.	799.	744.	793.	783.	1169.
MURANGA KIKUYU	38	729.	775.	622.	1155.	967.	876.	1155.	1135.	624.	951.	892.	1134.	877.	782.	919.
NYERI KIKUYU	39	739.	558.	535.	929.	762.	1091.	982.	1057.	606.	578.	577.	1011.	621.	711.	946.
NDIA	41	433.	368.	330.	682.	557.	681.	811.	662.	654.	419.	427.	788.	561.	742.	1061.
KAMBA	42	468.	481.	499.	565.	628.	958.	995.	699.	902.	620.	684.	640.	733.	914.	1331.
EMBU	43	557.	486.	434.	713.	534.	653.	765.	769.	651.	470.	535.	971.	623.	654.	991.
MBERE	44	587.	615.	559.	988.	570.	586.	729.	1095.	578.	642.	338.	1152.	543.	656.	848.
CHUKA	45	663.	592.	468.	702.	797.	863.	1103.	668.	835.	628.	817.	761.	838.	974.	1399.
MUTHAMBE	46	545.	412.	311.	649.	493.	803.	923.	559.	688.	514.	485.	864.	685.	829.	1167.
MWIMBI	47	446.	457.	449.	773.	535.	702.	1002.	708.	668.	492.	629.	866.	682.	634.	1059.
IGOJI	48	414.	473.	441.	719.	712.	854.	966.	658.	614.	592.	642.	914.	598.	602.	915.
IMENTI	49	559.	539.	459.	1012.	712.	913.	703.	948.	685.	715.	536.	1050.	627.	836.	997.
TIGANIA	50	629.	653.	604.	768.	684.	972.	877.	999.	791.	701.	551.	1199.	828.	773.	959.
IGEMBE	51	742.	877.	803.	988.	1089.	1124.	1090.	1119.	799.	762.	830.	1191.	862.	789.	1083.
THARAKA	52	777.	732.	526.	992.	883.	784.	1278.	930.	794.	851.	835.	943.	890.	824.	1277.
POKOMO	53	440.	389.	438.	692.	615.	879.	840.	719.	513.	647.	613.	942.	560.	563.	692.
GIRIAMA	56	773.	716.	684.	974.	799.	918.	1015.	901.	596.	633.	840.	1337.	707.	1027.	932.
CHONYI	57	1044.	893.	933.	1070.	1287.	1710.	1407.	1438.	1175.	1226.	1191.	1553.	1250.	1046.	1034.
MID MJI KENDA	58	821.	840.	715.	679.	990.	1179.	1201.	918.	935.	838.	914.	1016.	972.	1132.	1125.
DIGO	59	955.	760.	797.	1112.	1334.	1860.	1920.	954.	1700.	1436.	1684.	1894.	1651.	1587.	2245.
TAITA	60	570.	573.	506.	745.	616.	953.	776.	948.	928.	770.	571.	1202.	967.	986.	950.
TAVETA	61	518.	446.	427.	830.	911.	996.	928.	723.	759.	850.	743.	746.	807.	737.	1118.

	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
KIAMBU KIKUYU	37	1035.													
MURANGA KIKUYU	38	984.	587.												
NYERI KIKUYU	39	885.	639.	677.											
NDIA	41	955.	530.	655.	498.										
KAMBA	42	1246.	768.	911.	628.	373.									
EMBU	43	818.	603.	629.	476.	245.	422.								
MBERE	44	557.	673.	477.	406.	430.	659.	328.							
CHUKA	45	1067.	675.	766.	633.	295.	432.	300.	633.						
MUTHAMBE	46	870.	651.	607.	483.	218.	455.	281.	392.	292.					
MWIMBI	47	798.	542.	607.	619.	371.	532.	286.	440.	489.	333.				
IGOJI	48	822.	379.	477.	532.	340.	454.	299.	435.	342.	385.	402.			
IMENTI	49	677.	590.	649.	497.	480.	645.	394.	389.	559.	443.	524.	388.		
TIGANIA	50	773.	773.	564.	582.	527.	700.	500.	449.	780.	510.	661.	490.	558.	
IGEMBE	51	1081.	660.	588.	733.	684.	773.	670.	604.	818.	703.	632.	422.	814.	559.
THARAKA	52	1497.	889.	618.	761.	461.	465.	380.	697.	420.	517.	534.	447.	749.	750.	811.
POKOMO	53	856.	428.	557.	488.	361.	570.	393.	461.	540.	494.	409.	246.	436.	542.	588.
GIRIAMA	56	929.	825.	899.	841.	596.	937.	544.	672.	784.	677.	564.	514.	620.	877.	1114.
CHONYI	57	1283.	1048.	1168.	1028.	1035.	1216.	1046.	1129.	1259.	1101.	1033.	856.	1008.	1003.	1254.
MID MJI KENDA	58	1449.	993.	958.	847.	611.	656.	533.	885.	514.	615.	722.	563.	874.	797.	737.
DIGO	59	2227.	1229.	1573.	1468.	992.	880.	980.	1739.	797.	981.	1049.	961.	1354.	1579.	1862.
TAITA	60	799.	835.	868.	858.	542.	821.	590.	553.	706.	488.	523.	615.	542.	647.	1018.
TAVETA	61	1041.	498.	479.	589.	492.	648.	490.	568.	559.	452.	523.	386.	538.	689.	706.

	36	37	38	39	41	42	43	44	45	46	47	48	49	50	51
POKOMO	53	531.													
GIRIAMA	56	1017.	476.												
CHONYI	57	1212.	864.	1042.											
MID MJI KENDA	58	727.	652.	860.	1341.										
DIGO	59	888.	1006.	1350.	1688.	1128.									
TAITA	60	922.	566.	581.	1075.	905.	1317.								
TAVETA	61	523.	439.	939.	1104.	793.	835.	787.							

	52	53	56	57	58	59	60	61

TABLE AP.3.5. : PCO ANALYSIS OF DG DISTANCES BETWEEN MINIMAL ETHNIC POPULATION SAMPLES (MALES): BASED ON 26 SUMMARY ATTRIBUTES.

VECTOR COORDINATES: POPULATION	VECT1	VECT2	VECT3	VECT4	VECT5	VECT6	D FROM CENTROID
SOMALI	14.94	7.22	-4.52	-3.98	4.00	4.57	372.39
REENDILLE	14.53	6.66	-2.38	-4.26	4.53	0.71	321.35
GABBRA	5.23	6.10	-13.80	0.15	-1.44	3.34	305.54
BORAN	5.95	6.42	0.44	-4.64	-2.81	5.70	150.37
BURJI	22.56	5.97	3.77	0.33	5.96	0.55	646.09
SAMBURU	1.02	12.61	-4.23	-1.38	5.61	1.89	223.84
KADJIADO MAASAI	3.18	1.50	-1.92	-3.99	1.04	-1.67	60.09
NAROK MAASAI	-0.79	9.55	3.67	-5.56	-1.02	0.00	263.26
NGWESI	14.05	2.49	-5.25	-0.73	1.03	3.17	314.81
MUKOGODO	25.73	6.20	2.69	-6.46	0.41	2.61	796.39
KONY	-33.24	3.70	0.99	-0.74	3.53	-3.15	1323.32
NANDI	0.43	2.07	-4.53	-0.12	-1.41	0.32	111.42
KIPSIGIS	11.54	3.36	3.66	-2.00	4.60	-1.22	230.47
TUGEN	-5.53	12.49	-3.00	-2.39	-5.24	-0.05	247.61
KEYO	-4.12	10.24	-7.06	-4.09	-1.02	-3.58	222.37
MARAKWET	2.79	5.21	-6.03	-2.20	3.96	-6.13	155.25
POKOT	-12.52	2.63	-5.56	1.23	-3.40	-4.00	277.35
ITESO	-16.31	-9.46	-4.21	-2.23	2.94	-4.35	446.40
TURKANA	7.55	-6.58	12.25	-4.73	2.54	0.81	331.30
LUO	1.96	-12.10	-2.02	-0.67	2.54	-4.00	201.91
GUSII	2.54	3.10	-1.41	4.00	-3.31	-4.40	91.19
TIRIKI	-3.83	-2.63	9.66	3.15	-10.23	-1.50	266.10
MARAGOLI	-12.96	0.19	-1.10	-7.97	5.34	2.70	300.25
BUNYORE	15.20	-1.63	-4.90	10.13	3.24	-6.75	523.50
IDAKHO	-0.33	-12.10	-13.40	2.73	2.30	2.74	501.07
MARAMA	26.95	-3.21	4.45	-2.91	0.00	-11.40	919.86
WANGA	-11.01	-4.09	-0.77	6.60	-3.01	-0.57	406.46
MARACH	6.71	-0.11	4.13	-6.60	-0.43	-0.63	216.01
BUKHAYO	-16.33	2.02	-4.90	-0.36	3.10	4.47	474.05
SAMIA	-4.92	4.31	4.09	5.22	-11.15	4.76	413.75
BUTSOTSO	0.00	-17.42	-15.20	-0.35	-4.05	1.12	700.25
BUNYALA	1.15	-10.03	4.09	-11.77	-0.19	-10.06	444.35
KABRAS	12.00	6.07	-1.07	3.66	-5.46	0.67	343.30
BUKUSU	-17.90	-0.25	4.63	5.55	5.10	-0.96	497.14
KIAMBU KIKUYU	6.49	2.33	-5.10	-3.90	-4.17	0.72	130.65
MURANGA KIKUYU	0.30	-7.47	4.47	-3.03	-0.94	-3.22	361.01
NYERI KIKUYU	-6.04	6.41	12.73	-1.03	-2.41	-0.95	203.90
NDIA	-7.00	0.45	1.06	2.30	1.59	-1.24	141.32
KAMBA	1.35	-5.53	-0.14	0.60	-2.72	4.41	121.60
EMBU	-11.31	1.03	-0.36	10.32	-3.46	0.91	304.21
MBERE	7.70	-4.60	4.95	2.35	1.10	1.00	161.65
CHUKA	-4.42	15.05	2.10	11.04	2.41	-0.52	405.56
MUTHAMBE	-3.67	1.56	-0.79	4.91	-2.20	-0.26	119.35
MWIMBI	-16.42	3.99	-2.97	-0.10	-2.61	-1.49	303.90
IGOJI	-0.20	0.15	-0.42	3.33	4.25	7.45	103.72
IMENTI	-3.20	6.40	5.92	7.99	11.01	-0.34	312.30
TIGANIA	-9.04	3.02	-0.46	-2.70	-5.07	-4.20	169.90
IGEMBE	-3.00	9.20	-3.64	4.00	3.90	-3.09	100.04
THARAKA	3.51	-1.02	0.20	-4.52	-7.30	5.22	230.90
POKOMO	-3.52	-0.23	1.42	0.20	1.20	5.30	67.07
MALAKOTE	5.00	-6.19	-1.69	0.34	-5.44	4.20	301.35
GIRIAMA	-0.21	-4.64	0.51	11.69	0.22	2.00	279.42
CHONYI	-0.69	-13.44	2.41	5.50	7.25	-2.27	290.90
MID MJI KENDA	0.16	-14.59	0.12	6.13	7.34	4.21	502.01
DIGO	14.73	-5.40	1.04	-1.09	-5.19	3.37	306.07
TAITA	-16.13	-15.19	-9.33	-6.71	3.50	7.01	717.23
TAVETA	-10.64	-5.26	10.59	-0.77	-0.41	3.19	566.37

LATENT ROOTS= (1) 7666.2 (2) 3006.9 (3) 2163.1 (4) 1712.0
(5) 1332.3 (6) 1139.5 (7) 031.4 (0) 623.3
(9) 516.4

PERCENTAGE VARIANCE = (1) 40.0 (2) 16.1 (3) 11.3 (4) 0.9 (5) 7.0 (6) 6.0
(7) 4.3 (0) 3.2 (9) 2.7

TABLE AP.3.6. : PCO ANALYSIS OF DG DISTANCES BETWEEN MINIMAL ETHNIC POPULATION SAMPLES (FEMALES): BASED ON 26 SUMMARY ATTRIBUTES.

VECTOR COORDINATES: POPULATION	VECT1	VECT2	VECT3	VECT4	VECT5	VECT6	D FROM CENTROID
SOMALI	13.19	1.94	-0.83	2.86	2.23	-0.71	294.88
RENDILLE	20.37	-9.04	-8.55	-15.60	3.02	-0.59	672.66
GABBRA	17.56	1.04	-12.57	-15.17	0.60	2.48	568.49
BORAN	-3.31	5.01	-2.14	-2.76	0.82	-5.58	130.50
BURJI	6.37	2.60	4.60	2.12	7.90	0.84	183.47
SAMBURU	9.25	2.15	-7.99	2.72	0.69	-1.10	167.39
KADJIADO MAASAI	3.25	-0.39	5.01	0.36	3.24	-5.89	93.99
KONY	-26.90	-3.77	-7.50	1.30	0.10	-2.95	882.32
NANDI	-0.05	1.57	2.03	0.29	6.23	-1.60	106.35
KIPSIGIS	-0.70	2.72	-0.10	-1.73	0.74	-2.50	70.05
TUGEN	-3.57	2.93	-9.32	3.60	-6.26	2.92	179.39
KEYO	-10.15	-1.99	-1.57	4.19	-3.43	2.59	205.43
MARAKWET	-9.25	4.16	-1.02	0.99	2.35	-2.27	162.80
POKOT	0.36	11.10	-1.91	1.41	0.41	-3.37	222.50
ITESO	2.99	-2.37	-4.43	1.25	1.38	-6.54	119.90
TURKANA	5.02	-9.44	-1.39	2.10	-3.17	-7.67	260.02
LUO	7.83	-9.23	0.31	3.37	-0.59	-1.57	190.84
GUSII	9.22	-3.29	7.04	0.40	-2.17	1.27	214.02
TIRIKI	9.50	-10.73	1.37	4.90	-10.99	0.15	403.02
MARAGOLI	-0.05	-2.94	-4.01	2.66	-5.09	0.64	160.73
BUNYORE	-12.10	3.05	-2.44	4.15	-0.56	-2.66	502.32
IDAKHO	-0.07	-14.54	-0.00	4.06	1.09	2.66	416.99
MARAMA	14.35	-2.61	1.06	2.00	2.22	-5.70	304.03
WANGA	-13.55	3.34	12.34	-0.09	-2.10	-0.92	416.47
MARACH	-2.42	9.01	-6.50	1.31	-3.40	-0.14	100.60
BUKHAYO	-9.30	-5.73	-4.67	2.55	-6.30	0.50	230.26
SAMIA	17.30	4.75	-0.57	1.76	-5.05	-2.69	400.07
BUTSOTSO	-10.62	5.01	-0.90	0.07	-1.22	3.55	230.04
BUNYALA	-1.66	6.00	5.15	-4.70	-3.39	-4.21	259.00
KABRAS	-10.22	-7.54	2.07	-27.94	-4.72	1.47	604.26
BUKUSU	-25.25	-5.39	-11.12	2.32	13.41	1.63	1030.22
KIAMBU KIKUYU	1.52	6.06	3.93	-1.36	5.14	-6.25	140.20
MURANGA KIKUYU	-9.29	7.07	9.93	-1.11	-0.56	-4.13	341.79
NYERI KIKUYU	-5.95	9.90	-2.76	-2.61	0.56	4.00	215.90
NDIA	3.06	4.40	-2.99	1.71	-3.71	2.64	02.92
KAMBA	13.69	1.55	-6.74	2.20	-7.55	2.17	351.45
EMBU	2.72	4.52	-2.60	0.12	3.20	4.06	76.20
MBERE	-14.97	2.22	-4.40	-1.29	0.72	1.20	206.60
CHUKA	0.96	5.06	-1.13	4.42	6.27	0.00	205.47
MUTHAMBE	-2.35	2.96	-2.26	3.50	1.12	4.30	150.01
MWIMBI	-0.15	-0.40	1.02	2.00	-1.50	-4.31	00.30
IGOJI	0.52	4.49	6.32	-1.25	4.70	3.04	110.69
IMENTI	-0.01	-2.07	-1.33	-1.10	10.06	3.34	256.94
TIGANIA	-0.52	-4.99	0.63	0.55	-5.53	2.44	200.26
IGEMBE	-9.02	5.49	5.73	-1.95	-5.39	-1.51	231.10
THARAKA	10.57	12.43	7.70	0.71	-4.44	4.36	401.37
POKOMO	-1.57	-1.41	7.00	-2.32	3.63	-3.71	120.64
GIRIAMA	-5.43	-0.00	7.66	1.45	5.41	-1.42	212.96
CHONYI	-5.42	-0.04	16.55	-2.50	-2.93	7.79	467.10
MID MJI KENDA	3.30	-0.05	4.00	1.26	-0.74	0.55	150.01
DIGO	37.47	-5.04	5.05	4.75	5.04	1.72	1536.62
TAITA	-3.15	-19.30	1.13	5.09	1.04	0.19	467.10
TAVETA	4.29	4.93	4.43	0.25	6.07	-0.94	126.35

LATENT ROOTS	: (1) 6604.3	(2) 2225.5	(3) 1861.4	(4) 1596.2	(5) 1220.3
	(6) 764.9	(7) 651.5	(8) 401.1	(9) 397.2	
PERCENTAGE VARIANCE	: (1) 40.8	(2) 13.7	(3) 11.5	(4) 9.8	(5) 7.6
	(6) 4.7	(7) 4.0	(8) 3.0	(9) 2.5	

TABLE AP.3.7. : PCO ANALYSIS OF DG DISTANCES BETWEEN MINIMAL ETHNIC POPULATION SAMPLES (MALES): BASED ON 110 NON SUMMARY ATTRIBUTES.

