Section on a specific subject from:

DATABOOK OF HAPPINESS

A complementary reference work to
Conditions of Happiness

Ruut Veenhoven
with the assistance of Ton Jonkers
Erasmus University Rotterdam

H2 HEALTH AND

HEALTHCARE

H 2.1   Physical health
  2.1.1 - Expert ratings of general health
  2.1.2 - Self-perceived general health
  2.1.3 - Various indicators of physical health . . . . see also A 2.2.6, S 1.6
  2.1.4 - Specific physical health characteristics. . . . . . see also H 2.2

H 2.2   Psychosomatic symptoms. . . . . see also A 2.2.2, A 2.2.20

H 2.3   Mental health . . . . see also A 2.2, L 2,
                                      P 1, P 5, S 2

2.3.1 - General mental health ratings
2.3.2 - Specific mental health characteristics
2.3.3 - Being treated for mental illness

H 2.4   Longevity

H 2.5   Various factors concerning health

H 2.6   Healthcare

H 2.1 - PHYSICAL HEALTH

H 2.1.1 - EXPERT RATINGS OF GENERAL HEALTH

PERFORMANCE STATUS (PHYSICAL HEALTH)	Rating given by a physician based on his examination, the medical history, and the results of laboratory tests. The ratings had a theoretical range of 1 for 'moribund; fatal processes progressing rapidly' to 10 for 'normal; no complaints; no evidence of disease'.	Unaffected by sex and age	HAPP 3.1	r	+.11			People of 46 and older, Duke, U.S.A. Probability systematic random sample stratified by age and sex N: 502, date: 1968	PALMO 72 p. 70
PHYSICAL HEALTH	Physician's rating: very poor / poor / fair / good / excellent	The relationship disappears when controlled for self-rated general health and self-rated health problems.	HAPP 1.1	G'	+.14	Gt'	ns	Aged persons, U.S.A. Non-probability quota sample N: 2993, date: 1952 - 1954	SUCHM 58 p. 227
PHYSIQUE (SOUNDNESS OF BODILY CONSTITUTION)	Ratings by a visiting doctor and by the lecturer in physical excercises and hygiene		AFF 5.2	r_{pm}	+.30			Male students, England Non-probability chunk sample N: 194, date: 1912 - 1913	WEBB 15 p. 26
PHYSIQUE (SOUNDNESS OF BODILY CONSTITUTION)	Class-master rating on a 7-point scale on the basis of observation		AFF 5.3	r_{pm}	+.31			Schoolboys, England Non-probability chunk sample N: 140, date: 1912 - 1913	WEBB 15 p. 27
PHYSICAL STRENGTH	Rating by staff members on a 7-point scale ranging from 'physically weak' to 'physically strong'	Open ward : r = -.07 (ns) Closed ward: r = -.04 (ns)	AFF 5.1	r_{pm}	-		ns	Institutionalized mentally retarded males, U.S.A. Non-probability chunk sample N: 149, date: —	PANDE 71 p. 329

H 2.1.2 - SELF-PERCEIVED GENERAL HEALTH

SELF-PERCEIVED HEALTH	Closed question: poor / fair / good		HAPP 1.1	G'	+.37	Gt'	01	National adult population, U.S.A. Non-probability quota sample N: 2377, date: February, 1946	WESSM 56 p. 179
SELF-PERCEIVED HEALTH	Closed question: poor / fair / good / excellent	Lower among those under the age of 65: r = +.21 Stronger among those of age 65+ : r = +.40 The difference between the correlations is significant (05). Unaffected by S.E.S.	HAPP 1.1	r_{pm}	+.25		01	Non-institutionalized adults, U.S.A. Probability samples N: 1547, date: 1972, 1973	SPREI 74 p. 457

