

TDC 68 147 Mount Vale – A – Middle Adult Male – almost complete skeleton

Howells unweighted stepwise - using cranium only

 FORDISC 3.0 Analysis of Current Case

TDC 147 MV A

DF results using 14 Forward % selected (min: 1 max: 20, out of 19) variables:

AUB XCB BBH NLB DKB GOL NLH FOL MAB OBB
 OBH BPL OCC ZYB

From Group	Total Number	Into Group														Percent Correct
		BERM	BM19	BM20	BUSM	DOGM	EGYM	GTM20	NORM	TEIM	WM19	WM20	ZALM	ZULM		
BERM	56	40	1	0	1	1	2	0	4	0	3	2	2	0	71.4 %	
BM19	74	0	42	6	0	3	0	2	1	10	5	1	2	2	56.8 %	
BM20	100	2	13	47	0	2	5	5	4	3	1	7	2	9	47.0 %	
BUSM	41	0	1	0	34	1	0	0	0	2	0	0	1	2	82.9 %	
DOGM	47	0	2	1	0	39	0	0	0	3	0	0	0	2	83.0 %	
EGYM	58	0	1	1	1	0	30	2	7	0	2	4	9	1	51.7 %	
GTM20	74	2	1	2	0	1	0	65	0	1	1	1	0	0	87.8 %	
NORM	55	3	1	2	0	1	4	0	30	1	2	2	9	0	54.5 %	
TEIM	33	0	2	1	0	1	0	1	1	26	0	0	0	1	78.8 %	
WM19	98	4	5	2	0	0	7	4	4	0	65	4	3	0	66.3 %	
WM20	221	5	0	6	0	0	12	3	4	1	15	163	10	2	73.8 %	
ZALM	53	6	3	1	2	0	4	1	7	0	3	4	22	0	41.5 %	
ZULM	55	0	1	5	1	6	4	0	0	7	0	0	0	31	56.4 %	

 Total Correct: 634 out of 965 (65.7 %) *** CROSSVALIDATED ***

Multigroup Classification of Current Case

Group	Classified into	Distance from	Probabilities			
			Posterior	Typ F	Typ Chi	Typ R
EGYM	**EGYM**	12.8	0.296	0.766	0.540	0.373 (37/59)
NORM		13.5	0.216	0.745	0.490	0.250 (42/56)
WM19		13.9	0.171	0.611	0.455	0.495 (50/99)
ZALM		15.1	0.097	0.671	0.373	0.111 (48/54)
BM20		15.6	0.076	0.505	0.341	0.495 (51/101)
BM19		16.2	0.054	0.523	0.299	0.453 (41/75)
WM20		16.7	0.044	0.347	0.275	0.369 (140/222)
BERM		17.3	0.032	0.540	0.242	0.211 (45/57)