VECTOR COORDINATES: POPULATION	VECT1	VECT2	VECT3	VECT4	VECT5	VECT6	D FROM CENTROID
SOMALI	10.24	5.88	-0.41	-1.69	-1.58	-0.38	232.72
REENDILLE	9.36	3.64	1.01	-3.91	0.38	-0.69	238.10
GABBRA	3.70	7.32	-7.58	-9.58	1.24	-2.66	411.00
BORAN	3.41	6.10	4.15	-2.46	-0.32	-0.44	165.83
BURJI	10.84	2.41	4.85	-0.54	-3.79	7.64	577.76
SAMBURU	2.06	7.60	-1.07	-2.46	-3.16	1.74	230.66
KADJIADO MAASAI	4.76	6.41	-3.75	4.19	2.38	-0.34	268.27
NAROK MAASAI	-4.64	8.87	1.05	-0.06	7.06	-6.69	356.11
NGUESI	8.99	3.94	-1.52	-7.63	2.33	-2.55	358.15
MUKOGODO	10.03	6.82	3.88	2.45	-0.04	2.52	634.74
KONY	-21.61	12.29	7.79	6.75	3.41	4.76	922.45
NANDI	2.71	6.99	-4.02	-2.14	3.17	3.13	224.15
KIPSIGIS	9.28	6.18	2.65	2.49	5.04	1.54	295.43
TUGEN	-1.61	12.74	-0.27	0.58	-9.90	-8.61	248.48
KEYO	-2.60	7.49	-5.74	-0.49	-3.78	2.21	298.52
MARAKWET	4.93	7.66	-4.74	0.26	0.62	3.36	244.24
POKOT	-7.17	6.87	-6.25	0.19	6.78	0.38	367.95
ITESO	-11.25	-1.18	-4.19	5.27	-4.87	4.47	381.53
TURKANA	6.25	0.81	9.05	6.72	0.28	1.38	360.41
LUO	1.63	-4.59	-2.89	4.44	-0.16	2.03	129.55
GUSII	1.43	-2.16	-2.63	-0.35	-3.65	0.31	155.48
TIRIKI	-2.29	-6.73	4.37	-1.27	5.38	-3.94	348.87
NARAGOLI	-0.89	3.35	1.93	2.34	2.22	-3.80	409.94
BUNYORE	10.15	-6.74	-5.06	-3.62	1.30	0.01	425.09
IDAKHO	-5.90	-6.70	-14.30	0.89	5.87	-1.65	504.27
NARAMA	20.82	-1.58	-1.20	8.36	2.97	-1.51	746.87
WANGA	-10.53	-8.09	-5.00	0.61	-11.25	6.84	600.17
NARACH	6.35	0.78	3.92	12.52	4.54	4.55	506.50
BUKHAYO	-14.24	5.66	-5.72	5.32	-4.14	-2.30	691.81
SAMIA	-6.13	-6.52	9.73	-6.90	-1.38	-4.55	612.45
BUTSOTSO	5.16	-7.72	-17.65	9.32	1.24	-4.06	711.90
BUNYALA	-3.26	-6.87	7.03	13.65	-8.71	-10.75	736.88
KABRAS	7.22	-4.83	-1.91	-6.87	0.92	-12.54	515.85
BUKUSU	-9.30	0.95	1.69	-1.52	4.07	4.23	273.17
KIAMBU KIKUYU	3.76	3.60	-3.98	0.20	1.47	-0.10	192.90
MURANGA KIKUYU	4.23	-4.39	5.05	3.05	-0.54	2.63	360.64
NYERI KIKUYU	-5.08	2.40	9.11	1.23	3.80	-0.37	349.74
NDIA	-7.43	-2.32	1.82	-1.25	-0.26	1.49	203.83
KAMBA	0.42	-2.94	-0.35	-0.41	-2.98	1.91	168.74
EMBU	-9.59	-8.79	-0.60	-7.59	8.35	8.80	310.35
MBERE	5.72	-4.53	1.92	-0.97	3.48	0.35	207.15
CHUKA	-2.85	1.55	1.19	-11.44	-4.86	0.19	355.29
MUTHAMBE	-1.81	-1.43	-0.45	-2.62	-4.68	-1.89	197.45
MWIMBI	-12.15	3.72	-0.62	-3.55	-0.76	0.06	316.85
IGOJI	-1.65	-2.78	-1.63	-2.68	-0.05	-2.26	222.20
IMENTI	0.27	-0.56	3.85	-4.30	-3.79	6.50	279.60
TIGANIA	-7.21	0.44	1.05	0.80	-3.81	-1.39	176.81
IGEMBE	-0.78	2.67	-1.78	-5.77	-6.82	3.89	238.31
THARAKA	0.94	-1.00	8.12	1.47	1.30	-6.10	266.04
POKOMO	-2.53	1.29	2.34	-1.68	0.79	0.79	112.29
MALAKOTE	4.67	-6.35	-5.00	2.52	-0.87	6.30	442.48
GIRIAMA	-1.56	-13.26	6.18	-8.12	-1.24	-3.13	472.22
CHONYI	-0.83	-11.19	-1.12	1.96	0.25	2.26	316.00
MID MJI KENDA	6.54	-11.82	5.33	1.06	3.57	4.18	517.53
DIGO	9.19	-4.43	2.40	-0.92	2.27	-4.13	224.22
TAITA	-13.06	-3.62	-8.79	2.41	2.00	-3.60	486.55
TAVETA	-15.12	-2.36	9.85	1.83	6.70	0.02	516.15

LATENT ROOTS: (1) 4027.6 (2) 2084.3 (3) 1697.4 (4) 1373.9 (5) 1058.4 (6) 1013.6 (7) 956.1 (8) 788.4 (9) 712.4

PERCENTAGE VARIANCE : (1) 19.3 (2) 9.9 (3) 8.0 (4) 6.5 (5) 5.0 (6) 4.8 (7) 4.5 (8) 3.7 (9) 3.4

TABLE AP.3.8. : PCO ANALYSIS OF DG DISTANCES BETWEEN MINIMAL ETHNIC POPULATION SAMPLES (FEMALES): BASED ON 110 NON SUMMARY ATTRIBUTES.

VECTOR COORDINATES:

POPULATION	VECT1	VECT2	VECT3	VECT4	VECT5	VECT6	D FROM CENTROID
SOMALI	10.61	-0.11	0.60	-1.51	3.22	3.04	332.22
RENDILLE	15.32	-4.01	5.51	5.40	4.31	6.53	593.94
GABBRA	15.29	-9.24	1.34	0.93	3.12	-0.60	451.39
BORAN	-3.56	0.17	-2.79	-1.61	2.46	0.04	200.03
BURJI	5.13	0.63	-3.14	-2.71	3.25	-0.77	170.99
SAMBURU	8.74	-4.94	-0.76	1.98	-1.31	0.58	265.46
KADJIADO MAASAI	3.06	3.35	-4.49	5.07	2.74	-1.01	160.56
KONY	-19.47	-14.28	0.02	3.96	-1.70	0.22	857.60
NANDI	0.26	0.45	-6.54	4.28	0.58	-2.26	217.90
KIPSIGIS	-0.97	-1.90	-5.92	-0.02	3.40	0.89	184.60
TUGEN	-2.23	-9.32	1.42	-1.41	-3.22	3.30	215.80
KEYO	-6.70	-5.43	-0.86	1.14	-5.92	-1.22	243.99
MARAKWET	-4.07	-6.93	-6.70	1.54	-1.12	-6.70	323.50
POKOT	2.40	-5.33	-11.13	3.43	-1.81	-1.12	312.07
ITESO	1.99	-1.09	3.75	4.50	1.71	3.30	217.40
TURKANA	3.63	-0.44	1.09	6.63	1.90	-0.06	251.11
LUO	5.90	0.02	1.45	7.22	2.47	-3.50	219.80
GUSII	4.92	5.96	1.49	-1.10	1.51	-3.20	235.75
TIRIKI	5.20	5.60	7.99	5.09	-10.03	7.15	494.46
MARAGOLI	-2.25	-2.00	12.19	-2.22	1.97	-0.00	413.65
BUNYORE	-7.94	-2.79	4.64	-17.30	4.30	1.60	656.07
IDAKHO	-7.32	-0.96	10.01	6.14	-2.50	-1.93	655.90
MARAMA	13.02	2.60	2.46	-0.36	-1.01	-7.00	524.65
WANGA	-9.02	7.36	-1.16	-9.41	-0.53	-6.74	479.39
MARACH	-2.09	-3.33	4.21	1.45	-6.10	-1.06	363.63
BUKHAYO	-5.76	-4.30	3.29	0.77	-1.96	-3.21	275.14
SAMIA	14.49	-0.17	-6.03	5.94	-7.52	-4.00	622.14
BUTSOTSO	-6.00	-1.75	-0.46	0.32	-4.62	-9.76	417.37
BUNYALA	-5.16	5.43	-6.95	-0.25	6.72	6.79	501.03
KABRAS	-15.95	15.64	3.31	2.40	-3.59	2.94	777.46
BUKUSU	-13.35	-5.90	3.74	7.33	9.92	5.55	631.95
KIAMBU KIKUYU	1.37	1.91	-10.20	5.79	2.75	-2.90	347.20
MURANGA KIKUYU	-6.44	3.32	-10.42	-4.06	3.55	2.90	396.11
NYERI KIKUYU	-5.25	-1.23	-3.54	0.04	-1.89	-2.10	309.00
NDIA	2.51	-3.67	1.10	-2.07	-1.55	-2.20	131.77
KAMBA	0.06	-1.09	2.06	-2.50	-5.09	4.21	275.01
EMBU	0.25	-1.17	2.62	-6.14	0.00	2.24	163.95
MBERE	-10.74	-3.60	0.10	-3.01	3.00	0.34	240.50
CHUKA	7.96	-1.16	1.01	-7.21	-1.53	0.40	279.24
MUTHAMBE	2.05	-3.29	2.43	-3.99	-0.51	-1.33	160.61
MWIMBI	-0.02	1.05	0.05	-3.67	2.50	-0.76	214.63
IGOJI	0.45	3.06	-3.57	-2.32	1.16	1.09	165.90
IMENTI	-4.21	0.17	1.02	0.97	5.00	-2.53	276.12
TIGANIA	-6.59	-0.04	0.40	2.76	-2.16	0.67	324.09
IGEMBE	-7.26	-0.21	-10.26	-1.07	-0.75	5.75	452.92
THARAKA	5.22	4.05	-5.06	-12.27	-0.65	4.02	379.46
POKOMO	-2.47	5.36	-1.41	0.22	1.64	-1.49	175.90
GIRIAMA	-5.24	7.72	9.21	-2.55	2.90	-9.21	443.95
CHONYI	-5.13	17.75	0.27	10.20	0.60	1.00	785.01
MID MJI KENDA	3.53	4.35	2.06	-6.32	-13.66	3.21	479.03
DIGO	24.47	7.49	3.07	-2.75	4.52	0.81	994.29
TAITA	-3.29	2.07	11.94	2.50	3.90	0.73	380.50
TAVETA	4.24	3.76	-7.00	-0.36	3.49	0.46	270.16

LATENT ROOTS : (1) 3569.6 (2) 1690.0 (3) 1509.4 (4) 1338.2
(5) 1011.9 (6) 833.3 (7) 788.7 (8) 719.8
(9) 674.4

PERCENTAGE VARIANCE : (1) 18.0 (2) 8.5 (3) 7.6 (4) 6.8 (5) 5.1
(6) 4.2 (7) 4.0 (8) 3.6 (9) 3.4

TABLE AP 3.9 . UNROTATED COMPONENT SCORES(MALES): BASED ON 26 SUMMARY TRAITS.

POPULATION	COMP1	COMP2	COMP3	COMP4	COMP5	COMP6
SOMALI	1.32	-0.56	-0.89	0.46	-1.50	0.73
RENDILLE	1.25	-0.65	-0.59	0.61	-1.19	-0.13
GABBRA	0.47	-0.14	-2.36	0.07	-0.14	0.76
BORAN	0.53	-0.42	-0.12	0.89	-0.35	1.64
BURJI	1.96	-0.95	0.42	-0.17	-1.07	-0.23
SAMBURU	0.14	-1.46	-1.05	0.21	-1.35	0.14
KADJIADO MAASAI	0.28	0.02	-0.31	0.95	-0.37	-0.53
NAROK MAASAI	-0.72	-1.14	0.27	1.35	-0.24	0.44
NGWESI	1.21	0.03	-0.84	-0.14	-0.55	0.42
MUKOGODO	2.23	-0.45	0.28	1.13	-0.74	0.73
KONY	-2.80	-0.71	1.40	1.51	-0.82	-0.91
NANDI	0.02	-0.13	-0.85	0.13	0.14	0.17
KIPSIGIS	1.00	-0.60	0.49	0.32	-0.86	-0.71
TUGEN	-0.42	-1.24	-0.82	1.06	0.91	0.45
KEYO	-0.33	-0.91	-1.39	1.24	0.46	-0.41
MARAKWET	0.23	-0.60	-1.09	0.51	-0.21	-1.72
POKOT	-1.07	-0.23	-0.96	0.19	1.10	-0.74
ITESO	-1.45	1.27	-0.37	0.01	-0.36	-1.24
TURKANA	0.64	0.57	2.11	0.47	-0.87	-0.14
LUO	0.09	1.50	0.05	-0.25	-0.16	-1.25
GUSII	0.19	-0.51	-0.42	-0.28	1.21	-0.52
TIRIKI	-0.34	0.02	1.52	0.11	2.29	0.59
MARAGOLI	-1.09	0.11	-0.02	1.04	-1.51	-0.21
BUNYORE	1.25	-0.33	-0.87	-1.79	0.67	-1.83
IDAKHO	-0.79	1.81	-1.66	-1.12	-0.48	0.10
MARAMA	2.27	0.13	0.75	0.71	0.85	-2.66
WANGA	-0.99	0.61	-1.30	-0.31	1.93	-1.49
MARACH	0.54	1.10	0.93	0.97	-0.26	-0.22
BUKHAYO	-1.40	0.17	-0.78	1.20	-1.58	0.94
SAMIA	-0.41	-0.54	0.46	-0.47	1.71	2.26
BUTSOTSO	0.61	2.95	-1.99	-0.22	0.70	0.41
BUNYALA	0.05	1.43	1.08	1.97	0.23	-2.29
KABRAS	1.08	-0.69	-0.38	-0.12	1.14	0.86
BUKUSU	-1.43	-0.57	0.68	-1.20	-0.54	-0.70
KIAMBU KIKUYU	0.53	0.19	-0.85	0.95	0.49	0.63
MURANGA KIKUYU	0.70	1.12	1.02	1.15	1.96	-0.09
NYERI KIKUYU	-0.51	-1.21	1.80	0.79	0.55	0.13
NDIA	-0.69	-0.33	0.15	-0.32	0.07	-0.38
KAMBA	0.10	0.89	0.19	-0.23	0.16	1.23
EMBU	-0.98	-0.50	-0.12	-1.60	1.12	0.82
MBERE	0.66	0.27	0.88	-0.71	-0.20	0.14
CHUKA	-0.27	-2.45	-0.20	-1.61	0.22	-0.03
MUTHAMBE	-0.26	-0.27	-0.14	-0.60	0.83	0.04
MWIMBI	-1.38	-0.39	-0.53	0.31	0.70	0.14
IGOJI	-0.03	-0.09	-0.11	-1.07	-1.38	1.26
IMENTI	-0.23	-1.56	0.67	-1.82	-1.64	-0.80
TIGANIA	-0.77	-0.33	-0.20	0.98	1.15	-0.34
IGEMBE	-0.22	-1.36	-0.88	-0.77	-0.06	-1.15
THARAKA	0.32	0.34	1.41	1.07	0.75	1.61
POKOMO	-0.29	0.03	0.27	-0.29	-0.71	1.11
MALAKOTE	0.41	0.80	-0.15	-1.34	1.01	1.22
GIRIAMA	0.03	-0.10	1.48	-2.18	0.52	0.42
CHONYI	-0.12	1.09	0.74	-1.68	-0.78	-1.46
MIJIKENDA	0.67	1.31	1.72	-2.09	-1.40	0.13
DIGO	1.26	0.90	0.49	0.26	0.64	1.05
TAITA	-1.46	2.53	-0.92	0.26	-1.89	0.99
TAVETA	-1.60	0.21	1.79	-0.05	-0.29	0.62

TABLE AP 3.10 . UNROTATED COMPONENT SCORES(FEMALES): BASED ON 26 SUMMARY TRAITS.