Concept	Measurement	Remarks	Code	Stat	Value	Test	Sign	Population	Ref
PHYSICAL AILMENTS	Number of medical conditions reported 0 / 1 / 2 / 3 / 4 / 5+		HAPP 1.1	G'	-.26	Gt'	01	National adult population, Puerto Rico Probability simple random sample N: 1417, date: November, 1963 – January, 1964 and August – October, 1964	MATLI 66 p. 25/30
		Positive relationship with the Index of Negative Affects Unrelated to the Index of Positive Affects	AFF 2.3	DM	–				
SELF–PERCEIVED HEALTH	Closed question: poor / fair / good / excellent	Stronger among those of age 20–39: G' = +.59 Lower among those of age 40+ : G' = +.31	HAPP 1.1	G'	+.47	Gt'	01	See above	MATLI 66 p. 28-31
		Index of Negative Affects only	AFF 2.3	G'	+.40	Gt'	01		
SELF–PERCEIVED PHYSICAL HEALTH	Closed question: poor / not so good / pretty good / very good	Index of Positive Affects: r = +.18 (01) Index of Negative Affects: r = –.23 (01)	AFF 2.3	r_{pm}	+.28	Chi^2	01	Adults, Houston, Texas, U.S.A. Non–probability purposive quota sample stratified by age, sex, occupational skill level and ethnicity N: 1441, date: autumn, 1969	GAITZ 72 p. 65
			COMP 1.1	r_{pm}	+.34	Chi^2	01		
SUBJECTIVE HEALTH STATUS	Closed question: poor / fair / good / excellent		AFF 1.1	r_{pm}	+.28		001	Families of hourly workers and salaried employees, U.S.A. N: 712, date: summer, 1973	TESSL 75 p. 103
SELF–RATED HEALTH	Direct question rated on a 10–point self–anchoring scale (based on Cantril, 1965), with the bottom of the ladder representing the most serious illness and the top of the ladder representing perfect health.	Unaffected by sex and age	HAPP 3.1	r	+.43		05	People of 46 and older, Duke, U.S.A. Probability systematic random sample stratified by age and sex N: 502, date: 1968	PALMO 72 p. 70
SELF–RATED HEALTH	Closed question: poor / fair / good / excellent		HAPP 3.1	r	+.26		05	See above	PALMO 72 p. 73
SELF–RATED GENERAL HEALTH	Closed question: very poor / poor / fair / good/ excellent	Unaffected by physician's health rating, and self–rated health problems	HAPP 1.1	G'	+.48	Gt'	01	Aged persons, U.S.A. Non–probability quota sample N: 2993, date: 1952 – 1954	SUCHM 58 p. 227
REPORTED HEALTH	Direct question	Unaffected by income and social participation	AFF 1.1		+	Chi^2	s	Aged persons, Metropolitan Boston, U.S.A. Probability area sample N: 1335, date: 1965	FOWLE 69 p. 734
SELF–PERCEIVED HEALTH	Closed question: poor / fair / good		AFF 2.3	G	+.45	Chi^2	001	Non–institutionalized aged welfare recipients, U.S.A. Non–probability purposive quota sample N: 256, date: 1969	TISSU 72 p. 92
			CON 1.1	G	+.20	Chi^2	ns		
			HAPP 1.1	G	+.17	Chi^2	ns		
SUBJECTIVE HEALTH	poor vs good	See remarks in excerpt (Part II) Among the gainfully employed : G' = +.65 (01) Among retirees who had a positive orientation to retirement at the moment of retirement : G' = +.46 (01) Among retirees who had a negative orientation to retirement : G' = +.23 (ns)	COMP 1.2	G'	+.58	Gt'	01	Aged males, U.S.A. (those satisfied in 1952) Non–probability accidental sample N: 787, date: 1952 – 1956	THOMP 60 p. 168
SELF–PERCEIVED HEALTH	Direct question rated on a 10–point self–anchoring scale (based on Cantril, 1965), ranging from 'worst possible health' to 'best possible health'		COMP 1.1	r_{pm}	+.62		01	White males who had experienced a first heart attack, Durham, North Carolina, U.S.A. Non–probability quota sample N: 56, date: 1970	GARRI 73 p. 201
SELF–PERCEIVED HEALTH	Closed question: poor, fair vs good, very good		HAPP 2.1	G'	+.42	Gt'	01	Aged chronically–ill patients, U.S.A. Probability sample N: 167, date: 1959	HENLE 67 p. 70

