APPENDIX - C

Computation of Mean, Median, Quartiles and SD
for Meaning in life scores

Scores	F	x'	fx'	fx'^2
130-139	10	3	30	90
120-129	25	2	50	100
110-119	41	1	41	41
100-109	62	0	0	0
90-99	42	-1	-42	42
80-89	38	-2	-76	152
70-79	20	-3	-60	180
60-69	25	-4	-100	400
50-59	7	-5	-35	175
	N = 270		$fx' = -192$	$fx'^2 = 1180$

Highest score = 137
Lowest score = 53
  Range = 84
  Size of the c.i. = 10
  N = 270.

1. Mean = AM + $\frac{fx'}{N}$ x i

    = 104.5 + $\left(\frac{-192}{270} \times 10\right)$

    = 104.5 + $(-.711 \times 110)$

    = 104.5 - 7.11

    = <u>97.39</u>

2. Median $= L + \left(\dfrac{\dfrac{N}{2} - Cum.f}{fq} \right) \times i$

$= 99.5 + \dfrac{135 - 132}{62} \times 10$

$= 99.5 + \dfrac{30}{62}$

$= 99.5 + .49$

$= 99.89$

3. SD $= i \sqrt{\left(\dfrac{fx^2}{N} \right) - \left(\dfrac{fx'}{N} \right)^2}$

$= 10 \quad \dfrac{1180}{270} - \dfrac{-192}{270}$

$= 10 \quad 4.37 - -.711$

$= 10 \quad 4.37 - .5041$

$= 10 \quad 3.8659$

$= 10 \times 1.96 = 19.60$

4. $Q_1 = L + \left(\dfrac{\dfrac{N}{4} - Cum.f}{fq} \right) \times i$

$= 79.5 + \left(\dfrac{67.5 - 52}{38} \right) \times 10$

$= 79.5 + \dfrac{15.5}{38} \times 10$

$= 79.5 + 4.08$

$= 83.58 \quad or \quad 84$

5. $Q_3 = L + \left(\dfrac{\dfrac{3N}{4} - c.f}{fq} \right) \times i$

$= 109.5 + \dfrac{202.5 - 194}{41} \times 10$

$= 109.5 + \dfrac{8.5}{41} \times 10$

$= 109.5 + 2.07 = 111.57 \quad or \quad 112$

High PIL group = 112 and above

Moderate PIL group = 85 and above   upto 111

Low PIL group = 84 and below it.