POPULATION	COMP1	COMP2	COMP3	COMP4	COMP5	COMP6
SOMALI	1.16	0.48	-1.27	0.16	-0.38	0.38
RENDILLE	1.89	1.55	-1.00	-0.26	-1.00	0.86
GABBRA	1.68	0.29	-2.20	0.10	-0.79	-0.01
BORAN	-0.29	-0.53	-0.71	0.02	-0.97	1.86
BURJI	0.59	-0.16	0.09	-1.77	1.33	-0.51
SAMBURU	0.81	0.26	-1.09	0.43	-0.01	0.31
KADJIADO MAASAI	0.33	-0.07	0.59	-0.82	0.79	1.39
KONY	-2.32	1.07	-0.99	0.43	0.23	0.69
NANDI	0.00	-0.10	-0.09	-1.14	-0.36	0.72
KIPSIGIS	-0.08	-0.37	-0.21	-0.02	-1.02	0.99
TUGEN	-0.33	0.00	-1.20	1.62	0.23	-0.99
KEYO	-0.91	0.45	0.01	0.68	0.93	-1.00
MARAKWET	-0.78	-0.33	-0.56	-0.39	0.64	0.34
POKOT	0.01	-1.26	-0.94	-0.13	1.51	0.50
ITESO	0.32	0.65	-0.47	0.20	0.28	1.62
TURKANA	0.45	1.29	0.65	0.99	0.44	1.77
LUO	0.70	1.22	0.79	0.39	-0.11	0.33
GUSII	0.79	-0.29	1.30	0.11	-0.14	-0.49
TIRIKI	0.81	1.09	1.41	2.20	0.26	-0.31
MARAGOLI	-0.10	0.26	-0.18	1.60	0.51	-0.65
SUNYORE	-0.99	-0.51	-0.34	1.51	2.35	-0.04
IDAKHO	-0.76	2.40	0.76	0.03	-0.37	-0.61
MARAMA	1.27	0.47	0.31	-0.22	1.25	1.04
WANGA	-1.13	-1.32	1.28	-0.56	1.15	-0.16
MARACH	-0.22	-0.86	-1.36	0.95	0.25	-0.11
BUKHAYO	-0.83	0.68	-0.03	1.64	0.00	-0.44
SAMIA	1.50	-0.83	-0.02	1.18	0.08	0.61
BUTSOTSO	-0.98	-0.72	-0.46	0.19	0.10	-1.15
BUNYALA	-0.13	-1.38	0.33	0.09	-1.64	1.91
KABRAS	-1.44	-0.88	2.40	0.83	-2.19	1.27
BUKUSU	-2.12	2.33	-1.84	-1.94	-0.51	-0.06
KIAMBU KIKUYU	0.16	-0.72	-0.12	-1.22	0.20	1.73
MURANGA KIKUYU	-0.78	-1.46	0.78	-0.65	2.12	0.51
NYERI KIKUYU	-0.56	-1.28	-1.12	-0.15	-1.72	-0.73
NDIA	0.32	-0.65	-0.50	0.84	-0.38	-0.75
KAMBA	1.14	-0.08	-0.60	1.85	-1.16	-0.36
EMBU	0.23	-0.37	-0.80	-0.54	-1.20	-0.74
MBERE	-1.32	-0.02	-0.89	0.04	-1.11	0.00
CHUKA	0.77	-0.24	-0.75	-1.31	-0.04	-2.32
MUTHAMBE	-0.18	-0.33	-0.58	-0.16	1.17	-1.72
MWIMBI	0.01	-0.02	0.25	0.33	1.66	0.53
IGOJI	0.04	-0.76	0.29	-1.38	-0.63	-0.55
IMENTI	-0.69	0.84	-0.65	-2.15	-0.16	-0.66
TIGANIA	-0.80	0.38	0.57	1.10	-0.70	-0.56
IGEMBE	-0.82	-1.21	0.48	0.58	-0.03	0.33
THARAKA	0.89	-2.24	0.43	0.08	0.68	-1.33
POKOMO	-0.13	-0.13	0.94	-0.97	-0.62	1.14
GIRIAMA	-0.43	0.97	1.28	-1.31	0.42	0.19
CHONYI	-0.49	-0.12	2.74	-0.51	-1.91	-1.47
MID MJI KENDA	0.27	-0.15	0.58	-0.18	-1.39	-2.19
DIGO	3.31	0.53	1.26	-1.00	0.23	-0.68
TAITA	-0.26	2.78	1.42	0.10	1.20	-0.63
TAVETA	0.42	-0.60	0.02	-1.48	0.54	0.17

Table Ap.3.11: Rotated component scores(males): based on 26 summary traits.

POPULATION	COMP1	COMP2	COMP3	COMP4	COMP5	COMP6
SOMALI	0.78	1.41	-1.01	-0.70	0.97	-0.88
RENDILLE	0.61	1.43	-0.67	-0.98	0.18	-0.54
GABBRA	1.94	-0.37	-1.13	-0.49	0.99	-0.10
BORAN	0.14	0.81	-1.34	0.37	1.21	0.15
BURJI	0.40	2.14	-0.25	-0.07	-0.48	-1.05
SAMBURU	0.36	0.36	-1.50	-1.12	0.03	-1.10
KABJIADO MAASAI	0.10	0.52	-0.11	-1.00	0.02	0.46
NAROK MAASAI	-1.13	0.09	-1.49	-0.55	0.00	0.44
NGWESI	1.14	0.82	-0.25	-0.08	0.61	-0.49
MUKOGODO	0.36	2.55	-0.76	0.02	0.62	0.14
KONY	3.09	-1.07	-0.40	-1.66	-0.62	0.39
NANDI	0.63	-0.27	-0.48	-0.21	0.19	0.12
KIPSIGIS	0.14	1.42	0.02	-0.62	-0.59	-0.44
TUGEN	0.21	-0.45	-1.82	-0.13	-0.31	0.94
KEYO	0.65	-0.42	-1.37	-1.14	-0.40	0.91
MARAKWET	0.08	0.09	-0.14	-1.67	-1.12	0.16
POKOT	0.45	1.46	-0.32	-0.47	-0.76	0.82
ITESO	-0.31	-1.37	1.32	-1.32	0.11	0.20
TURKANA	-1.56	1.61	1.05	0.16	0.17	-0.03
LUO	0.29	-0.10	1.83	-0.64	-0.04	0.22
GUSII	0.78	-0.36	-0.22	0.38	-1.05	0.49
TIRIKI	-0.09	-0.38	0.04	2.03	-0.69	1.58
MARAGOLI	-1.13	-0.18	-0.19	-1.64	0.72	-0.23
BUNYORE	2.04	0.06	0.96	0.08	-1.91	-0.74
IDAKHO	1.22	-1.63	1.18	-0.49	1.39	-0.64
MARAMA	0.85	2.11	1.45	-0.61	-2.16	1.31
WANGA	1.35	-2.14	0.88	-0.09	-1.24	0.95
MARACH	-0.63	1.02	0.96	-0.27	0.54	0.84
BUKHAYO	-0.85	-0.64	-0.96	-1.47	1.77	-0.26
SAMIA	-0.31	-0.76	-1.26	2.50	0.47	0.50
BUTSOTSO	2.25	-0.75	1.63	0.08	1.99	1.06
BUNYALA	-0.92	0.79	1.81	-1.65	-0.69	2.10
KABRAS	1.00	0.48	-0.95	1.22	-0.18	0.42
BOKUSU	-1.07	-1.09	0.38	-0.14	-0.94	-1.29
KIAMBU KIKUYU	0.77	0.26	-0.67	-0.05	0.72	0.97
MURANGA KIKUYU	-0.15	0.60	0.81	0.99	-0.15	2.43
NYERI KIKUYU	-1.06	0.42	0.78	0.60	-0.98	0.60
NDIA	0.37	-0.60	0.00	-0.09	-0.54	-0.25
KAMBA	0.02	-0.07	0.26	0.95	1.19	0.10
EMBU	0.14	-1.60	-0.40	1.57	-0.38	-0.58
MBERE	-0.20	0.68	0.69	0.76	-0.03	-0.54
CHUKA	0.24	-0.56	-1.44	0.75	-1.74	-1.65
MUTHAMBI	0.29	-0.66	-0.13	0.65	0.50	0.05
MWIMBI	-0.26	-1.40	-0.76	-0.16	-0.15	0.54
ICOJI	-0.10	0.02	-0.27	0.40	1.12	-1.78
IMENTI	0.64	0.14	-0.01	-0.26	-1.32	-2.71
TIGANIA	-0.22	-0.71	-0.58	-0.24	-0.56	1.36
ICEMBE	0.72	-0.55	-0.55	-0.68	-1.49	-0.88
THARAKA	-1.14	0.83	-0.40	1.40	0.94	1.25
POKOMO	-0.55	0.03	-0.30	0.41	0.94	-0.74
MALAKOTE	0.87	-0.50	0.45	1.86	0.67	-0.13
GIRIAMA	-0.50	-0.25	0.06	2.10	-0.70	-1.20
CHONYI	0.16	-0.24	2.29	-0.20	0.61	-1.26
MID MJI KENDA	0.68	0.79	2.24	1.06	0.51	-1.97
DIGO	0.35	1.00	0.35	1.23	0.90	0.79
TAITA	-0.39	-1.20	1.11	-1.26	3.06	-0.47
TAVETA	2.29	-0.66	0.31	0.57	0.32	-0.19

Table Ap.3.12: Rotated component scores(females): based on 26 summary traits.

POPULATION	COMP1	COMP2	COMP3	COMP4	COMP5	COMP6
SOMALI	1.22	-0.69	0.81	0.40	-0.40	0.76
RENDILLE	2.11	0.02	0.98	0.93	-0.56	1.60
GABBRA	1.60	-1.43	1.40	0.14	-0.15	1.31
BORAN	0.55	-0.94	-0.97	-0.39	-1.67	-0.46
BURJI	-0.20	-0.57	-0.58	1.39	1.70	0.07
SAMBURU	0.84	-0.66	0.83	0.33	-0.45	-0.24
KABJIADO MAASAI	0.47	-0.10	-1.37	1.14	-0.19	0.50
KONY	-1.93	-0.04	0.38	0.55	-1.96	0.44
NANDI	0.15	-0.43	-1.08	0.33	-0.04	0.71
KIPSIGIS	0.49	-0.36	-0.69	-0.59	-0.08	-0.49
TUGEN	-0.49	-0.42	2.02	-0.59	-0.41	0.42
KEYO	-1.27	0.47	1.03	0.21	0.14	0.62
MARAKWET	-0.82	-0.80	-0.29	0.44	-0.30	0.20
POKOT	-0.22	-1.76	-0.10	0.63	0.03	1.21
ITESO	0.74	-0.21	-0.21	1.03	-1.34	0.00
TURKANA	1.03	1.13	-0.13	1.11	-1.62	0.61
LUO	0.84	1.33	0.17	0.55	-0.27	0.10
GUSII	0.67	0.08	-0.31	-0.48	0.93	0.91
TIRIKI	0.94	2.15	1.27	-0.18	-0.37	1.24
MARAGOLI	-0.20	0.40	1.49	-0.27	-0.33	0.80
BUNYORE	-1.24	-0.50	1.02	0.62	-0.60	2.37
IDAKHO	-0.81	2.16	0.59	0.69	-0.26	1.11
MARAMA	1.17	0.08	-0.32	1.61	0.01	0.74
WANGA	-1.34	-0.02	-1.33	-0.13	0.75	1.47
MARACH	-0.20	-1.33	0.98	-0.54	-0.54	0.53
BUKHAYO	-0.67	0.84	1.28	-0.47	-0.91	0.43
SAMIA	1.72	-0.41	0.35	-0.44	-0.26	1.09
BUTSOTSO	-1.26	-0.54	0.56	-0.80	0.45	0.18
BUNYALA	0.94	-0.56	-1.80	-1.43	-1.37	-0.12
KABRAS	-0.13	1.69	-2.16	-2.45	-1.45	0.28
BOKUSU	-2.23	-0.27	0.18	1.55	-0.85	3.62
KIAMBU KIKUYU	0.49	-1.06	-1.75	0.69	-0.45	-0.01
MURANGA KIKUYU	-1.06	-0.74	-1.37	0.77	0.53	2.02
NYERI KIKUYU	-0.39	-1.25	0.11	-1.94	0.10	1.11
NDIA	0.24	-0.43	0.91	-1.01	0.21	0.71
KAMBA	1.43	0.08	1.56	-1.34	-0.53	0.03
EMBU	0.14	-0.68	0.23	-0.87	0.55	1.23
MBERE	-0.97	-0.45	0.10	-0.85	-0.90	-1.04
CHUKA	-0.27	-0.72	0.87	-0.10	2.42	1.03
MUTHAMBI	-1.04	-0.59	1.11	0.24	1.30	0.46
MWIMBI	-0.14	-0.06	-0.01	1.09	-0.18	1.40
ICOJI	-0.17	-0.37	-0.97	-0.52	1.18	-0.71
IMENTI	-1.16	-0.33	-0.43	0.95	0.87	-1.64
TIGANIA	-0.56	1.12	0.56	-1.01	-0.47	0.03
ICEMBE	-0.50	-0.21	-0.61	-1.00	-0.44	0.99
THARAKA	0.28	-0.93	0.02	-1.09	1.95	1.52
POKOMO	0.30	0.36	-1.76	0.03	-0.27	-0.39
GIRIAMA	-0.58	1.17	-1.17	1.11	0.49	0.35
CHONYI	-0.42	2.38	-1.22	-2.00	1.45	-0.66
MID MJI KENDA	-0.14	0.79	0.59	-1.58	1.68	-0.94
DIGO	2.62	0.93	-0.10	0.97	2.38	-0.12
TAITA	-0.69	2.64	0.72	1.90	0.25	0.02
TAVETA	0.11	0.79	-1.02	0.68	0.96	0.07

TABLE AP.3.13 : UNROTATED COMPONENT SCORES : BASED ON 26 MALE AND 26 FEMALE SUMMARY TRAITS.

POPULATION	COMP1	COMP2	COMP3	COMP4	COMP5	COMP6	COMP7	COMP8	COMP9	COM10	COM11
SOMALI	1.49	0.03	-0.98	-1.46	0.63	0.56	-0.85	-0.56	-0.33	0.02	0.23
RENDILLE	1.87	0.78	-0.78	-1.94	0.38	0.93	0.33	0.29	-0.92	0.02	-0.28
GABBRA	1.28	1.27	-1.47	-1.25	1.58	-0.84	-1.05	-0.76	-0.29	-0.46	-0.43
BORAN	0.24	-0.73	-0.78	-0.01	0.48	0.98	-0.38	-0.61	-1.72	-0.41	1.23
BURJI	1.57	-1.37	-0.49	-0.87	-1.08	-0.01	-0.36	1.48	0.61	1.09	0.07
SAMBURU	0.57	0.65	-1.54	-0.93	0.39	0.03	0.42	0.03	-0.61	0.24	-0.73
KADJIADO MAASAI	0.42	-0.18	0.16	-0.04	0.48	0.31	-0.15	1.93	-0.59	0.04	0.05
KONY	-3.08	0.59	-0.59	-0.05	-0.43	2.41	0.41	0.55	0.27	-0.33	-0.47
NANDI	0.07	-0.04	-0.34	-0.28	0.24	-0.47	-0.64	0.86	-0.95	-0.36	1.11
KIPSIGIS	0.68	-1.08	-0.44	-0.23	-0.18	0.98	-0.09	-0.11	-0.87	-0.28	-0.84
TUGEN	-0.43	0.26	-1.52	0.17	0.99	0.11	1.28	-0.98	0.82	0.69	0.16
KEYO	-0.74	-0.38	-0.72	-0.32	1.24	-0.36	1.37	0.78	0.34	1.37	0.71
MARAKWET	-0.33	-0.98	-0.85	-0.45	0.98	-0.19	-0.33	1.25	0.14	-0.09	-0.76
POKOT	-0.58	0.68	-1.18	1.07	1.02	-0.71	-0.88	1.18	0.85	-0.88	0.66
ITESO	-0.78	1.61	0.63	-0.16	0.71	0.36	-0.95	0.77	-0.04	-1.83	-1.18
TURKANA	0.68	-0.09	1.24	-0.55	-0.62	2.46	1.25	0.01	0.41	-0.54	0.29
LUO	0.46	0.66	1.62	-0.61	0.34	0.09	0.12	0.35	0.41	-0.75	-0.85
GUSII	0.44	0.32	0.17	0.69	-0.07	-1.19	1.08	0.69	-0.62	-0.11	-1.16
TIRIKI	0.31	1.12	1.09	1.12	-0.34	0.58	2.98	-0.62	1.31	-0.58	1.28
MARAGOLI	-0.78	0.98	0.08	0.04	0.78	0.89	0.25	-0.22	0.41	2.12	-2.27
BUNYORE	0.15	-2.21	-0.39	-0.51	0.72	-1.18	1.32	-0.96	2.88	-2.16	-1.25
IDAKHO	-0.99	0.41	1.85	-1.96	0.87	-1.39	0.39	-0.66	0.02	-0.59	1.48
MARAMA	2.11	-1.81	0.47	-0.47	0.38	1.03	0.74	1.87	1.48	-1.33	-0.48
WANGA	-1.21	-0.57	0.56	1.42	0.55	-2.41	-0.39	1.31	0.11	-0.81	-0.95
MARACH	0.23	-0.71	-0.01	0.49	0.08	1.78	-1.28	-1.25	1.16	-0.83	0.25
BUKHAYO	-1.34	0.78	0.89	-0.38	1.22	0.63	0.54	-0.64	-1.02	1.73	-1.13
SAMIA	0.77	1.53	-0.59	1.66	-0.21	-0.39	1.11	-1.38	-0.45	-2.17	1.73
BUTSOTSO	-0.19	-1.38	1.27	-0.19	2.44	-1.27	-2.48	-1.63	0.24	0.91	0.82
BUNYALA	0.03	-0.58	0.84	1.53	0.68	1.92	-1.36	0.65	-1.12	-2.09	-1.28
KABRAS	-0.12	-2.55	0.57	0.73	0.17	-0.35	2.38	-0.53	-3.09	0.27	0.44
BUKUSU	-2.18	-0.31	-0.55	-2.36	-1.55	0.65	-0.75	0.13	1.14	-1.06	1.67
KIAMBU KIKUYU	0.58	-0.47	-0.29	0.29	0.82	-0.12	-1.82	1.21	-1.04	-0.19	1.72
MURANGA KIKUYU	0.08	-1.68	0.83	1.74	0.29	0.38	-0.78	1.38	1.75	1.81	1.42
NYERI KIKUYU	-0.55	-0.38	-1.39	1.38	-1.18	1.38	-0.59	-0.84	-0.32	0.65	-0.42
NDIA	-0.18	0.75	-0.57	0.74	-0.14	-0.26	-0.16	-0.84	0.44	0.05	-1.55
KAMBA	0.79	0.97	0.26	0.36	0.36	0.19	0.18	-2.49	0.31	0.33	0.14
EMBU	-0.48	0.91	-0.77	0.45	-0.96	-1.38	-0.57	-1.13	-0.26	-0.88	0.36
MBERE	-0.36	-1.71	-0.85	-0.68	-0.42	0.73	-0.57	-1.68	0.41	-0.14	0.42
CHUKA	0.32	0.69	-1.97	-0.26	-1.84	-1.71	0.44	0.07	0.57	0.42	0.49
MUTHAMBE	-0.26	0.04	-0.52	0.24	-0.17	-0.96	-0.43	0.11	1.58	1.29	-1.80
MUIMBI	-0.78	1.14	-0.28	0.73	0.48	-0.61	0.61	1.16	0.24	0.48	-0.12
IGOJI	0.18	-0.15	-0.12	-0.18	-1.05	-0.93	-1.19	-0.54	-1.32	0.71	0.35
IMENTI	-0.57	-0.46	-0.98	-1.66	-2.28	-0.32	-0.46	0.63	-0.13	-0.15	-0.66
TIGANIA	-0.91	0.00	0.07	0.44	0.65	0.31	1.55	-0.07	-0.48	0.49	0.36
IGEMBE	-0.57	-0.91	-0.97	0.58	0.07	-1.05	1.07	0.28	-0.86	-0.22	-0.55
THARAKA	0.88	0.12	-0.03	2.43	-0.36	0.48	-0.79	-0.52	0.83	1.80	1.13
POKOMO	-0.18	0.02	0.46	0.14	-0.78	-0.07	-0.34	0.47	-1.80	0.21	0.64
GIRIAMA	-0.22	-0.51	1.09	-0.48	-2.24	-0.61	0.68	0.49	0.47	-0.05	1.11
CHONYI	-0.33	-0.61	2.18	0.24	-1.52	-1.18	0.12	-0.42	-1.88	-0.21	-2.38
KIO NJI KENDA	0.58	-0.41	1.44	-0.28	-1.86	-0.17	-1.18	-2.23	0.33	0.51	-1.25
DIGO	2.79	1.76	1.25	0.28	-0.63	-0.45	-0.17	0.89	0.26	0.62	-0.17
TAITA	-1.05	1.58	2.65	-1.81	0.98	-0.18	0.01	0.38	0.01	1.78	1.00
TAVETA	-0.61	1.55	0.13	1.25	-1.49	0.68	-1.58	0.88	0.05	-0.79	0.68