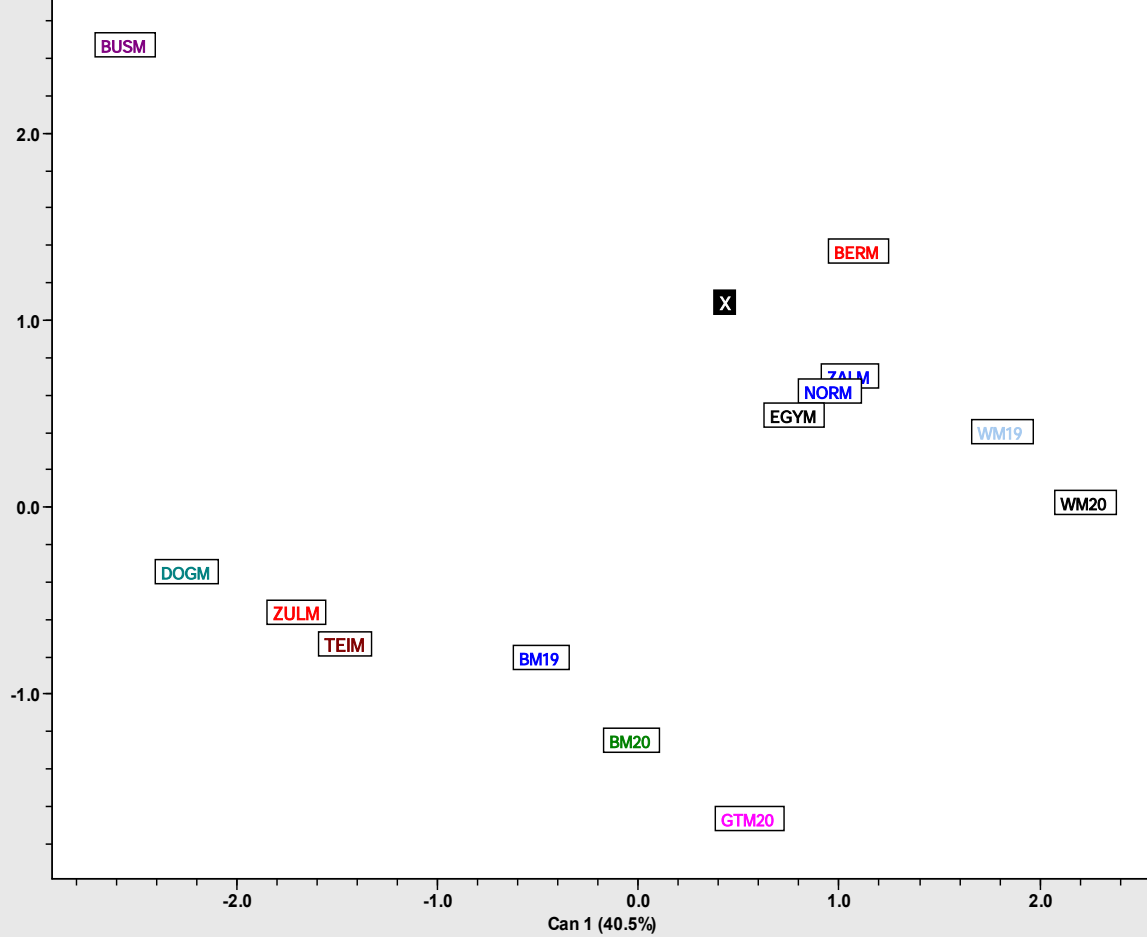
TEIM	20.9	0.005	0.608	0.105	0.029 (33/34)
ZULM	21.7	0.004	0.344	0.085	0.036 (54/56)
DOGM	21.8	0.003	0.398	0.083	0.000 (48/48)
BUSM	23.2	0.002	0.407	0.057	0.024 (41/42)
GTM20	29.1	0.000	0.083	0.010	0.000 (75/75)