Variable	Question	Notes	Code	Stat	Value	Test	Sig	Sample	Reference
PHYSICAL CONDITION	Repeated direct question rated on an open graphic scale ranging from 'poor' to 'excellent'	Both the scale for physical condition and the one measuring hedonic level were marked 2 times a day for periods ranging from 18 - 64 days. Individual correlations vary from -.36 to +.74. Of the 16 correlations only 1 is negative and 10 of the remaining 15 are significant.	AFF 3.1	r_{pm}	+			University students and staff members, U.S.A. Non-probability chunk sample N: 16, date: —	DYSIN 37 p. 152
PHYSICAL CONDITION	See above	Both the scale for physical condition and the one measuring hedonic level were marked 3 times a day during 5 weeks Individual correlations vary from -.39 to +.71. Of the 24 correlations only 2 are negative and 19 of the remaining 22 are significant, with 11 of these over +.50.	AFF 3.1	r_{pm}	+			University students, U.S.A. Non-probability chunk sample N: 24, date: —	DYSIN 38 p. 118
PHYSICAL HEALTH	Repeated closed question on physical health during the past day, scored every evening during 6 weeks very sick / sick / rather poor / fair / good / excellent		AFF 3.1	r_{pm}	+.12	t	ns	Female college students, U.S.A. Non-probability chunk sample N: 21, date: ± 1960	WESSM 66/1 p. 277
PHYSICAL HEALTH	See above		AFF 3.1	r_{pm}	-.31	t	ns	Male college students, U.S.A. Non-probability chunk sample N: 17, date: ± 1960	WESSM 66/2 p. 283
SELF-PERCEIVED PHYSICAL HEALTH	Repeated closed question on health during the past day, scored every evening during one month very sick / sick / rather poor / fair / good / excellent		AFF 3.1 HAPP 3.1	r_{pm} r_{pm}	+.39 +.13		01 ns	Undergraduate students, U.S.A. Non-probability chunk sample N: 67, date: summer, 1970	GORMA 71 p. 216/222
POSITIVE EVALUATION OF HEALTH	Closed question ranging from 'not at all good' to 'very good'		HAPP 1.1 AFF 1.1	mc mc	+.56 +.60			Urban adult Jewish population, Israel Probability area sample, using dwelling units N: 1940, date: spring, 1973	LEVY 75/1 p. 372
HEALTH CONDITION	Closed question		HAPP 1.1 AFF 1.1	mc mc	+.54 +.60			Urban adult Jewish population, Israel Probability area sample using dwelling units N: 1830, date: summer, 1973	LEVY 75/2 p. 373
SELF-PERCEIVED HEALTH	Closed question: poor / fair / good		HAPP 1.1	G'	+.50	Gt'	01	National adult population, The Netherlands N: at least 1000, date: 1948	NIPO 49 p. 3
SUBJECTIVE HEALTH FEELING	Direct question rated on an open graphic scale ranging from 'very sick' to 'very healthy'	Unaffected by age Stronger among those of lower S.E.S. Stronger among those with lower educational level Stronger among males than among females	HAPP 1.1	G	+.50		05	National adult population, The Netherlands Aakster (1972) sample N: 1552, date: June, 1968	BAKKE 74 p. 28
SELF-PERCEIVED HEALTH	Direct question: less than good / good / excellent		HAPP 1.1	r_{pm}	+.29			Housewives, The Netherlands Probability area sample N: 450, date: autumn, 1964	PHILI 66 p. 66
SELF-PERCEIVED HEALTH	Closed question: very poor / poor / average / fairly good / very good		HAPP 2.1	T^2	+.18	Chi^2	001	National adult population, Poland Non-probability purposive quota sample stratified by sex, age, type of local community, employment and S.E.S. N: 2387, date: June - July, 1960	MAKAR 62 p. 115

see also 'Types of Affect: Energy' (A 2.2.6), 'Satisfaction with Physical Health' (S 1.6)

Indicator	Description	Notes	Class	Stat	Value		Sig	Sample	Reference
POOR PHYSICAL HEALTH	2-item index of closed questions on general health (poor / fair / good / excellent), and number of times one stayed at a hospital, sanitarium, or nursing home during the past 5 years		AFF 1.3	$\overline{DR}$	-.15		05	Adults, Alameda county, U.S.A. Probability sample N: 6928, date: 1965	BERKM 71 p. 42
SELF-PERCEIVED PHYSICAL HEALTH	Factor containing yes / no questions on feeling bothered by pains and ailments, and feeling healthy enough to carry out the things one would like to do (3 ranks).	males : t_k = +.14 (01) females: t_k = +.10 (01)	HAPP 1.1	t_k	+		01	Adult married population with children, U.S.A. Probability area sample N: 797, date: spring, 1957	VEROF 62 p. 196
HAVING PROBLEMS WITH HEALTH	Closed question		COMP 4.1				ns	Students, U.S.A. Non-probability chunk sample N: 1651, date: —	SYMON 37 p. 292
SELF-RATED HEALTH PROBLEMS	Closed question: no vs yes	Unaffected by physician's health ratings and self-rated general health	HAPP 1.1	G'	-.32	Gt'	01	Aged persons, U.S.A. Non-probability quota sample N: 2993, date: 1952 – 1954	SUCHM 58 p. 227
HAVING CHRONIC HEALTH PROBLEMS	Absence vs presence of chronic health problems (other than heart disease); obtained from hospital records		COMP 1.1	r_{pm}	-.14		ns	White males who had experienced a first heart attack, Durham, North Carolina, U.S.A. Non-probability quota sample N: 56, date: 1970	GARRI 73 p. 201
LONG-TERM ILLNESS	Direct yes / no questions on long-standing physical or health trouble and whether this kept one from doing the things one might like to do	Index of Positive Affects: G = -.05 Index of Negative Affects: G = +.19	AFF 2.3	G	–			Adults, urban areas, U.S.A. Probability area samples N: 2787, date: January, 1963 – January, 1964	BRADB 69 p. 118
RECENT ILLNESS	Direct yes / no questions on sickness during the past few weeks and whether it caused a cut down in one's usual activities	Index of Positive Affects: G = -.04 Index of Negative Affects: G = +.13	AFF 2.3	G	–			See above	BRADB 69 p. 118
ILLNESS	2-item index of closed questions on both recent and long-term illnesses (see above) low / medium / high	Computed for Index of Negative Affects only: $\overline{DR}$ = +.14 (05) Stronger among those with low anxiety and not among those with high anxiety Stronger among those, esp. females, reporting low physical symptoms, and not among those having a lot of physical symptoms	AFF 2.3	$\overline{DR}$	–	BCI		See above	BRADB 69 p. 119
LONG-STANDING ILLNESS	Direct question on long-standing physical or health trouble	Index of Positive Affects: G = +.04 Index of Negative Affects: G = -.03	AFF 2.3	G	+			Employed males, England Non-probability purposive quota sample N: 192, date: —	PAYNE 74 p. 17
RECENT ILLNESS	Direct question on sickness during the last few weeks	Index of Positive Affects: G = +.20 Index of Negative Affects: G = -.04	AFF 2.3	G	+			See above	PAYNE 74 p. 17
RECENT ILLNESS	Closed question on number of days one stayed in bed due to illness during the past three months: not a single day / a few days / about 1 week / 2 weeks – 1 month / 1-3 months / 3 months		HAPP 1.1	G	-.29			National adult population, The Netherlands Probability area sample N: 1552, date: June, 1968	BAKKE 74 p. 28
RECENT ILLNESS	Direct question on number of times one stayed in bed due to illness during the last three months not in bed vs in bed	When elaborated for age, significant among those of age 50-65 only	HAPP 1.1	G'	-.31	Gt'	05	Adults, Utrecht, The Netherlands Probability sample stratified by age N: 300, date: autumn, 1967	MOSER 69 p. 31