Table Ap.3.14: Rotated component scores: based on 26 male and 26 female summary traits

POPULATION	COMP1	COMP2	COMP3	COMP4	COMP5	COMP6	COMP7	COMP8	COMP9	COMP10	COMP11
SOMALI	0.86	1.49	-0.93	-0.70	0.32	-0.50	-0.72	-0.91	0.61	0.37	0.30
RENDILLE	1.68	0.04	-0.93	-1.06	1.71	-1.35	-0.45	-1.24	0.81	-0.32	0.27
GABBRA	-0.28	1.02	-0.45	-0.66	-0.68	-0.77	-1.04	0.75	0.96	-0.36	1.41
BORAN	0.06	2.03	-0.29	0.89	0.37	-0.25	-0.59	0.61	-0.24	1.20	-2.22
BURJI	1.78	1.43	-1.24	-1.35	0.01	0.34	-0.92	-0.54	0.30	0.66	-0.13
SAMBURU	0.82	0.22	-0.77	-0.97	0.46	-0.19	-1.41	-0.73	-0.27	-0.26	-0.39
KADJIADO MAASAI	0.51	0.37	0.63	-1.00	0.17	0.19	-0.24	1.34	-0.09	0.72	-0.55
KONY	-1.71	-1.61	-0.06	-1.80	-2.50	0.00	-0.31	-0.41	-0.82	0.52	-0.34
NANDI	0.22	-0.07	-0.28	-0.34	0.57	-0.54	-0.52	1.34	0.54	0.64	0.52
KIPSIGIS	-0.14	1.41	-0.57	-0.85	-0.51	-0.17	-0.10	0.33	-0.40	-0.85	-0.15
TUGEN	-0.59	-0.17	0.69	0.12	0.13	-0.34	-1.58	-1.87	-0.28	-0.07	0.30
KEYO	-1.11	-0.02	1.07	-0.14	0.81	0.53	-1.79	-0.54	0.17	0.95	-0.25
MARAKWET	-0.73	0.35	0.31	-1.28	1.05	-0.62	-0.24	0.35	-0.66	0.21	-0.76
POKOT	0.26	-1.41	1.27	-0.35	0.80	-1.75	-0.14	0.37	-0.47	0.65	0.43
ITESO	1.01	-1.61	0.02	-2.01	-0.01	-0.15	1.54	0.13	-0.25	-0.01	0.25
TURKANA	0.29	1.34	0.06	-0.46	-2.14	1.32	0.72	-0.52	-0.47	1.04	0.60
LUO	0.84	-0.05	0.13	-0.71	0.27	1.17	1.58	-0.31	-0.09	0.30	-0.04
GUSII	0.95	-0.21	0.48	0.10	0.94	1.12	-0.38	0.52	-1.01	-0.99	-0.29
TIRIKI	0.65	-0.37	1.51	1.46	-1.31	1.35	-0.18	-1.30	-1.01	0.90	1.89
MARAGOLI	-0.11	-0.59	0.75	-0.93	-0.55	0.75	-0.38	-1.74	0.48	-1.01	-2.37
SUNYORE	-1.53	1.10	0.28	0.24	2.03	-0.30	1.63	-2.09	-2.87	-0.07	1.13
IDAKHO	-0.72	-0.86	-0.92	0.07	1.50	1.54	0.86	-0.39	1.50	1.42	1.58
MARAMA	0.98	2.21	0.98	-0.89	0.19	0.23	1.19	0.07	-1.97	1.51	-0.06
WANGA	-0.73	-1.57	1.22	0.06	2.07	0.02	0.91	1.52	-0.98	-0.88	-0.22
MARACH	-0.61	1.01	0.74	-0.19	-1.09	-1.61	1.10	-1.16	0.83	-0.13	0.23
BUKHAYO	-0.68	-0.77	0.23	-1.26	-0.34	1.15	-1.09	-1.09	1.38	-1.05	-0.98
SAMIA	1.68	-0.87	0.30	1.11	-0.57	-0.44	-0.60	-0.15	-0.54	-0.50	3.30
BUTSOTSO	-1.29	0.47	0.54	0.10	2.03	-1.28	1.84	-0.26	2.77	-0.53	0.87
BUNYALA	0.37	0.38	0.96	-2.23	-1.37	-0.74	1.85	1.50	-0.35	-1.49	0.61
KABRAS	-1.65	1.73	0.19	0.19	0.14	2.22	-1.78	1.77	0.12	-1.89	1.61
BUKUSU	-1.89	-0.98	-2.37	-0.15	-0.81	-0.89	0.93	-0.08	-0.37	2.65	0.54
KIAMBU KIKUYU	0.24	0.51	0.56	-0.38	0.47	-1.04	-0.58	1.83	1.01	0.81	0.68
MURANGA KIKUYU	-1.29	0.93	2.65	1.57	-0.39	-0.84	0.48	0.92	0.56	1.29	-1.82
NYERI KIKUYU	-0.56	-0.03	-0.24	0.40	-2.00	-1.32	-0.75	-0.02	-0.28	-1.30	-0.65
NDIA	0.40	-0.83	0.03	0.11	-0.05	-0.40	0.20	-1.03	-0.58	-1.42	-0.64
KAMBA	0.79	0.11	-0.04	0.98	-0.47	-0.05	0.21	-1.88	1.14	-1.01	0.82
EMBU	0.44	-1.43	-1.11	1.09	0.29	-0.88	-0.09	0.05	-0.12	-0.76	0.85
MBERE	-1.68	1.17	-1.00	0.49	-0.61	-0.73	0.68	-0.63	0.37	-0.23	0.54
CHUKA	0.65	-0.80	-1.32	1.86	0.73	-0.71	-1.55	-0.15	-1.27	0.52	-0.48
MUTHAMBE	-0.34	-0.56	0.41	0.86	0.80	-0.56	0.11	-0.91	-0.44	-0.08	-1.63
MWIMBI	0.31	-1.53	1.09	-0.16	0.34	0.34	-0.78	0.14	-0.42	0.32	-0.49
IGOJI	0.07	-0.10	-1.33	0.95	0.24	-0.39	-0.32	1.11	1.06	-0.74	-0.39
IMENTI	-0.50	-0.17	-2.54	0.07	-0.05	-0.18	-0.09	0.66	-1.23	0.54	-1.21
TIGANIA	-0.79	-0.35	0.88	-0.20	-0.37	1.06	-1.11	-0.28	0.07	-0.09	0.55
IGEMBE	-0.80	-0.12	0.04	-0.08	0.90	0.29	-1.19	0.56	-1.09	-1.06	0.30
THARAKA	0.44	0.30	1.80	2.24	-1.19	-1.21	-0.30	0.05	1.00	-0.32	-0.46
POKOMO	0.14	-0.16	-0.58	0.05	-0.43	0.47	-0.46	1.76	0.79	-0.23	0.13
GIRIAMA	-0.49	-0.07	-0.88	1.81	-0.39	1.13	0.48	1.02	-0.72	1.29	0.09
CHONYI	-0.26	-0.26	-0.96	0.48	0.27	2.11	1.75	1.02	-0.53	-2.14	-0.84
MID MJI KENDA	-0.02	0.57	-1.60	1.69	-0.63	0.37	2.00	-0.68	0.54	-1.54	-0.88
DIGO	3.21	0.51	0.47	1.03	0.18	0.82	0.64	0.29	0.32	0.52	-0.98
TAITA	-0.14	-1.19	0.06	-0.26	0.30	2.28	0.58	-0.41	2.73	1.90	-0.66
TAVETA	1.00	-1.79	-0.06	0.35	-1.63	-1.11	0.80	1.32	-0.13	0.41	-0.10

TABLE AP 3.15 : UNROTATED COMPONENT SCORES (MALES) : BASED ON 80 DIGITAL TRAITS.

POPULATION	COMP1	COMP2	COMP3	COMP4	COMP5	COMP6	COMP7	COMP8	COMP9
SOMALI	1.31	-0.54	0.30	0.92	-0.66	-0.08	0.27	-0.36	0.55
RENDILLE	1.12	0.12	0.11	-0.10	-1.55	-0.29	1.35	-0.99	0.16
GABBRA	0.60	-0.61	-1.81	-0.54	-1.18	-0.59	0.30	-2.28	0.67
BORAN	0.52	0.10	0.72	-0.03	0.06	-1.07	0.37	0.27	-0.12
BURJI	2.07	-0.35	0.98	1.78	1.70	0.00	-0.18	-0.91	0.00
SAMBURU	0.28	-0.86	0.28	1.50	-0.02	-0.01	0.53	-0.70	0.50
KADJIADO MAASAI	0.56	-1.20	0.46	0.77	0.24	-0.38	-1.82	-0.20	1.34
NAROK MAASAI	-0.39	-0.36	0.68	-2.02	-0.82	-0.14	-1.39	-1.44	0.43
NGWESI	1.17	0.03	-0.94	-0.55	-0.71	0.87	0.97	-1.22	0.20
MUKOGODO	2.15	-0.47	1.46	0.35	-0.42	0.15	2.29	1.20	1.91
KONY	-2.49	-1.63	2.67	-0.45	0.19	0.26	-1.15	1.05	0.85
NANDI	0.39	-1.32	-0.53	-0.64	1.30	-0.35	-0.36	-0.80	-1.03
KIPSIGIS	1.16	-0.77	0.99	-0.66	0.14	0.47	-0.82	-1.11	-0.08
TUGEN	-0.25	-0.59	-0.20	0.32	0.37	-0.14	-0.36	-0.02	-0.10
KEYO	-0.16	-1.59	-0.52	0.14	-0.09	0.74	0.30	0.99	-1.14
MARAKWET	0.57	-1.68	-0.35	0.14	-0.65	-0.47	0.13	-0.72	-0.91
POKOT	-0.82	-1.53	-0.74	-1.66	-0.36	0.18	-0.05	0.02	0.26
ITESO	-1.44	-0.75	-0.17	1.44	0.16	0.22	-0.50	0.71	-0.07
TURKANA	0.73	0.18	2.26	0.42	0.16	-0.22	-1.83	0.77	0.47
LUO	0.10	-0.28	-0.35	0.17	0.21	0.53	-0.15	-0.31	-0.41
GUSII	0.13	-0.13	-0.70	0.63	0.58	-0.21	-0.52	0.83	-0.15
TIRIKI	-0.35	1.51	0.17	-1.56	1.57	-1.59	-0.68	-0.14	0.49
MARAGOLI	-0.98	-0.40	0.46	-0.46	-1.63	0.70	-0.96	-0.57	-1.35
SUNYORE	1.10	0.44	-1.68	-0.73	-1.28	-0.33	0.73	0.96	-0.76
IDAKHO	-0.73	-0.70	-2.17	-1.43	1.24	-0.13	0.15	0.01	0.05
MARAMA	2.48	-0.54	0.39	-1.57	-0.79	0.96	-0.40	2.12	-0.15
WANGA	-1.32	-0.33	-1.63	1.37	-0.34	0.28	2.17	2.66	-1.42
MARACH	0.68	-0.73	1.46	-2.13	0.29	-0.21	1.81	1.47	-1.88
SUKHAYO	-1.56	-1.02	0.67	0.65	-1.45	1.18	1.68	1.19	3.27
SAMIA	-0.73	2.36	-0.21	-1.04	0.01	-3.70	1.18	1.33	0.40
SUTSOTSO	0.59	-1.28	-2.05	-0.38	-0.29	-0.39	-2.58	1.83	-0.76
SUNYALA	-0.34	1.23	1.54	2.22	-3.45	-2.23	0.04	-1.03	-2.51
KABRAS	0.85	2.05	-1.23	-0.09	-2.25	1.03	-2.17	0.40	1.17
SUKUSU	-1.07	-0.32	0.35	-0.59	0.61	0.42	-0.37	-0.12	-0.59
KIAMBU KIKUYU	0.51	-0.83	-0.21	-0.70	-0.11	-0.43	1.17	0.13	0.36
MURANGA KIKUYU	0.46	0.62	0.34	1.69	1.11	1.10	-0.06	1.27	-0.31
NYERI KIKUYU	-0.48	0.61	1.43	-1.07	0.66	1.69	-0.09	-0.29	-1.96
NDIA	-0.97	0.30	0.04	0.21	0.21	0.46	0.50	-0.42	-1.01
KAMBA	0.03	0.30	0.05	1.19	1.60	-0.53	0.74	-0.26	-0.20
EMBU	-1.23	0.99	-0.95	0.08	0.89	0.56	0.17	-0.77	0.90
MBERE	0.63	0.59	0.11	-0.51	0.90	-0.36	0.49	-0.55	1.32
CHUKA	-0.18	0.80	-0.86	0.67	0.57	1.04	-0.11	-0.52	-1.32
MUTHAMBE	-0.18	0.63	-0.40	1.37	0.55	-0.02	-0.14	-0.38	-0.47
MWIMBI	-1.38	-0.23	-0.20	0.37	0.37	0.52	1.44	-1.26	0.17
IGOJI	-0.16	0.48	-0.09	0.39	0.14	0.48	0.57	-0.98	-0.20
IMENTI	-0.17	0.30	0.37	1.12	0.57	0.34	-0.44	-0.16	0.47
TIGANIA	-0.83	-0.06	-0.07	0.18	-0.77	-0.34	-0.34	0.79	0.03
IGEMBE	-0.05	-0.62	-0.71	1.32	0.32	-0.20	-0.55	-0.75	-0.95
THARAKA	0.22	1.35	1.08	-0.06	0.16	-0.44	-1.02	0.38	-0.39
POKOMO	-0.25	0.32	0.42	-0.15	0.34	0.29	-0.01	0.19	-0.12
MALAKOTE	0.16	-0.39	-0.90	0.46	1.85	-3.14	-0.71	0.54	0.88
GIRIAMA	-0.27	3.09	-0.85	0.10	0.09	2.60	-0.61	1.20	0.45
CHONYI	-0.25	0.62	-0.30	0.59	-0.42	-0.50	-0.67	0.60	1.29
MID MJI KENDA	0.65	1.36	0.61	-0.87	1.82	1.20	1.40	-1.27	-0.17
DIGO	1.06	1.13	-0.26	-0.65	-0.29	0.50	-0.26	-0.10	0.43
TAITA	-1.56	-0.33	-0.78	-0.09	-0.91	0.03	0.16	-1.51	1.80
TAVETA	-1.82	0.91	1.44	-1.63	-0.55	-0.41	0.38	-0.46	-0.29

TABLE AP. 3.15(CONTINUED)