Current Case is closest to EGYMs

		Group Means												
Current Case	Chk	BERM 56	BM19 74	BM20 100	BUSM 41	DOGM 47	EGYM 58	GTM20 74	NORM 55	TEIM 33	WM19 98	WM20 221	ZALM 53	ZULM 55
AUB	118	127.5	119.9	121.0	113.2	115.3	118.6	123.6	124.7	117.4	123.5	123.2	123.7	116.2
XCB	142	147.6	137.6	136.5	133.6	137.5	139.2	135.4	141.9	129.8	142.7	140.2	141.4	134.1
BBH	130	130.3	130.5	135.7	122.5	132.1	133.7	133.2	131.7	129.1	133.9	141.6	134.8	133.7
NLB	22	-	25.5	25.8	26.1	27.2	28.4	24.8	25.6	25.4	27.8	23.5	23.8	25.4
DKB	24		22.9	25.2	24.0	21.7	23.5	20.9	21.6	22.3	24.2	23.2	21.1	21.4
GOL	182		180.3	186.6	186.8	178.4	177.7	185.6	173.5	188.5	184.0	183.1	188.2	185.1
NLH	48		51.7	51.2	51.8	43.8	47.7	51.7	51.7	52.0	50.2	52.8	52.8	51.4
FOL	33	-	39.0	35.8	36.9	37.1	35.0	35.7	35.8	36.5	36.1	36.3	37.2	37.3
MAB	60		63.9	66.0	66.7	60.0	64.4	62.8	64.5	63.6	62.8	59.6	61.5	64.2
OBB	41		40.1	38.6	40.7	39.3	39.6	39.5	38.9	40.4	39.5	38.1	41.0	40.4
OBH	32		33.8	34.2	35.0	30.8	33.7	32.9	36.2	33.7	33.2	33.2	33.7	32.7
BPL	98		93.8	103.0	103.7	93.7	100.0	96.5	97.9	97.0	102.5	94.9	97.4	102.4
OCC	95		94.0	92.1	97.7	88.6	94.5	97.5	96.0	97.3	93.7	93.5	100.6	96.2
ZYB	129		135.6	131.9	131.6	123.6	129.6	128.8	131.5	134.4	131.1	132.1	130.1	133.0

Natural Log of Determinant = 32.8466

Can 2 (21.0%)



Howells stepwise unweighted using cranial and mandibular metrics

 FORDISC 3.0 Analysis of Current Case
 TDC 147 MV A

DF results using 15 Forward % selected (min: 1 max: 20, out of 19) variables:

AUB BBH XCB NLB DKB PAC GOL NLH MAB OBB
 BPL BNL OBH ZYB FOL

From Group	Total Number	Into Group												Percent Correct
		BERM	BM19	BM20	BUSM	DOGM	EGYM	NORM	TEIM	WM19	WM20	ZALM	ZULM	
BERM	56	37	1	0	1	1	2	6	0	3	1	4	0	66.1 %
BM19	74	0	52	6	0	1	2	0	9	3	0	1	0	70.3 %
BM20	100	2	13	49	1	1	4	5	6	1	5	3	10	49.0 %
BUSM	41	0	0	1	34	1	0	1	1	0	0	0	3	82.9 %
DOGM	47	0	0	1	0	39	0	0	3	0	0	0	4	83.0 %
EGYM	58	0	2	1	1	0	30	5	0	1	3	13	2	51.7 %
NORM	55	3	1	2	0	1	4	29	1	2	2	10	0	52.7 %
TEIM	33	0	3	0	0	1	0	1	27	0	0	0	1	81.8 %
WM19	98	5	7	1	0	0	6	4	0	70	2	3	0	71.4 %
WM20	221	5	0	5	0	0	10	4	1	22	163	10	1	73.8 %
ZALM	53	7	1	1	2	0	4	13	0	2	2	21	0	39.6 %
ZULM	55	0	1	4	1	6	3	0	8	0	0	1	31	56.4 %