POPULATION	COM10	COM11	COM12	COM13	COM14	COM15	COM16	COM17	COM18
SOMALI	-0.19	-0.01	0.00	-0.83	0.89	0.61	0.50	-0.81	0.15
RENDILLE	-0.49	-0.06	0.08	0.51	0.66	-0.63	0.00	-0.82	0.66
GABBRA	-1.03	0.53	0.39	0.69	0.30	-1.44	-0.04	-1.09	-0.39
BORAN	0.31	-0.01	0.75	0.48	0.85	0.29	0.86	0.53	-0.55
BURJI	0.42	0.18	0.92	-0.41	-0.57	-0.10	0.91	-1.40	-1.03
SAMBURU	0.06	0.08	-1.58	1.12	1.30	0.15	0.35	-0.48	-0.38
KADJIADO MAASAI	0.39	0.05	1.00	0.46	0.61	-1.05	0.44	0.87	-0.15
NAROK MAASAI	-1.29	0.50	0.62	1.28	-0.25	0.45	0.01	2.53	-0.03
NGWESI	0.73	-0.21	0.21	-0.14	-1.71	0.18	-0.75	-0.58	0.69
MUKOGODO	-0.55	0.02	0.94	-2.07	0.77	0.95	-1.27	-0.58	0.41
KONY	0.91	-0.16	-0.70	-1.18	0.07	-0.91	-2.24	-2.29	-0.10
NANDI	-0.60	-0.27	-1.33	1.17	1.33	0.46	0.24	-0.15	0.08
KIPSIGIS	1.44	0.66	2.22	1.00	0.40	-0.11	-1.95	1.21	1.23
TUGEN	0.25	0.32	-0.99	-0.57	0.06	-0.89	0.13	0.65	1.79
KEYO	-1.56	-0.30	-0.90	0.98	0.53	1.10	-0.98	0.35	-0.31
MARAKWET	0.84	0.08	-0.88	-1.38	0.88	-1.36	-0.57	-0.92	-1.83
POKOT	-1.37	1.64	-1.68	0.76	0.06	1.13	1.37	-0.88	-0.02
ITESO	0.41	0.72	1.21	-2.40	1.70	-1.24	1.84	1.18	1.26
TURKANA	-3.07	-0.96	-0.37	0.06	0.18	0.67	0.35	0.29	1.53
LUO	0.66	0.42	-0.04	0.31	0.75	-0.46	1.22	-0.13	-0.33
GUSII	0.90	-0.23	-0.98	1.70	-1.57	-0.44	0.17	0.33	1.00
TIRIKI	0.11	-0.20	-0.65	-1.46	-0.87	-1.00	-0.91	0.56	-1.72
MARAGOLI	1.22	-0.24	1.08	0.50	-0.54	-0.32	-0.57	-0.51	-0.18
BUNYORE	-0.02	-0.45	-0.85	0.00	-0.43	-1.47	-1.25	-0.85	2.70
IDAKHO	1.97	0.25	0.00	-1.23	0.78	1.40	-0.22	0.48	0.59
MARAMA	-0.25	-0.47	-1.40	-0.28	-0.02	-1.39	1.31	1.27	-1.98
WANGA	-1.84	0.02	2.57	0.23	-0.72	-0.23	-1.14	-0.07	-1.21
MARACH	0.96	2.54	0.73	-0.56	-0.83	-0.68	0.73	1.74	1.18
BUKHAYO	1.41	-0.40	-2.14	1.06	-2.07	0.41	0.17	0.95	0.55
SAMIA	0.41	-0.84	-0.38	1.48	2.06	-1.33	0.29	-0.67	0.12
BUTSOTSO	1.58	-3.03	0.36	-0.80	0.27	2.23	0.25	-0.57	0.19
BUNYALA	1.08	0.14	-1.50	-0.80	0.07	1.87	-0.44	1.68	-0.34
KABRAS	-0.13	2.85	0.27	-0.84	-0.13	0.51	-1.13	-0.56	-0.71
BUKUSU	-1.03	0.42	0.05	0.24	0.66	0.14	-1.51	-0.60	-1.79
KIAMBU KIKUYU	0.15	-0.25	1.02	0.69	0.08	1.49	0.32	-0.70	-2.03
MURANGA KIKUYU	0.39	0.75	1.40	2.04	0.01	0.90	0.73	-0.59	0.26
NYERI KIKUYU	-0.32	0.12	-0.39	-0.55	0.00	-0.27	0.62	-0.05	-0.16
NDIA	1.27	-0.60	1.08	1.72	-0.40	-0.19	-0.46	0.33	-0.67
KAMBA	1.40	0.06	-1.18	-0.76	-1.22	0.50	0.27	1.05	-2.10
EMBU	0.96	1.14	-0.23	0.18	0.41	1.04	-0.49	-0.13	0.34
MBERE	0.81	-2.01	0.35	-0.51	-0.55	-1.05	0.56	0.33	0.62
CHUKA	-1.63	-0.63	-0.69	-1.01	-2.84	-1.34	0.94	0.50	-0.18
MUTHAMBE	-0.20	1.57	-0.87	-0.55	-0.14	-0.75	-0.80	-1.17	-0.01
MWIMBI	-0.78	0.05	-0.33	-0.87	1.14	0.98	1.15	0.71	0.98
IGOJI	-0.02	-0.79	0.43	0.57	0.46	0.46	1.68	-0.05	0.73
IMENTI	-0.29	-0.08	-0.93	1.26	-0.07	-1.77	-0.56	-0.40	-0.32
TIGANIA	-1.30	-0.84	-0.22	0.29	0.08	0.29	0.09	0.49	-0.42
IGEMBE	-0.88	-1.34	0.19	-0.90	-0.38	-1.18	-1.09	-0.01	1.80
THARAKA	0.64	0.06	0.40	1.23	-1.53	1.45	0.20	-1.75	0.98
POKOMO	0.76	1.09	0.07	1.43	0.41	-1.27	0.63	-0.71	0.08
MALAKOTE	-1.35	2.50	0.08	-0.53	-1.50	1.49	-0.47	0.25	0.78
GIRIAMA	0.13	0.26	-0.62	-0.61	2.57	0.10	0.28	0.39	0.06
CHONYI	-0.44	-0.97	1.36	0.68	0.14	-1.10	-0.69	2.03	-1.04
MIJIKENDA	-0.75	-1.59	-0.72	-0.13	0.76	1.45	-2.90	1.15	0.22
DIGO	0.06	-0.46	-0.27	-0.70	-1.43	0.84	1.51	-0.77	-0.60
TAITA	-0.56	-0.64	1.62	-0.91	-0.75	-0.01	0.62	0.89	-0.73
TAVETA	-0.74	-0.97	1.39	-1.03	-0.68	0.45	1.80	-2.46	0.33

TABLE AP 3 16 . UNROTATED COMPONENT SCORES (FEMALES) BASED ON 80 DIGITAL TRAITS.

POPULATION	COMP1	COMP2	COMP3	COMP4	COMP5	COMP6	COMP7	COMP8	COMP9
SOMALI	1.20	-0.77	-1.00	1.76	-0.34	-0.13	-1.07	0.20	-0.06
RENDILLE	1.76	-0.70	-0.87	0.55	-0.91	-0.41	1.79	-0.27	-0.19
GABBRA	1.92	-1.53	-0.65	0.07	-0.37	0.14	-0.84	-0.39	0.29
BORAN	-0.37	0.41	0.33	-0.46	-0.68	1.12	-0.29	0.44	-0.23
BURJI	0.63	0.31	0.21	0.94	0.82	-1.18	-0.24	-1.12	0.37
SAMBURU	0.96	-1.03	-0.05	0.14	0.35	0.35	0.42	0.40	1.46
KADJIADO MAASAI	0.38	0.14	1.26	0.58	-0.25	-0.39	-0.80	0.09	-1.25
KONY	-2.15	-2.56	-0.20	-0.79	-0.28	-1.22	0.88	1.34	1.02
NANDI	0.16	-0.33	1.22	-0.39	0.30	-1.00	0.50	0.09	-0.75
KIPSIGIS	-0.07	-0.31	0.53	0.83	-0.38	-0.08	1.02	1.41	-1.04
TUGEN	-0.36	-1.38	-1.06	0.30	-0.11	0.82	0.66	-0.83	0.43
KEYO	-0.80	-1.19	-0.17	-0.73	0.88	-0.47	0.83	-0.70	-0.31
MARAKWET	-0.45	-1.70	0.83	0.66	0.83	-1.01	-1.65	0.40	1.92
POKOT	0.27	-1.34	1.58	0.08	0.28	-0.43	0.42	0.36	-0.58
ITESO	0.36	-0.30	-0.04	-0.59	-1.55	0.17	1.18	1.76	-0.75
TURKANA	0.52	-0.81	0.84	0.15	-1.05	0.87	0.47	1.04	0.81
LUO	0.91	-0.76	0.83	-0.22	-1.00	-0.01	-0.54	0.41	-0.15
GUSII	0.62	0.67	0.09	0.24	0.44	-0.07	0.08	-0.27	0.37
TIRIKI	0.65	0.43	-0.31	-1.53	-0.40	2.81	-0.71	0.00	-0.60
MARAGOLI	-0.27	-0.11	-1.80	-0.80	-1.80	-0.52	0.80	0.36	1.62
BUNYORE	-1.20	1.50	-2.76	2.01	-1.14	0.88	-1.35	-0.22	-0.19
IDAKHO	-0.88	-0.41	-1.17	0.09	-0.37	-0.32	1.91	-0.79	-0.38
MARAMA	1.36	0.05	0.17	-0.43	0.57	-0.57	-2.64	0.21	2.10
WANGA	-1.26	1.85	-0.04	-0.40	0.23	-1.29	-0.36	0.09	1.31
MARACH	-0.34	-0.50	-0.80	-2.01	0.09	0.29	-0.38	0.10	-2.27
BUKHAYO	-0.70	-1.23	-0.47	-0.45	-0.11	0.60	-1.05	-0.72	1.09
SAMIA	1.70	-0.82	1.33	-0.43	1.00	2.44	-1.07	-0.13	-1.23
BUTSOTSO	-0.88	-0.41	0.24	-2.16	0.73	-0.96	0.48	0.58	0.79
BUNYALA	-0.45	0.82	1.30	2.34	-2.09	1.59	-0.15	0.36	2.63
KABRAS	-1.90	2.16	0.79	-0.53	-0.17	2.01	0.20	1.97	-0.10
BUKUSU	-1.55	-0.90	0.11	0.71	-1.95	-0.16	-1.79	-0.05	-2.18
KIAMBU KIKUYU	0.25	-0.15	1.96	0.41	0.01	-0.13	-0.87	-0.07	-1.33
MURANGA KIKUYU	-0.86	0.75	1.28	2.68	1.00	-0.65	0.88	0.53	-0.66
NYERI KIKUYU	-0.39	-0.03	0.35	-0.83	0.34	0.61	0.68	-0.78	-0.03
NDIA	0.30	-0.48	-0.72	-0.12	0.01	-0.25	-0.35	-0.45	0.20
KAMBA	0.83	0.10	-0.94	-0.68	0.23	2.34	1.41	-0.69	0.63
EMBU	0.03	0.48	-1.33	0.09	0.63	-0.44	0.40	-0.41	-0.63
MBERE	-1.38	-0.20	-0.58	0.50	0.15	0.47	-0.01	-0.54	-0.76
CHUKA	0.83	0.92	-1.01	0.25	1.61	-0.36	-1.11	-1.01	-0.56
MUTHAMBE	0.15	-0.39	-0.99	-0.13	0.56	-1.11	-0.95	-0.80	-0.37
MWIMBI	-0.05	0.45	-0.60	-0.08	-0.06	-0.08	-0.93	0.01	-1.25
IGOJI	0.05	0.78	0.60	0.29	0.96	-0.56	0.18	-0.27	0.27
IMENTI	-0.54	0.30	-0.10	-0.21	0.25	-1.05	0.42	-0.82	-1.00
TIGANIA	-0.86	-0.42	-0.14	0.64	0.45	0.48	1.18	-0.35	-0.25
IGEMBE	-1.02	-0.45	0.96	1.04	2.73	1.17	0.77	-0.34	0.06
THARAKA	0.56	1.51	-0.85	1.13	1.01	-0.17	1.47	-1.38	0.12
POKOMO	-0.14	0.88	0.60	-0.31	-0.23	-0.81	0.05	0.88	0.79
GIRIAMA	-0.59	1.75	-0.34	-1.60	-0.23	-1.61	-1.71	1.58	-0.47
CHONYI	-0.39	1.44	2.61	-1.98	-1.98	-0.23	0.34	-4.39	0.93
MIJIKENDA	0.27	1.12	-0.63	-1.21	2.89	1.03	0.06	1.78	1.15
DIGO	3.22	1.64	-0.20	-0.59	-1.08	-1.50	1.61	1.36	-0.34
TAITA	-0.34	0.06	-1.10	0.08	-0.52	-0.16	-0.86	-0.52	0.05
TAVETA	0.50	0.65	0.87	1.11	-0.29	-0.86	0.61	0.58	-0.52

TABLE AP. 3. 16 (CONTINUED)

POPULATION	COM10	COM11	COM12	COM13	COM14	COM15	COM16	COM17	COM18
SOMALI	0. 63	-1. 81	-1. 62	-0. 75	1. 74	0. 57	1. 53	-0. 17	0. 63
RENDILLE	-0. 17	-1. 19	0. 42	-1. 00	-1. 74	2. 29	-1. 65	0. 69	-0. 80
GABBRA	-0. 37	-0. 77	-0. 69	0. 33	-0. 37	0. 88	0. 18	-0. 89	0. 36
BORAN	-0. 36	1. 02	-0. 06	-1. 94	-0. 67	-0. 12	1. 17	-0. 43	-0. 79
BURJI	0. 76	-0. 44	1. 13	0. 67	0. 00	0. 32	1. 00	0. 22	-1. 28
SAMBURU	0. 96	0. 33	-0. 66	0. 06	0. 03	1. 17	-1. 39	-0. 55	-1. 47
KADJIADO MAASAI	0. 24	0. 35	0. 01	-0. 77	-0. 69	0. 37	-0. 31	-0. 44	-0. 92
KONY	0. 06	-1. 28	0. 20	0. 68	1. 84	0. 33	1. 87	-0. 39	-2. 51
NANDI	-0. 10	0. 46	0. 75	-1. 86	0. 06	0. 97	-0. 89	1. 23	-0. 44
KIPSIGIS	0. 18	-0. 29	-0. 48	-1. 21	-0. 05	-1. 32	-0. 35	-0. 60	1. 18
TUGEN	-0. 91	-0. 42	0. 20	0. 61	0. 68	-0. 68	-0. 55	0. 92	0. 40
KEYO	0. 15	-0. 50	-0. 28	-1. 00	1. 34	0. 91	-0. 85	0. 40	0. 28
MARAKWET	0. 12	-0. 90	0. 77	0. 40	-1. 37	-0. 31	-0. 93	0. 10	-0. 41
POKOT	0. 22	0. 92	-1. 42	0. 83	-0. 49	-0. 28	-1. 03	0. 63	0. 37
ITESO	-1. 48	-0. 08	0. 28	-0. 06	-0. 88	-1. 50	1. 17	-0. 70	-1. 14
TURKANA	1. 61	0. 15	0. 73	0. 93	-0. 29	-0. 79	-0. 11	-0. 25	0. 36
LUO	-0. 15	-0. 28	-0. 90	-0. 20	1. 23	-1. 02	1. 08	0. 39	0. 74
GUSII	-0. 59	0. 79	0. 03	0. 73	-2. 16	-0. 52	0. 98	1. 30	-0. 25
TIRIKI	-1. 24	-0. 99	-0. 68	0. 65	0. 71	0. 95	0. 42	-1. 69	0. 09
MARAGOLI	0. 02	0. 04	-0. 57	0. 69	-0. 19	-0. 79	-1. 21	1. 35	1. 05
BUNYORE	2. 39	0. 04	-0. 51	-0. 57	0. 34	-1. 89	-0. 36	-0. 32	-1. 03
IDAKHO	1. 45	0. 02	2. 19	-0. 24	-0. 31	-1. 17	1. 81	-0. 29	0. 29
MARAMA	0. 01	-0. 32	0. 17	-2. 95	-0. 76	-1. 11	0. 07	-0. 47	1. 32
WANGA	-1. 77	0. 21	-0. 97	-1. 50	1. 22	-1. 50	-0. 70	0. 56	-2. 41
MARACH	-1. 11	-0. 42	1. 22	-0. 67	0. 68	-0. 26	-0. 49	2. 43	1. 16
BUKHAYO	-0. 29	0. 69	-0. 45	0. 59	-1. 37	-0. 66	0. 99	-1. 05	1. 56
SAMIA	1. 93	1. 19	0. 13	0. 50	0. 20	-1. 44	0. 37	2. 76	-2. 01
BUTSOTSO	2. 97	2. 61	-1. 36	0. 17	0. 18	1. 55	0. 17	-0. 56	1. 60
BUNYALA	-1. 82	2. 70	1. 38	0. 20	1. 45	1. 97	0. 29	1. 11	0. 39
KABRAS	1. 20	-2. 65	-0. 23	-0. 06	-2. 36	1. 91	-0. 10	0. 08	-0. 22
BUKUSU	0. 39	0. 13	-0. 13	0. 65	0. 78	0. 25	-3. 11	-1. 02	-0. 55
KIAMBU KIKUYU	-0. 20	-0. 57	1. 21	0. 55	0. 43	0. 87	1. 96	-1. 64	-0. 41
MURANGA KIKUYU	-0. 32	-1. 06	-3. 00	1. 38	0. 62	-0. 10	0. 99	2. 02	1. 33
NYERI KIKUYU	-1. 96	1. 32	-2. 06	-0. 46	0. 01	0. 48	0. 33	-0. 54	-0. 58
NDIA	-0. 24	-0. 12	0. 15	0. 21	-0. 90	0. 04	0. 54	0. 99	0. 00
KAMBA	0. 60	-0. 11	-0. 35	-0. 98	0. 96	-0. 22	-0. 11	0. 32	0. 36
EMBU	-0. 42	0. 43	0. 36	-0. 45	0. 27	1. 49	1. 40	-0. 99	0. 92
MBERE	0. 01	1. 25	-0. 61	-0. 10	-0. 94	0. 36	0. 41	-0. 19	0. 64
CHUKA	-0. 35	0. 14	-0. 72	0. 61	-0. 28	0. 70	0. 05	0. 00	-0. 82
MUTHAMBE	-1. 22	0. 02	-0. 53	0. 04	-0. 29	0. 37	-0. 30	-0. 42	-0. 71
MWIMBI	0. 06	1. 38	1. 42	-0. 13	1. 66	0. 88	-0. 56	-0. 42	0. 82
IGOJI	0. 08	-0. 68	0. 61	0. 31	-0. 09	-0. 55	0. 04	-0. 46	1. 81
IMENTI	0. 06	1. 98	-0. 06	0. 68	-1. 32	-0. 94	0. 82	-0. 99	-1. 02
TIGANIA	-1. 26	-0. 22	-0. 84	-1. 13	-2. 03	-0. 64	-0. 52	-0. 27	0. 21
IGEMBE	-0. 78	-0. 82	2. 30	-0. 74	0. 99	-1. 30	-0. 94	-0. 51	1. 22
THARAKA	1. 22	0. 17	0. 27	-0. 22	0. 61	1. 14	-0. 07	0. 08	-0. 76
POKOMO	0. 77	-0. 47	1. 27	-1. 20	0. 10	0. 60	0. 24	0. 26	-0. 25
GIRIAMA	0. 14	-0. 35	0. 19	0. 42	0. 23	0. 59	0. 54	1. 72	1. 02
CHONYI	0. 59	-1. 83	-0. 49	0. 68	0. 56	-0. 77	-0. 45	-0. 34	0. 09
MID MJI KENDA	-0. 46	-0. 11	0. 04	2. 17	0. 95	-0. 66	-1. 41	-1. 27	-0. 76
DIGO	-0. 39	0. 13	0. 13	0. 91	0. 86	-1. 00	-0. 21	-0. 52	0. 14
TAITA	-1. 10	-0. 37	1. 74	2. 87	-1. 07	0. 44	-0. 14	0. 97	0. 39
TAVETA	0. 02	0. 59	0. 34	0. 65	-0. 07	-0. 86	-1. 66	-2. 13	0. 80

Table Ap.3.17: Rotated component scores (males): based on 80 digital traits.

POPULATION	COMP1	COMP2	COMP3	COMP4	COMP5	COMP6	COMP7	COMP8	COMP9	COM10	COM11	COM12	COM13	COM14	COM15	COM16	COM17	COM18
SOMALI	1.09	0.66	0.47	0.71	0.84	-0.35	-0.04	0.86	-0.65	0.37	0.54	-0.60	0.27	0.37	-0.07	0.70	0.29	0.32
RENDILLE	-0.32	0.64	0.75	0.34	1.26	-1.33	0.35	0.60	-0.71	-0.34	0.13	1.12	0.76	0.40	-0.55	0.75	0.40	0.17
GABBRA	-1.27	-0.24	0.21	1.30	1.55	-1.44	1.12	1.05	-0.01	-0.97	0.67	0.60	0.44	-1.00	-0.02	1.02	0.27	-0.81
BORAN	0.44	0.09	0.75	-1.07	0.35	-0.06	0.60	0.16	0.62	0.81	0.55	0.54	-0.52	0.44	-0.47	0.33	-0.50	0.20
BURJI	2.82	1.32	0.38	0.45	1.20	0.42	0.37	0.13	0.82	0.03	-0.22	-0.62	-0.69	0.15	-0.41	1.00	0.79	-1.59
SAMBURU	0.82	0.09	-0.41	0.67	0.62	-0.36	-1.10	0.87	-0.26	-0.36	0.86	1.06	-1.23	-0.33	-0.58	1.31	0.46	0.64
KADJIADO MAASAI	1.60	-0.30	0.08	-0.51	-0.30	-1.60	0.11	0.93	0.63	0.87	-0.67	-0.39	-0.57	-1.30	0.29	0.24	-0.90	-0.62
NAROK MAASAI	-0.55	-0.99	-0.57	-1.15	-0.30	-1.21	0.60	1.91	1.86	0.39	-0.18	0.95	1.32	0.12	1.55	-1.41	-0.78	0.73
NGWESI	-0.20	0.22	0.04	1.30	0.98	-0.33	-0.32	0.28	-0.54	-0.71	-0.25	0.12	0.90	0.24	0.54	1.12	1.77	-0.85
NUKOGODO	1.80	0.56	0.86	-0.55	1.61	1.06	-0.03	0.67	-1.25	1.74	0.03	-0.30	1.62	0.55	-0.99	0.14	0.08	0.08
KONY	0.99	-1.57	-2.26	-1.03	-2.74	-0.09	-0.34	0.03	-3.30	-0.95	-0.30	-1.06	-0.22	0.88	0.44	1.04	-0.01	-0.96
NANDI	0.47	-1.45	0.13	0.50	0.29	0.32	0.36	0.74	1.14	-0.82	0.13	0.53	-0.99	0.01	0.26	1.29	0.40	1.80
KIPSIGIS	1.47	-0.74	0.36	0.05	-0.45	-1.85	1.04	0.49	-0.24	2.01	-0.59	0.96	-0.12	0.42	2.09	1.08	1.39	-0.25
TUGEN	-0.03	-0.72	-0.15	0.06	-0.38	-0.96	-1.02	-0.77	0.16	0.40	0.13	-0.68	0.47	-0.92	0.07	0.72	0.74	0.85
KEYO	0.42	-1.51	-0.39	1.01	0.65	0.86	0.20	-0.49	-0.42	-0.74	0.05	0.82	-0.26	0.20	0.42	0.43	1.41	1.95
MARAKWET	0.79	-1.17	-0.11	1.24	-0.32	-0.15	1.48	0.40	-0.92	-1.09	1.79	-0.06	-0.05	-1.08	-1.03	1.02	0.36	-1.05
POKOT	-1.15	-1.99	-0.35	1.10	0.12	0.83	-1.15	1.35	1.04	-0.74	-0.37	0.31	1.05	1.14	-0.26	1.37	1.20	0.59
ITESO	-0.13	-0.54	-0.88	-0.01	-0.83	-1.49	0.14	-1.18	0.40	2.62	0.01	-2.05	-0.08	-1.01	-2.46	0.42	-0.47	0.30
TURKANA	1.68	1.20	-0.66	-1.71	0.12	-0.47	-0.20	0.17	0.29	-0.40	-1.03	-1.02	1.44	0.61	0.85	0.65	-1.60	2.66
LOD	0.13	-0.10	-0.09	0.86	-0.32	-0.51	0.11	0.33	1.11	0.17	0.07	0.41	-0.61	-0.00	-0.99	0.51	0.37	-0.26
GUSII	0.14	-0.28	0.84	0.08	-0.13	-0.37	-1.86	-1.48	0.86	-0.81	-0.50	0.31	-0.69	-0.61	1.26	0.07	0.05	-0.19
TIRIKI	-0.66	0.18	-0.28	2.10	-1.12	1.95	1.03	0.53	0.32	-0.68	0.59	-0.71	0.56	-1.68	0.85	0.18	1.05	-1.12
MARAGOLI	-0.26	-0.41	-0.40	0.75	-1.30	-1.70	1.00	-0.46	-0.21	-0.72	0.21	0.24	-0.30	1.32	0.52	-1.09	0.02	-1.04
BUNYORE	-1.34	-0.20	2.28	0.87	0.17	-0.97	-0.17	-1.74	-1.59	-0.95	-0.67	0.12	1.50	-0.52	0.71	0.73	1.21	0.98
IDAKHO	-1.20	-2.04	1.22	0.84	-0.71	1.19	-0.24	0.57	0.15	1.40	0.38	-1.42	-1.06	-0.06	-0.09	-0.56	1.51	0.24
MARAMA	1.85	-0.46	1.92	-0.16	-1.50	1.10	0.40	-0.12	0.96	-1.22	0.20	1.45	2.21	-1.38	-1.61	-0.39	-1.31	-0.06
WANGA	-1.17	-0.62	0.66	0.51	2.24	1.25	1.74	-3.05	-1.49	0.37	-1.28	0.44	-0.60	-0.17	-0.56	-1.40	-2.20	-0.67
MARACH	0.27	-2.25	0.62	-0.92	-0.23	0.31	0.16	-2.32	1.05	2.25	0.57	1.35	2.70	1.18	-0.41	0.13	1.16	-0.81
BUKHAYO	-0.29	-0.80	-0.14	-0.73	-0.17	-0.36	-5.03	0.32	-1.64	-0.58	0.24	1.02	0.23	-0.25	-0.54	-1.73	0.94	-0.91
SAMIA	-2.57	0.70	2.28	-3.09	-0.22	0.11	0.74	-0.36	-0.78	-0.11	0.29	1.16	-1.51	0.38	-0.25	2.61	0.28	0.13
BUTSOTSO	0.82	-0.98	3.19	0.99	-1.36	0.32	0.54	-0.19	0.06	-1.19	0.12	-3.23	-1.90	0.68	0.31	1.42	-1.05	0.94
BUNYALA	-0.61	1.64	0.27	-0.10	0.16	-1.52	0.14	-1.02	-0.03	0.10	3.77	-0.04	0.12	1.11	1.00	0.51	1.12	0.50
KABRAS	-1.15	2.09	0.30	2.58	-1.68	0.51	0.39	1.17	-0.57	1.33	0.15	-0.25	1.97	-0.41	1.66	0.01	1.34	1.25
BUKUSU	-0.09	-0.71	-1.74	0.20	-0.55	1.28	1.58	0.58	-0.59	-0.52	-0.20	0.69	-0.48	0.14	0.59	0.12	0.53	0.09
KIAMBU KIKUYU	0.30	-0.69	0.85	-0.01	1.23	1.28	0.73	1.23	-0.09	-0.24	0.12	0.65	-0.84	1.20	-0.53	-0.55	-0.80	-1.17
MURANGA KIKUYU	1.12	1.20	0.04	0.69	0.34	0.40	-0.67	-1.32	0.77	1.29	-1.56	0.93	-1.63	1.24	0.31	0.12	0.85	0.30
NYERI KIKUYU	0.33	0.13	-1.43	0.02	-1.39	0.58	0.77	-0.81	1.03	-0.50	-0.02	0.59	0.88	1.19	-0.89	-0.21	1.09	0.72
NDIA	-0.28	-0.09	-0.29	-0.12	-0.11	-0.49	0.45	-0.81	0.34	-0.23	-0.13	1.41	-1.80	0.51	0.37	-1.27	0.31	-0.62
KAMBA	0.74	0.21	-0.60	-0.40	0.32	1.96	-0.87	-0.40	1.00	-0.15	2.07	-0.11	-1.02	-1.13	-0.20	-0.50	0.67	1.35
ENBU	-1.40	0.29	-0.68	0.81	-0.46	0.80	-1.08	0.84	-0.07	1.30	-0.20	0.01	-1.10	0.54	-0.68	0.92	-0.07	
MBERE	0.33	0.59	1.10	-1.73	0.19	-0.46	-0.47	0.42	-0.01	-0.50	-0.72	-0.64	-0.20	-0.90	0.79	-0.64	1.74	0.33
CHUKA	-0.38	0.93	-1.42	0.44	0.76	0.41	-0.16	-1.83	1.66	-2.04	-0.48	-0.85	1.45	-1.33	-0.35	-1.04	0.65	-0.10
MUTHAMBI	-0.30	0.81	-1.32	1.29	0.06	0.47	-0.09	-0.74	-0.45	0.08	0.30	-0.19	0.05	-0.75	0.60	1.60	0.48	-0.46
MWIMBI	-1.06	-0.33	-1.29	0.02	1.06	-0.14	-0.76	0.66	0.35	1.03	0.47	-0.48	-0.22	0.41	-1.68	0.18	0.60	1.62
IGOJI	-0.31	0.79	0.09	-0.01	0.70	-0.78	-0.30	0.20	1.07	0.06	-0.36	0.04	-0.81	0.84	-1.20	0.22	0.51	0.70
IMENTI	0.49	0.71	-1.01	-0.11	-0.37	-0.46	-0.53	-0.30	-0.27	-0.96	-0.70	1.09	-0.65	-1.41	0.42	0.92	-0.06	0.15
TIGANIA	-0.51	-0.05	-0.21	-0.63	0.11	0.00	0.15	-0.11	-0.12	-0.72	0.05	-0.17	-0.02	-0.16	0.06	0.48	-1.72	0.83
ICEMBE	0.27	0.00	-0.61	0.35	0.88	-1.57	0.58	-1.32	-0.63	-0.75	-0.39	-1.63	-0.08	-1.20	0.60	0.06	1.00	1.27
THARAKA	0.17	1.40	0.52	-0.30	-0.35	0.07	-0.77	-0.58	0.48	-0.56	-0.63	-0.44	-0.36	2.52	1.81	0.49	0.17	-0.66
POKOMO	-0.11	0.00	-0.04	0.04	-0.72	-0.40	-0.29	-0.59	0.41	0.31	-0.91	1.44	-0.45	0.23	-0.24	1.31	0.05	-0.63
MALAKOTE	-0.50	-0.86	-0.13	-0.70	2.02	1.63	-0.74	-0.06	0.92	1.58	0.02	-2.11	0.67	-0.53	2.86	1.82	-0.80	0.56
GIRIAMA	-1.11	2.44	0.21	1.15	-2.65	1.27	-0.05	0.10	-0.26	1.59	-0.75	0.61	-0.30	-0.73	-1.42	0.31	-0.16	1.83
CHONYI	-0.14	0.60	0.22	-1.48	-0.05	-0.67	0.77	0.19	-0.15	0.51	-0.56	0.44	-0.58	-2.09	0.45	-1.54	-1.49	-0.38
MIJI KUU KENDA	0.43	0.70	-0.63	-0.75	0.51	1.70	0.57	0.91	-1.23	0.04	0.26	1.14	-0.32	-0.14	1.13	1.75	2.53	2.72
DIGO	0.02	1.39	0.96	0.31	-0.05	1.01	-0.55	0.61	1.03	-1.04	-0.16	-0.80	0.98	0.73	-0.59	0.54	0.17	-0.80
TAITA	-1.35	-0.14	-0.97	-0.58	0.74	-0.97	0.13	1.70	0.13	0.16	-0.42	-1.19	0.08	-0.62	-0.87	1.96	0.47	1.14
TAVETA	-1.44	0.62	0.73	-1.56	-0.11	-0.23	0.80	0.28	-0.02	-1.20	-0.96	-1.51	0.60	3.15	-1.54	0.34	0.34	-0.81

Table Ap.3.18: Rotated component scores (females): based on 80 digital traits.