 Total Correct: 582 out of 891 (65.3 %) *** CROSSVALIDATED ***

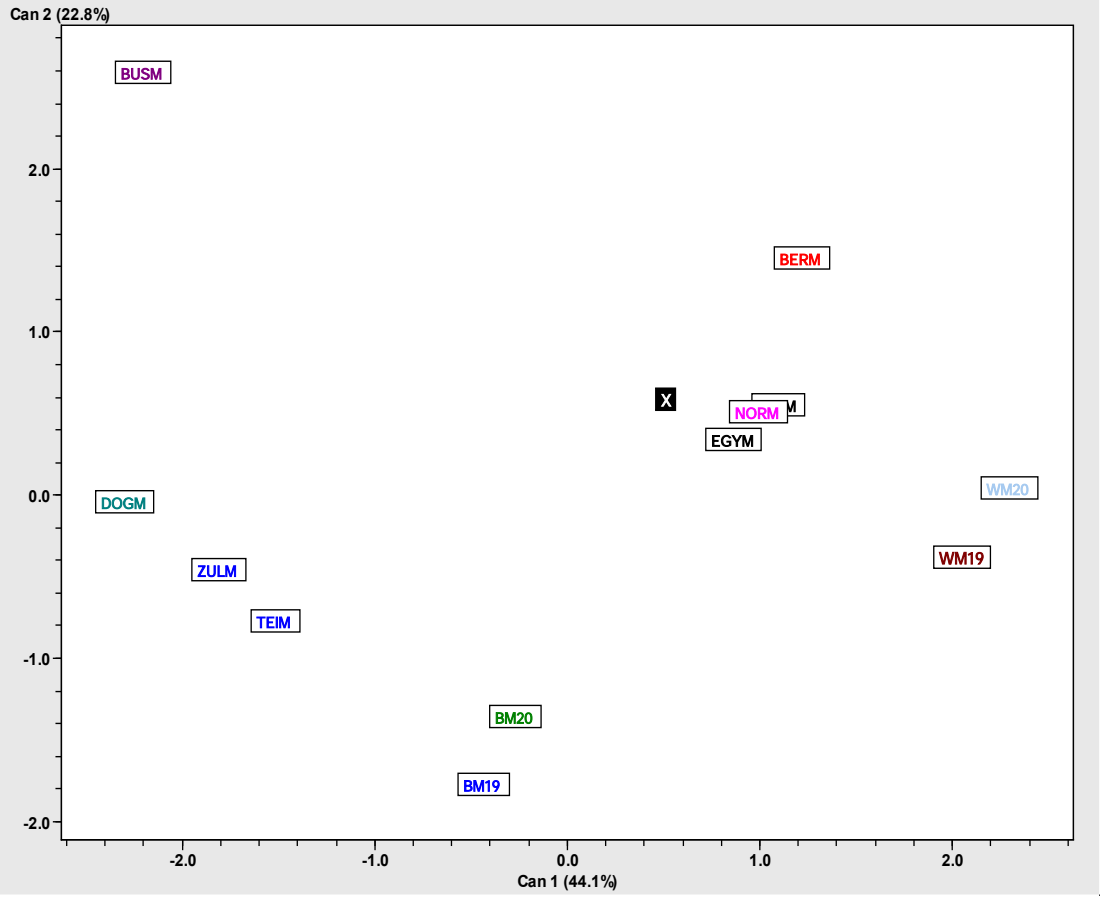
Multigroup Classification of Current Case

Group	Classified into	Distance from	Probabilities			
			Posterior	Typ F	Typ Chi	Typ R
EGYM	**EGYM**	13.2	0.343	0.814	0.587	0.339 (39/59)
NORM		13.6	0.277	0.805	0.554	0.304 (39/56)
ZALM		15.1	0.135	0.749	0.446	0.185 (44/54)
BM20		16.3	0.072	0.541	0.362	0.505 (50/101)
WM19		16.8	0.058	0.517	0.333	0.414 (58/99)
BERM		17.2	0.045	0.628	0.304	0.228 (44/57)
WM20		17.8	0.035	0.355	0.276	0.387 (136/222)
BM19		19.1	0.018	0.451	0.208	0.373 (47/75)
TEIM		21.5	0.005	0.681	0.122	0.029 (33/34)
DOGM		21.8	0.005	0.487	0.112	0.021 (47/48)
ZULM		22.0	0.004	0.414	0.107	0.089 (51/56)
BUSM		22.5	0.003	0.524	0.094	0.048 (40/42)