POPULATION	COMP1	COMP2	COMP3	COMP4	COMP5	COMP6	COMP7	COMP8	COMP9	COM10	COM11	COM12	COM13	COM14	COM15	COM16	COM17	COM18
SOMALI	0.87	-0.22	0.67	-0.62	0.55	1.90	-0.50	-0.33	-0.96	-0.01	0.90	-0.69	-0.59	1.07	0.17	-1.10	3.02	-0.65
RENDILLE	1.31	0.02	1.40	2.27	1.24	-0.40	-0.13	-1.27	-0.16	0.52	0.22	-1.30	-0.45	1.91	-0.35	2.01	-0.92	-0.83
GABBRA	0.07	0.43	0.47	0.93	1.32	1.86	-0.42	-0.12	-0.71	-0.44	1.17	0.11	0.28	0.67	-0.01	-0.19	0.09	-1.18
BORAN	-0.86	-0.07	1.02	-0.95	0.17	-0.52	0.06	1.38	0.25	-0.97	-0.74	-1.00	-0.24	0.56	-1.24	-0.66	-0.63	0.15
BURJI	1.19	0.03	-0.35	0.64	-0.27	1.27	0.46	-0.77	-0.41	-0.99	-0.57	-0.08	-1.15	-0.13	0.78	0.10	-0.19	1.51
SAMBURU	-0.51	0.48	0.69	0.93	0.39	0.38	-0.70	-1.07	0.20	0.46	0.11	-0.16	0.57	2.03	1.42	-0.54	-1.00	0.35
KADJIADO MAASAI	-0.25	0.00	-0.19	-0.18	-0.10	0.99	1.00	0.96	-0.30	0.34	-0.89	-0.83	-0.09	1.12	-0.32	0.72	-0.57	0.31
KONY	-2.08	0.00	-1.43	1.07	-1.86	-0.71	-1.26	-1.45	-0.54	-1.42	0.68	0.63	-2.84	1.70	0.06	-1.49	0.99	0.34
NANDI	-0.34	-0.66	0.54	1.10	-1.52	-0.18	0.30	0.45	0.40	0.45	-0.42	-1.97	-0.11	0.38	0.10	1.36	-0.45	0.12
KIPSIGIS	-0.41	0.14	0.15	0.09	0.16	-0.77	0.84	0.76	-0.47	2.23	-0.38	-0.65	-0.25	-0.06	-0.90	-0.77	0.97	-0.68
TUGEN	-0.45	-0.09	-0.36	0.19	1.02	-0.45	-0.95	-1.00	0.85	0.41	1.58	-0.03	-0.64	-1.03	0.22	0.20	0.42	-0.08
KEYO	-0.79	-1.28	-0.13	0.60	-0.79	-0.80	-0.24	-0.68	-0.46	0.14	1.10	-1.32	0.08	0.07	1.23	0.45	0.51	-0.47
MARAKWET	-1.08	0.09	-0.80	0.75	-0.33	2.22	-1.03	-1.96	-0.06	0.76	-1.45	0.11	-0.46	-0.45	-0.03	-0.18	-1.19	-0.41
POKOT	-1.49	0.80	-0.86	1.24	0.00	0.34	0.52	0.05	0.31	1.26	-0.03	-0.16	1.61	0.22	-0.03	0.63	0.55	0.50
ITESO	-0.60	1.50	-0.13	0.80	0.52	-1.26	-0.32	1.79	-0.10	0.02	-0.25	0.66	-1.76	0.53	-1.96	-0.48	-0.18	-0.28
TURKANA	-0.81	1.31	1.14	0.15	-0.22	0.31	0.81	-0.89	0.22	1.29	0.36	1.28	-0.20	0.04	-0.61	-0.83	-0.41	0.59
LUO	-0.72	1.37	0.38	-0.26	-0.57	0.88	-0.10	0.88	-0.10	0.16	0.85	-0.25	-0.15	-0.40	-0.45	-0.43	1.72	-0.31
GUSII	0.58	0.65	-0.01	0.90	0.92	0.21	-0.36	0.13	0.58	-0.87	-1.38	0.30	0.64	-1.04	-1.19	0.54	-0.28	1.23
TIRIKI	-0.95	-0.15	1.24	-1.18	1.51	-0.11	-0.09	1.58	-0.33	-1.44	1.06	1.86	-0.04	0.68	0.91	0.27	0.12	-1.72
MARAGOLI	0.87	1.50	-0.10	-0.06	-0.36	-1.41	-1.79	-1.67	0.54	0.83	1.24	0.37	0.97	-0.53	-1.09	0.07	-0.08	-0.71
BUNYORE	1.71	-0.25	-0.38	-3.91	1.05	-0.24	-0.93	-0.84	-0.85	1.41	0.27	-0.22	-0.46	0.86	-0.80	-1.22	-0.18	1.87
IDAKHO	0.66	-0.52	0.27	0.38	-0.15	-1.47	1.26	-0.98	-0.99	-0.29	1.01	-0.12	-1.80	-1.37	-1.43	-1.26	-0.44	1.48
MARAMA	0.22	0.31	1.62	-0.71	-0.64	2.31	-1.53	0.44	-0.94	0.34	-1.33	-1.86	0.61	-1.60	-0.33	-1.56	-0.99	-1.59
WANGA	0.31	1.11	-1.63	-1.41	-1.15	-1.40	-2.46	0.97	0.66	-0.48	-1.79	-1.71	-0.80	0.15	1.30	-0.13	-0.26	0.02
MARACH	-0.42	-1.66	0.47	0.10	-1.19	-0.72	-1.18	1.36	-0.01	0.45	1.67	-0.11	-0.32	-1.69	-1.01	2.49	0.41	-0.34
BUKHAYO	-1.07	0.06	-0.51	-0.32	1.10	0.78	-0.04	-0.69	-0.22	-0.96	0.45	0.50	1.18	-1.42	-1.30	-1.48	-0.59	-0.77
SAMIA	-1.94	0.52	1.86	-0.36	0.19	1.48	-0.73	1.28	0.32	0.62	0.41	0.34	0.19	-0.34	0.29	1.50	0.16	4.38
BUTSOTSO	-0.83	-0.66	0.41	0.62	-2.45	-0.82	0.94	-0.95	-0.82	-0.48	0.75	0.25	3.89	0.66	0.01	-1.84	-0.36	0.69
BUNYALA	0.47	0.53	0.94	-0.98	-0.56	0.54	0.96	-0.69	5.93	-1.06	-0.09	-0.18	-0.22	0.59	-0.14	-0.76	-0.09	-0.57
KABRAS	-0.70	-1.10	2.11	-1.36	0.22	-1.50	0.49	-1.40	-1.06	-0.20	-3.15	2.20	0.02	1.53	-0.82	1.59	0.18	-0.98
BUKUSU	-0.82	-0.45	-2.28	-2.15	-0.28	0.77	0.77	-0.08	0.03	2.18	1.56	0.08	-0.05	2.04	-0.15	1.59	-1.12	-0.80
KIAMBU KIKUYU	-0.59	-0.38	-0.19	0.15	-0.45	1.70	2.36	1.17	-0.46	-1.33	-0.38	0.80	-1.63	0.45	0.11	-0.12	0.30	-0.21
MURANGA KIKUYU	0.24	0.11	-1.44	0.19	0.58	-0.11	0.65	-0.73	0.77	0.66	-1.73	0.21	1.00	-0.25	0.26	0.61	4.81	0.50
NYERI KIKUYU	-1.27	0.23	-0.89	0.14	1.06	-1.27	-0.25	1.25	0.75	-1.73	-0.11	-1.00	1.22	0.49	0.55	-0.15	0.22	-0.53
NDIA	0.31	-0.05	0.03	0.55	0.36	0.50	-0.80	-0.47	-0.08	-0.63	0.15	-0.10	0.08	-0.54	-0.87	0.50	-0.04	0.34
KAMBA	-0.21	0.02	2.35	-0.45	1.11	-1.42	-0.53	-0.07	0.07	0.02	1.29	-0.42	0.22	-0.47	1.11	-0.45	0.31	0.36
EMBU	1.40	-1.74	0.05	0.53	0.18	-0.32	0.75	0.53	-0.26	-1.44	0.58	-0.17	0.18	0.09	-0.17	-0.91	0.31	-0.61
MBERE	-0.34	-1.24	-0.78	-0.50	0.91	-0.50	0.67	-0.16	0.29	-0.45	0.08	-0.36	1.12	-0.02	-1.13	-0.30	-0.03	0.34
CHUKA	1.28	-0.87	-0.76	0.06	0.97	0.96	-0.75	0.69	-0.57	-1.02	-0.38	0.12	0.83	0.26	1.06	0.62	-0.08	0.74
MUTHAMBE	0.48	-0.47	-1.55	0.40	0.55	0.70	-1.01	0.47	-0.50	-0.77	0.21	-0.60	0.18	0.32	0.25	0.39	-0.51	-0.48
MWIMBI	0.93	-1.64	-0.13	-0.76	-1.23	0.41	0.77	1.16	0.84	0.31	1.56	0.15	0.18	0.11	0.31	-0.04	-0.66	-0.18
IGOJI	0.69	-0.22	-0.03	0.21	-0.21	0.18	1.01	-0.25	-0.43	0.51	-0.72	0.44	0.18	-1.79	0.54	-0.38	0.34	-0.74
IMENTI	0.15	0.30	-1.93	0.39	0.40	-0.61	0.94	0.96	-0.56	-0.87	-0.30	-0.13	0.51	-0.11	-0.87	-0.58	-1.28	1.63
TIGANIA	-0.76	-0.35	-0.52	0.50	2.10	-1.27	-0.06	-0.13	-0.12	0.44	-1.20	-1.25	0.16	-0.45	-0.82	0.16	-0.23	-0.70
IGEMBE	-1.04	-2.09	0.16	0.20	0.47	-0.33	0.83	-0.01	0.74	1.68	-0.67	-0.21	-1.76	-2.69	1.95	-0.61	-0.26	-0.40
THARAKA	2.12	-0.70	0.57	0.17	0.48	-0.81	0.79	-0.78	-0.05	-0.46	-0.07	-0.73	-0.02	0.59	1.73	-0.04	0.04	1.44
POKOMO	0.58	-0.10	1.16	0.00	-1.87	-0.13	0.15	-0.43	-0.12	-0.05	-1.10	-0.36	-0.79	0.26	-0.12	-0.16	-0.46	-0.21
GIRIAMA	1.22	-0.60	-0.06	-0.62	-2.91	0.20	-1.10	0.52	-0.40	-0.45	-0.67	1.29	0.93	-0.42	-1.20	1.15	0.81	-0.50
CHONYI	-0.54	3.42	-0.16	-2.03	-0.53	-0.59	2.06	-1.52	-1.55	-1.91	0.58	-0.75	0.00	-1.79	2.03	2.15	-0.44	-0.71
MID MJI KENDA	-0.20	-0.47	-0.30	0.42	0.17	-0.77	-1.75	0.92	0.05	0.76	-0.87	3.19	0.43	-0.19	2.97	-1.08	-0.89	0.09
DIGO	2.54	2.62	0.47	1.57	-0.71	-0.71	0.17	2.09	-0.29	1.06	0.56	1.02	-0.19	0.28	0.41	-0.26	0.27	-0.30
TAITA	1.10	-0.31	-1.15	0.35	0.42	0.77	-0.39	-1.08	1.01	-0.71	0.62	2.33	-0.46	-1.07	-0.98	1.58	-0.85	-0.16
TAVETA	0.77	0.79	-1.14	0.21	0.21	-0.05	1.87	0.70	0.07	2.14	-0.36	0.46	0.22	0.18	0.56	-0.76	-0.91	-0.85

TABLE AP.3.19 :UNROTATED COMPONENT SCORES (MALES): BASED ON 32 PALMAR TRAITS.

POPULATION	COMP1	COMP2	COMP3	COMP4	COMP5	COMP6	COMP7	COMP8	COMP9	COMP10
SOMALI	-0.80	-0.06	-0.66	0.07	0.08	0.96	-0.66	0.58	-0.76	-0.36
REMDILLE	-0.75	-0.72	-0.55	-0.12	0.27	0.20	0.03	1.56	-0.25	-0.71
GABBRA	-1.42	0.53	-0.44	-0.29	1.25	0.77	2.40	-0.06	-0.39	2.19
BORAN	-1.46	0.34	0.09	0.49	0.66	0.70	0.36	1.04	0.12	-0.31
BURJI	-0.34	-1.54	-0.24	-1.37	0.70	1.13	-1.05	1.50	0.53	-0.28
SAMBURU	-1.06	-0.17	-1.24	0.00	-0.31	0.30	-1.58	-0.38	-0.24	-0.43
KADJIADO MAASAI	0.02	1.04	-1.27	-1.41	-1.54	-0.97	0.74	0.04	-0.45	-2.04
NAROK MAASAI	-1.13	1.31	-1.02	-1.22	-0.46	-0.56	0.62	-0.51	0.12	-0.50
NGUESI	-1.09	-0.87	0.83	1.09	-0.53	0.86	1.49	-1.54	1.24	-2.01
NUKOGODO	-0.70	0.04	-0.49	-1.51	0.08	0.39	-0.19	2.04	-0.25	0.19
KONY	-1.34	0.48	1.25	-0.36	0.13	0.03	0.59	-1.32	-1.45	-1.39
NANDI	-0.56	-0.06	0.20	0.34	-0.09	-0.17	0.79	0.01	-0.48	-0.52
KIPSIGIS	-0.39	-0.77	0.13	-0.52	-1.14	-0.99	0.17	-0.04	-0.10	0.66
TUGEN	-1.91	1.09	0.62	0.32	0.25	-0.27	-0.20	-0.41	0.04	1.13
KEYO	-0.91	1.10	0.26	0.72	0.37	-0.57	-0.88	-0.09	0.87	-1.14
MARAKWET	-0.61	-0.10	0.28	-1.17	-0.13	-0.25	0.72	-0.43	0.14	-0.47
POKOT	-0.55	0.30	0.65	-0.04	-1.87	-1.75	0.75	0.61	-1.19	-0.55
ITESO	0.64	0.50	-0.31	0.04	0.85	-0.23	0.87	0.63	1.14	-1.11
TURKANA	0.50	-0.24	0.42	0.24	0.96	0.02	0.51	-0.14	0.54	-1.44
LUO	1.46	0.04	0.29	-0.00	0.53	0.16	0.32	-0.36	0.67	-0.51
GUSII	0.32	-0.00	0.46	0.51	0.29	-1.48	-1.44	-0.63	1.16	0.03
TIRIKI	0.63	0.70	0.40	-0.10	0.06	-1.13	-0.22	-1.41	-0.14	1.37
NARAGOLI	-0.24	-0.26	-0.10	-1.00	-2.16	3.25	1.05	-2.01	1.09	1.39
BUNYORE	0.76	-1.00	-0.51	-1.50	0.47	-1.67	0.03	-0.55	-0.32	-0.01
IDAKHO	1.49	0.65	-1.92	0.04	-1.33	0.22	-1.11	-2.04	-0.03	-0.14
NARAMA	1.50	0.52	1.04	-2.40	0.32	-2.20	0.42	-0.33	0.32	2.33
WANGA	0.95	0.10	2.26	0.37	1.00	0.14	-0.63	1.52	-0.44	0.93
NARACH	1.35	0.15	0.51	-2.10	-0.34	1.13	0.25	-0.55	1.11	-2.24
BUKHAYO	-0.32	1.95	-2.19	0.54	2.64	0.25	-0.20	-0.36	2.39	0.15
SANIA	-0.79	-0.35	1.36	-0.07	0.75	1.72	-3.06	-0.53	-2.39	-0.75
BUTSOTSO	2.32	1.71	-1.76	-0.47	2.27	0.51	0.92	0.34	-2.70	-0.07
BUNYALA	2.05	2.11	0.95	-0.99	0.40	0.09	-1.91	-1.66	0.35	0.30
KABRAS	-0.10	0.69	-0.77	0.04	-1.32	-2.41	-1.14	2.04	0.04	-0.96
BUKUSU	-0.21	-1.36	0.12	0.93	0.70	-0.43	1.34	-1.06	-0.40	-0.64
KIAMBU KIKUYU	-0.37	0.00	0.24	0.95	1.32	-0.09	0.09	0.41	0.05	-0.69
MURANGA KIKUYU	0.73	1.10	2.74	0.03	-0.00	1.06	0.05	1.30	1.19	0.70
NYERI KIKUYU	-0.50	0.41	0.26	-1.59	-2.07	0.07	-0.51	0.94	-1.31	0.50
NDIA	0.04	-0.44	0.60	0.52	0.00	-0.39	0.13	-0.45	-0.26	-0.40
KAMBA	0.33	0.51	-0.15	1.20	0.26	0.43	0.57	0.05	0.11	-0.16
EMBU	-0.57	-0.61	-0.24	0.52	1.17	-1.12	0.45	0.76	-0.10	0.63
MBERE	0.63	-0.92	0.67	1.10	-0.92	-0.72	0.10	0.21	0.12	-0.43
CHUKA	-1.70	-0.71	-0.91	-0.39	0.91	-1.64	-0.33	-1.00	-0.72	0.47
MUTHAMBE	-0.03	0.70	-0.42	0.65	-2.00	0.20	-1.14	-0.13	0.69	1.27
MWIMBI	-0.05	0.07	0.41	0.50	-0.20	-0.31	-0.45	0.64	-1.32	0.30
IGOJI	0.34	-0.30	-2.15	1.06	-1.60	-0.09	-1.26	-0.22	1.60	0.01
IMENTI	-0.59	-2.23	-1.61	-2.50	0.00	0.05	-0.95	0.29	0.75	0.66
TIGANIA	-0.37	0.60	1.05	0.30	0.47	0.30	-1.19	0.50	1.72	-0.22
IGEMBE	-1.04	-1.02	0.49	0.71	0.60	0.23	-1.04	-0.67	0.35	2.37
THARAKA	-0.11	0.93	1.12	0.40	-0.45	0.20	1.19	-1.05	-0.36	0.16
POKOMO	-0.27	-0.27	-0.30	0.07	-0.10	-0.04	0.93	-0.06	-0.00	0.13
MALAKOTE	1.36	-1.06	-0.46	-0.61	-0.72	0.27	0.55	1.56	1.66	-0.59
GIRIAMA	0.33	-1.69	0.44	0.62	-0.24	0.17	-0.34	0.46	0.22	0.40
CHONYI	1.05	-2.09	0.06	1.29	0.09	-0.93	1.23	-0.15	0.33	0.06
MID MJI KENDA	1.06	-1.03	-0.02	1.17	0.51	0.95	-1.30	-0.59	-1.99	-0.91
DIGO	0.46	0.11	1.03	-0.07	0.15	1.06	0.92	0.41	-0.42	-0.05
TAITA	1.10	0.97	-1.90	1.34	-1.04	1.76	1.16	1.31	-1.44	1.31
TAVETA	0.07	-0.95	0.44	0.60	-0.12	-0.14	1.11	0.75	-0.63	0.71

TABLE AP.3.20 :UNROTATED COMPONENT SCORES (FEMALES): BASED ON 32 PALMAR TRAITS.