Current Case is closest to EGYMs

		Group Means											
Current Case	Chk	BERM 56	BM19 74	BM20 100	BUSM 41	DOGM 47	EGYM 58	NORM 55	TEIM 33	WM19 98	WM20 221	ZALM 53	ZULM 55
AUB	118	127.5	119.9	121.0	113.2	115.3	118.6	124.7	117.4	123.5	123.2	123.7	116.2
BBH	130	130.3	130.5	135.7	122.5	132.1	133.7	131.7	129.1	133.9	141.6	134.8	133.7
XCB	142	147.6	137.6	136.5	133.6	137.5	139.2	141.9	129.8	142.7	140.2	141.4	134.1
NLB	22	-	25.5	25.8	26.1	27.2	28.4	24.8	25.4	27.8	23.5	23.8	25.4
DKB	24		22.9	25.2	24.0	21.7	23.5	20.9	22.3	24.2	23.2	21.1	21.4
PAC	112		110.1	122.5	117.4	109.5	112.1	115.7	114.4	114.3	120.4	118.7	115.3
GOL	182		180.3	186.6	186.8	178.4	177.7	185.6	188.5	184.0	183.1	188.2	185.1
NLH	48		51.7	51.2	51.8	43.8	47.7	51.7	52.0	50.2	52.8	52.8	51.4
MAB	60		63.9	66.0	66.7	60.0	64.4	62.8	63.6	62.8	59.6	61.5	64.2
OBB	41		40.1	38.6	40.7	39.3	39.6	39.5	40.4	39.5	38.1	41.0	40.4
BPL	98		93.8	103.0	103.7	93.7	100.0	96.5	97.0	102.5	94.9	97.4	97.1
BNL	99		98.6	101.3	103.3	94.8	98.5	101.5	101.8	102.2	101.1	106.2	101.3
OBH	32		33.8	34.2	35.0	30.8	33.7	32.9	33.7	33.2	33.2	33.7	32.7
ZYB	129		135.6	131.9	131.6	123.6	129.6	128.8	134.4	131.1	132.1	130.1	133.0
FOL	33	-	39.0	35.8	36.9	37.1	35.0	35.7	36.5	36.1	36.3	37.2	37.3

Natural Log of Determinant = 35.0138



TDC 68 - 147 Mount Vale A Mid adult Male

Postcranial metrics - Male V Female test = Male

Only black V White test (Unfiltered) - indeterminate but slightly more white than black

 FORDISC 3.0 Analysis of Current Case
 TDC 147 MV A

DF results using 29 Variables:

CLAAPD	CLAVRD	CLAXLN	FEMBLN	FEMCIR	FEMEBR
FEMHDD	FEMMAP	FEMMTV	FEMSAP	FEMSTV	FEMXLN
HUMEBR	HUMHDD	HUMMWD	HUMMXD	HUMXLN	ISCHLN
PUBCLN	RADAPD	RADTVD	RADXLN	SACAHT	TIBCIR
TIBDEB	TIBNFT	TIBNFX	TIBPEB	TIBXLN	

From Group	Group Counts	Into Group BM	Into Group WM	Percent Correct
BM	50	37	13	74.0 %
WM	114	17	97	85.1 %

Total Correct: 134 / 164 (81.7 %) *** CROSSVALIDATED ***
 Two Group Discriminant Function Results

Group	Classified into	Distance from	Probabilities Posterior	Typ F	Typ Chi	Typ R
BM		30.2	0.359	0.980	0.353	0.569 (22/51)
WM	**WM**	29.1	0.641	0.811	0.410	0.548 (52/115)

Group Means and Discriminant Function Coefficients

Current Case	Chk	BM 50	WM 114	D.F. Weights	Relative Weights
CLAAPD	11 --	14.3	12.8	0.519	6.0 %
CLAVRD	13 +	11.2	11.3	0.112	0.1 %
CLAXLN	140 --	157.9	157.6	-0.073	0.2 %