POPULATION	COMP1	COMP2	COMP3	COMP4	COMP5	COMP6	COMP7	COMP8	COMP9	COM10
SOMALI	-0.38	-0.70	-1.05	-0.03	0.44	-0.21	-1.07	-0.12	-0.00	0.70
RENDILLE	0.67	-1.78	-1.47	1.43	2.05	0.31	-1.23	2.54	0.52	0.14
GABBRA	-0.82	-1.24	-0.59	-0.17	-1.09	-0.78	-0.16	-0.14	0.14	-0.38
BORAN	-1.24	-1.02	0.44	-0.29	-1.25	-0.33	-0.81	-0.27	0.01	-1.77
BURJI	-0.35	-0.35	-0.48	0.48	-0.66	0.95	-0.44	0.76	-0.36	-0.33
SAMBURU	-0.14	-0.09	-0.41	0.51	0.11	-0.46	-0.96	0.42	-0.07	-0.38
KADJIADO MAASAI	0.45	0.57	-0.54	0.61	0.88	0.69	-0.35	-0.34	0.09	0.25
KONY	-0.68	-2.06	0.56	-2.38	0.36	1.72	-0.56	0.22	-1.85	-0.53
NANDI	-0.49	-0.16	-0.57	-1.42	0.34	0.06	0.38	-1.11	-0.63	0.32
KIPSIGIS	-0.00	-0.43	-0.10	-0.35	-0.63	0.00	0.29	0.89	1.30	-0.96
TUGEN	-0.97	0.22	-0.49	0.07	0.57	-0.34	0.27	0.91	-0.02	0.97
KETO	-0.22	0.53	0.37	-0.35	0.02	0.03	0.77	-1.96	-0.33	-0.05
MARAKWET	-0.05	0.26	-0.55	-0.09	-0.04	-0.04	0.54	0.35	0.34	-0.03
POKOT	-1.07	1.08	-0.40	-0.09	0.06	1.39	-0.09	0.00	-0.31	0.60
ITESO	0.22	-0.40	0.02	1.05	1.07	-0.09	0.04	0.56	-2.04	-0.38
TURKANA	0.91	-0.05	0.16	1.28	-0.71	0.02	0.40	-1.01	0.28	-0.02
LUO	1.50	0.34	-0.06	-0.46	-1.28	-0.19	0.29	-0.55	-0.19	-0.17
GUSII	1.22	1.21	0.35	-0.12	-1.97	-1.34	-0.95	-0.15	0.30	-0.75
KIRIKI	1.38	0.69	1.85	-0.29	2.60	1.66	0.04	0.19	0.11	-0.35
MARAGOLI	0.04	0.78	0.45	2.38	-0.10	-0.06	-0.24	-1.53	-2.79	-0.40
BUNYORE	-1.50	0.45	0.72	-0.35	-1.36	2.49	2.06	-0.09	0.90	0.35
IDAKHO	3.10	0.09	-2.59	-1.63	1.48	0.42	1.49	-2.38	0.99	-0.61
MARAMA	0.90	1.35	-0.45	2.81	-0.23	-0.16	-0.00	0.46	1.06	0.10
WANGA	-0.13	1.85	-0.27	0.40	-0.00	-0.02	1.00	1.01	-0.14	-0.03
MARACH	-0.07	0.35	0.04	1.60	1.73	-1.19	0.67	-1.07	-0.00	-0.77
BUKHAYO	0.46	1.34	-0.39	-1.00	-0.02	-0.63	1.05	0.95	-1.66	3.34
SAMIA	0.11	1.93	-1.50	-0.00	0.72	0.90	-0.47	-0.76	1.00	0.65
BUTSOTSO	-0.34	0.44	-0.43	0.57	0.15	-0.79	2.49	0.46	-1.30	-0.06
BUNYALA	-0.59	-0.33	1.77	0.34	-0.22	-1.72	0.06	-0.53	-0.20	-0.40
KABRAS	1.91	0.73	1.01	-1.15	0.03	-1.34	-0.75	1.00	-1.60	-1.45
BUKUSU	0.37	-3.50	0.21	1.14	-0.23	0.20	-0.53	-2.57	-0.03	1.00
KIAMBU KIKUYU	-0.65	0.12	-1.53	-0.17	0.59	0.65	0.02	1.77	0.05	-0.90
MURANGA KIKUYU	-0.57	1.14	-0.29	0.15	-0.32	1.42	-1.72	-0.33	-0.31	0.64
NYERI KIKUYU	-0.51	0.06	-1.50	-1.34	-0.16	-2.55	-0.66	-0.70	-0.41	-1.12
NDIA	-0.70	0.27	0.04	-1.23	0.24	-0.35	1.24	0.69	-0.00	-0.00
KAMBA	-0.40	0.26	-0.43	0.69	0.72	-0.05	0.64	0.40	0.15	2.09
EMBU	-0.52	-0.05	0.65	-0.27	0.07	-1.10	0.45	-0.03	0.12	0.77
MBERE	-0.40	-0.61	-0.53	0.00	-1.26	-0.37	-0.09	-0.69	0.07	0.76
CHUKA	-0.92	-1.12	-0.05	-0.12	0.37	0.16	0.31	-0.90	1.35	0.23
MUTHAMBE	-0.10	0.53	0.41	0.03	-0.44	-0.27	-1.64	0.26	0.42	-0.35
MWIMBI	-0.23	0.60	0.02	1.36	-1.19	1.15	-0.99	-0.54	0.14	-0.94
IGOJI	-0.60	-1.10	0.46	1.12	0.29	-0.29	1.04	0.04	0.90	0.41
IMENTI	0.64	-1.30	-1.91	0.10	-1.01	-1.39	-0.43	1.10	0.00	1.03
TIGANIA	0.71	-0.27	1.39	-0.51	1.73	-0.46	-1.10	0.02	-1.20	1.64
IGEMBE	-0.03	0.53	1.00	0.91	1.31	0.03	0.41	0.12	1.47	-1.79
THARAKA	-1.66	1.35	1.11	-0.44	-0.35	-0.42	-0.39	-0.61	-0.13	2.50
POKOMO	0.10	-0.40	0.14	-0.67	-0.06	0.50	0.00	1.23	-1.30	-0.95
GIRIAMA	1.03	-0.07	0.10	1.07	-0.07	0.44	3.17	0.70	0.05	0.30
CHONYI	1.71	-0.14	2.01	-1.14	-0.02	-1.37	0.10	0.46	2.59	0.90
MID NJI KENDA	0.00	-0.23	1.67	-1.04	1.63	-0.47	-0.12	-0.06	1.43	-0.22
DIGO	0.16	-0.24	0.90	-0.61	-1.00	0.94	-0.15	0.41	0.15	-0.55
TAITA	2.30	-0.71	0.10	-0.03	-2.02	2.23	-0.53	0.99	-0.49	0.44
TAVETA	-0.26	0.90	-1.21	-0.02	-0.27	0.30	-1.90	-0.64	0.96	-0.41

Table Ap.3.21: Rotated component scores(males): based on 32 palmar traits.

POPULATION	COMP1	COMP2	COMP3	COMP4	COMP5	COMP6	COMP7	COMP8	COMP9	COMP10
SOMALI	-0.63	-0.68	0.11	0.44	-0.33	0.96	0.01	0.00	-0.39	-1.12
RENDILLE	-1.05	-0.97	-0.33	0.23	-0.94	0.80	0.45	-0.74	0.13	-0.12
GABBRA	-0.46	-0.38	0.47	0.34	1.11	0.52	-0.52	-0.91	-3.02	1.74
BORAN	-1.58	-0.09	-0.21	-0.43	-0.09	1.17	-0.14	-0.40	-0.56	0.03
BURJI	-0.95	-1.28	-1.03	0.63	-0.38	0.56	2.39	0.19	-0.03	-0.44
SAMBURU	-0.91	-1.02	0.42	0.63	-0.07	-0.17	-0.35	0.86	0.20	-1.54
KADJIADO MAASAI	-0.23	0.44	0.16	2.44	-1.24	0.22	-1.42	0.04	1.66	0.59
NAROK MAASAI	-1.10	0.41	0.36	1.84	0.06	-0.25	-1.22	0.32	0.03	0.66
NGWESI	-0.35	-0.66	-1.70	-1.20	0.86	1.23	-1.87	1.33	1.12	1.15
MUKOGODO	-1.15	-0.16	-0.25	1.35	-1.22	0.47	1.26	-0.55	-0.79	-0.02
KONY	-0.17	0.63	-1.70	0.66	1.03	0.54	-2.00	-0.58	0.06	-0.66
NANDI	-0.15	-0.12	-0.43	-0.12	-0.13	0.40	-0.93	-0.54	0.02	0.25
KIPSIGIS	0.27	-0.38	-0.62	0.25	-0.94	-1.35	-0.39	0.08	-0.38	0.35
TUGEN	-1.35	0.77	-0.01	-0.41	0.56	-0.71	-0.93	0.10	-1.60	-0.36
KEYO	-1.69	0.87	0.21	-0.60	0.36	-0.06	-0.55	0.30	1.03	-0.57
MARAKWET	-0.29	0.00	-1.04	0.93	0.26	-0.22	-0.41	0.04	0.09	0.73
POKOT	0.15	0.81	-0.75	0.39	-2.01	-0.75	-1.77	-0.94	0.24	0.13
ITESO	-0.63	0.39	0.46	-0.10	0.26	0.79	0.49	-0.41	1.28	1.32
TURKANA	-0.06	0.06	-0.47	-0.43	0.81	0.77	0.21	-0.42	1.43	0.55
LUO	0.79	0.45	0.10	-0.20	0.72	0.34	0.70	0.10	1.01	0.66
GUSII	-0.41	0.42	0.24	-1.03	0.48	-1.78	0.38	0.37	1.15	-0.47
TIRIKI	0.94	0.94	0.61	-0.04	0.90	-1.73	-0.36	-0.01	-0.46	-0.01
MARAGOLI	1.46	-0.50	-0.69	0.38	0.48	0.97	-0.40	3.76	-2.09	1.16
BUNYORE	0.83	-1.36	-0.69	1.15	0.32	-1.83	0.67	-0.97	0.94	0.48
IDAKHO	1.89	-0.40	2.12	0.56	0.20	-0.24	-1.22	1.44	0.93	-1.34
MARAMA	1.18	1.74	-0.12	1.22	0.42	-3.03	1.39	-0.92	-0.77	1.48
WANGA	0.43	1.53	-0.65	-1.43	-0.13	0.15	1.79	-1.34	-0.76	-0.70
MARACH	0.53	0.84	-1.39	1.72	0.55	1.17	0.94	1.35	1.98	0.82
BUKHAYO	-2.39	0.11	2.96	-0.10	2.31	0.40	0.83	0.55	0.43	0.90
SAMIA	0.09	0.01	-1.51	0.18	0.95	0.86	0.37	-0.05	-0.41	-4.21
BUTSOTSO	1.64	0.46	2.47	1.96	1.21	1.83	0.52	-2.70	-0.02	-0.35
BUNYALA	1.17	2.64	0.77	0.71	1.69	-0.85	1.04	1.12	0.71	-1.22
KABRAS	-1.27	0.53	1.11	-0.26	-2.75	-1.06	-0.37	-0.80	1.62	-0.65
BUKUSU	0.77	-1.34	-0.71	-0.77	1.57	-0.08	-1.51	-0.62	0.58	0.65
KIAMBU KIKUYU	-1.33	0.63	0.47	-0.98	0.75	0.67	0.08	-0.46	0.56	0.24
MURANGA KIKUYU	0.25	2.70	-1.05	-1.32	-0.93	0.68	1.27	0.90	-0.85	0.51
NYERI KIKUYU	0.23	0.66	-0.79	1.72	-2.06	-0.37	-0.19	0.28	-1.13	-0.83
NDIA	0.34	-0.07	-0.56	-0.59	0.20	-0.14	-0.55	-0.30	0.49	-0.14
KAMBA	-0.12	0.22	0.81	-0.97	-0.36	1.14	-0.03	-0.41	0.03	0.32
EMBU	-0.75	-0.73	0.29	-0.68	0.06	-0.64	0.19	-1.54	-0.38	0.45
MBERE	0.75	-0.17	-0.48	-1.30	-0.98	-0.34	-0.34	-0.09	0.89	0.11
CHUKA	-0.77	-1.41	-0.02	0.72	1.46	-2.02	-1.36	-0.68	-0.31	-0.52
MUTHAMBE	0.18	0.51	1.09	-0.44	-1.23	-0.75	-0.25	1.98	-0.77	-0.58
MWIMBI	-0.43	0.69	0.17	-0.18	-0.67	0.01	-0.74	-0.86	-0.90	-1.17
IGOJI	-0.05	-1.34	2.31	-1.23	-1.17	-0.85	-0.12	2.18	0.46	-0.21
IMENTI	-0.77	-2.56	-0.62	1.91	0.47	-0.63	2.35	0.72	-0.52	0.09
TIGANIA	-1.40	1.06	-0.28	-1.10	0.30	0.05	1.08	0.94	0.32	-0.30
IGEMBE	-0.26	-0.88	-0.08	-1.44	0.93	-1.39	0.56	0.50	-1.97	-0.73
THARAKA	0.73	1.16	-0.42	-0.40	0.55	0.40	-1.41	0.16	-0.62	0.51
POKOMO	0.12	-0.55	0.24	-0.59	-0.17	0.23	-0.79	-0.20	-0.26	0.60
MALAKOTE	0.21	-0.52	-0.15	0.01	-1.46	0.49	1.71	0.62	1.16	1.61
GIRIAMA	0.57	-1.03	-0.62	-1.19	-0.57	-0.29	0.78	0.10	-0.11	-0.14
CHONYI	2.01	-1.31	0.21	-1.77	-0.17	-0.80	0.44	-0.78	0.48	1.44
MID MUI KENDA	2.33	-1.46	-0.18	-0.70	0.45	0.94	0.49	-0.65	1.14	-2.25
DIGO	0.70	0.60	-0.74	-0.20	0.06	1.25	0.27	-0.33	-0.53	0.34
TAITA	1.48	-0.36	2.51	0.10	-1.61	2.11	-0.29	-0.15	-1.67	0.16
TAVETA	0.67	-0.57	-0.39	-0.87	-0.72	0.15	-0.12	-1.02	-0.60	0.82

Table Ap.3.22: Rotated component scores(females): based on 32 palmar traits.

POPULATION	COMP1	COMP2	COMP3	COMP4	COMP5	COMP6	COMP7	COMP8	COMP9	COMP10
SOMALI	-0.71	-0.29	-0.08	0.46	0.43	-0.74	0.15	-0.51	-1.29	-0.08
RENDILLE	-1.42	0.08	2.36	2.31	0.07	-1.64	0.13	-0.42	-1.35	-0.97
GABBRA	-1.45	-0.46	-0.80	-0.93	-0.07	-1.06	-0.26	-0.36	0.35	1.23
BORAN	-0.47	-0.31	-1.68	-0.75	0.13	-0.93	0.29	-1.28	1.02	-0.65
BURJI	0.20	-0.37	0.32	-0.33	0.92	-0.79	-0.19	-0.19	-0.04	-0.29
SAMBURU	-0.25	-0.16	-0.16	0.34	-0.47	-1.79	-0.54	0.38	0.14	1.11
KADJIADO MAASAI	0.76	-0.01	0.73	0.98	0.60	0.07	0.71	-0.04	-0.45	-0.43
KONY	-0.97	-1.68	-2.21	0.42	1.14	0.64	-0.85	0.85	-0.79	-1.55
NANDI	-0.35	-0.94	-1.23	-0.07	0.12	0.81	0.27	0.53	-0.77	0.68
KIPSIGIS	-0.36	0.19	-0.15	-0.17	-0.22	0.07	-0.16	-1.32	0.58	0.64
TUGEN	0.13	-0.40	0.91	-0.18	-0.59	0.33	-0.18	-0.87	-1.38	-0.39
KEYO	0.92	-0.60	-0.58	-0.22	0.92	1.76	1.24	-0.36	0.29	-1.13
MARAKWET	0.31	-0.28	-0.47	-0.22	-0.39	0.65	0.69	-0.88	-0.33	0.19
POKOT	1.73	-1.45	-0.10	0.63	0.59	-0.04	-0.54	-1.09	-1.31	-0.30
ITESO	-0.04	-1.18	0.69	0.16	-0.66	-1.03	0.27	1.44	-0.16	-1.21
TURKANA	0.29	0.44	0.92	-0.27	1.44	0.45	1.00	-0.16	1.04	-0.91
LUO	0.08	1.43	-0.36	-0.90	0.69	0.56	0.96	0.71	0.22	-0.28
GUSII	0.82	2.68	-0.80	-1.25	0.00	-0.51	1.03	-0.39	0.32	-0.75
TIRIKI	1.16	-0.04	0.24	2.86	-0.29	1.24	-0.87	1.49	0.82	-0.88
MARAGOLI	1.25	-0.85	0.53	-0.87	0.30	-1.45	1.25	1.88	0.92	-1.77
BUNYORE	0.86	-1.54	0.22	-1.06	1.20	1.64	-1.94	-0.21	1.56	2.23
IDAKHO	-0.83	0.81	-0.33	1.98	1.01	2.19	3.49	1.76	-0.41	1.94
MARAMA	0.90	1.34	2.18	0.72	0.02	-2.04	-0.38	-0.32	1.25	1.88
WANGA	1.41	0.46	0.63	-1.30	-1.35	-0.33	0.41	0.23	0.38	0.97
MARACH	0.26	-1.88	0.20	0.46	-1.61	-0.53	1.40	0.14	0.97	-0.10
BUKHAYO	0.51	0.70	1.03	-2.22	-0.18	1.42	-0.99	1.30	-2.89	-0.20
SAMIA	1.44	0.12	-0.27	1.26	0.58	0.24	0.06	0.12	-1.03	2.58
BUTSOTSO	0.28	-1.17	1.04	-1.47	-1.54	0.70	1.40	0.76	0.28	-0.24
BUNYALA	-0.55	-0.04	-0.81	-0.72	-1.62	-0.40	-0.62	-0.13	1.30	-0.54
KABRAS	0.27	1.41	-1.54	0.04	-1.74	-1.15	-0.33	2.73	0.31	-0.03
BUKUSU	-3.25	-1.09	-0.25	0.31	1.94	-0.63	-0.20	0.23	1.20	-0.30
KIAMBU KIKUYU	0.20	-1.03	0.77	0.32	-0.54	-0.37	0.19	0.14	-0.50	1.42
MURANGA KIKUYU	1.58	-0.31	-0.47	0.33	1.41	-1.04	-0.93	-0.08	-0.67	0.44
NYERI KIKUYU	-0.71	0.31	-1.95	-0.63	-1.46	-0.89	1.91	-0.48	-1.19	0.62
NDIA	0.17	-0.41	-0.51	-0.38	-1.19	1.11	0.34	-0.19	-0.15	0.12
KAMBA	-0.07	0.14	1.88	-0.38	-0.52	0.99	0.27	-1.15	-1.76	-1.20
EMBU	-1.33	-0.49	-0.54	-0.37	-0.82	0.22	-0.84	0.09	0.37	0.72
MBERE	-0.77	0.07	-0.22	-1.17	0.78	-0.11	0.11	-0.62	-0.32	0.22
CHUKA	-0.96	-0.50	-0.05	0.54	0.47	1.00	0.35	-1.74	0.21	-0.22
MUTHAMBE	0.74	1.06	-0.62	0.19	0.14	-0.85	-0.12	-1.03	-0.17	-0.83
MWIMBI	1.42	0.19	-0.09	-0.28	1.31	-0.94	0.01	-0.71	1.51	-0.83
IGOJI	-1.08	-0.47	1.55	-0.09	-0.51	0.28	-0.63	-0.97	0.67	-0.15
IMENTI	-2.05	1.47	0.99	-0.76	0.36	-0.76	0.64	-0.86	-1.58	0.31
TIGANIA	-0.48	0.04	-0.18	1.23	-1.06	-0.50	-2.25	1.83	-1.13	-0.72
IGEMBE	1.01	-0.19	0.48	1.34	-1.15	0.55	0.77	-1.79	1.59	-1.01
THARAKA	1.04	-0.27	-0.42	-1.01	-0.34	0.65	-2.01	-0.83	-1.12	0.13
POKOMO	0.06	-0.39	-0.45	-0.22	-0.12	-0.26	-0.15	0.92	-0.23	-0.79
GIRIAMA	-1.23	-0.44	2.19	-1.35	-0.07	1.02	-0.45	1.63	1.68	1.46
CHONYI	-0.98	3.29	-0.17	0.80	-1.12	1.96	-1.61	-0.62	1.00	-0.58
MIJIKENDA	-0.44	0.49	-0.80	1.87	-1.33	1.05	-0.98	-0.42	0.69	-0.03
DIGO	0.27	0.56	-0.61	-0.32	0.84	0.50	-0.52	-0.20	0.66	-0.82
TAITA	-0.14	1.51	0.54	-0.56	2.89	-0.11	-0.80	1.58	0.26	-0.68
TAVETA	0.82	0.48	-1.46	0.90	0.78	-1.22	0.00	-0.52	-0.55	1.93

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