FEMBLN	426	---	482.0	472.4	-0.153	11.8 %
FEMCIR	93	-	93.2	92.9	-0.116	0.2 %
FEMEBR	81	-	83.6	85.4	-0.071	1.0 %
FEMHDD	47	-	47.6	48.6	-0.241	2.0 %
FEMMAP	30	-	31.2	30.9	0.192	0.5 %
FEMMTV	30	+	28.6	28.1	0.417	1.6 %
FEMSAP	26	--	29.0	29.0	-0.340	0.2 %
FEMSTV	34	+	33.1	32.6	-0.033	0.1 %
FEMXLN	430	---	485.9	475.8	0.163	13.3 %
HUMEBR	62	-	64.3	64.8	-0.094	0.4 %
HUMHDD	46	-	46.7	49.0	-0.436	8.0 %
HUMMWD	21	+	19.7	19.0	0.351	2.2 %
HUMMXD	23	-	24.3	23.5	0.184	1.2 %
HUMXLN	312	--	342.2	336.8	-0.012	0.5 %
ISCHLN	89	-	89.0	91.5	-0.045	0.9 %
PUBCLN	72	-	73.8	82.9	-0.082	6.1 %
RADAPD	13	-	13.4	13.1	-0.062	0.2 %
RADTVD	17	+	16.4	16.6	-0.381	0.7 %
RADXLN	233	--	268.0	254.6	0.236	25.6 %
SACAHT	100	-	103.2	112.9	-0.068	5.4 %
TIBCIR	91	--	101.5	98.6	0.114	2.7 %
TIBDEB	52	-	52.0	52.4	0.280	0.9 %
TIBNFT	26	-	26.6	25.7	0.065	0.5 %
TIBNFX	35	-	37.4	36.7	-0.289	1.6 %
TIBPEB	76	-	78.8	79.1	0.108	0.2 %
TIBXLN	358	--	405.9	394.2	-0.060	5.7 %

Constant 0.976

 Scores 3.511 -3.511 -0.578
 (Class means) (Unknown)
 D square = 7.023

Natural Log of Determinant = 62.5356

Postcranial metrics stepwise forward wilks filter unweighted results more clearly within white range - but does not exclude black ie not that helpful for this type of material

 FORDISC 3.0 Analysis of Current Case
 TDC 147 MV A

DF results using 12 Forward Wilks selected (min: 1 max: 20, out of 29) Variables:

PUBCLN RADXLN HUMHDD CLAAPD SACAHT TIBNFT
 FEMSAP HUMMWD HUME BR RADTVD TIBDEB TIBXLN

From Group	Group Counts	Into Group BM	Into Group WM	Percent Correct
BM	50	41	9	82.0 %
WM	114	14	100	87.7 %

Total Correct: 141 / 164 (86.0 %) *** CROSSVALIDATED ***
 Two Group Discriminant Function Results

Group	Classified into	Distance from	Probabilities Posterior	Typ F	Typ Chi	Typ R
BM		13.1	0.249	0.619	0.286	0.392 (31/51)
WM	**WM**	10.9	0.751	0.636	0.451	0.522 (55/115)

Group Means and Discriminant Function Coefficients

Current Case	Chk	BM 50	WM 114	D.F. Weights	Relative Weights
PUBCLN	72 -	73.8	82.9	-0.110	13.6 %
RADXLN	233 --	268.0	254.6	0.192	34.9 %
HUMHDD	46 -	46.7	49.0	-0.463	14.2 %
CLAAPD	11 --	14.3	12.8	0.525	10.2 %
SACAHT	100 -	103.2	112.9	-0.072	9.5 %
TIBNFT	26	26.6	25.7	0.255	3.2 %
FEMSAP	26 --	29.0	29.0	-0.324	0.3 %
HUMMWD	21 +	19.7	19.0	0.403	4.3 %
HUME BR	62 -	64.3	64.8	-0.123	0.9 %

RADTVD	17	+	16.4	16.6	-0.330	1.0 %
TIBDEB	52	-	52.0	52.4	0.176	1.0 %
TIBXLN	358	--	405.9	394.2	-0.044	6.9 %

Constant -2.111

Scores 3.120 -3.120 -1.104
 (Class means) (Unknown)
 D square = 6.239

Natural Log of Determinant = 31.3627