Concept	Operationalization	Remarks	Happiness	Statistic	value	stat.	sig.	Population	Reference
NUMBER OF DOCTOR'S CONSULTS	Direct question on number of consults during the past three months: 0 / 1 / 2 / 3-4 / 5-10 / more than 10		HAPP 1.1	G	-.18			National adult population, The Netherlands Probability area sample N: 1552, date: June, 1968	BAKKE 74 p. 28
NUMBER OF DOCTOR'S CONSULTS	Direct question on number of doctor's consults during last year: 0 / 1-3 / 4 or more	When elaborated for age significant among those of age 50 - 65 only	HAPP 1.1	G'	-.10	Gt'	ns	Adults, Utrecht, The Netherlands Probability sample stratified by age N: 300, date: autumn, 1967	MOSER 69 p. 31
HOSPITALIZATION	Direct questions on number of admissions into hospital during last year		HAPP 1.1			Chi^2	ns	See above	MOSER 69 p. 31
MEDICINE USE	Direct question on medicine use during last two weeks		HAPP 1.1			Chi^2	ns	See above	MOSER 69 p. 31

H 2.1.4 - SPECIFIC PHYSICAL HEALTH CHARACTERISTICS   see also 'Psychosomatic Symptoms' (H 2.2)

Concept	Operationalization	Remarks	Happiness	Statistic	value	stat.	sig.	Population	Reference
PRESENCE OF BODILY DEFECT	'normal' vs handicapped Ss	Reversed among those with incomes above $ 15,000.-	HAPP 2.1 AFF 1.1	G' G'	-.13 -.17	Gt' Gt'	ns ns	Physically defective and normal persons, Detroit, U.S.A. Non-probability purposive samples N: 295, date: —	CAMER 71 p. 641-642 CAMER 73/1 p. 210
PRESENCE OF PHYSICAL HANDICAP	'normal' vs handicapped Ss		HAPP 2.1			Chi^2	ns	Physically handicapped and normal persons, U.S.A. Non-probability purposive samples N: 90, date: —	CAMER 73/2 p. 210
BORN WITH PHYSICAL HANDICAP	Ss who acquired their defect vs Ss who had had their defect since birth	Computed for handicapped Ss only	HAPP 2.1			Chi^2	ns	See above	CAMER 73/2 p. 210
MOVING ONE'S LIMBS EASILY	Direct question rated on an open graphic scale ranging from 'very easily' to 'with much difficulty'		HAPP 1.1	G	+.31			National adult population, The Netherlands Probability area sample N: 1552, date: June, 1968	BAKKE 74 p. 28
MOTOR ABILITY; GENERAL COORDINATION	Rating by the hospital's research staff	Open ward : r = +.10 (ns) Closed ward: r = +.11 (ns)	AFF 5.1	r_{pm}	+		ns	Institutionalized mentally retarded males, U.S.A. Non-probability chunk sample N: 149, date: —	PANDE 71 p. 329
HEARING ABILITY	See above	Open ward : r = -.09 (ns) Closed ward: r = -.09 (ns)	AFF 5.1	r_{pm}	-		ns	See above	PANDE 71 p. 329
VISUAL ABILITY	See above	Open ward : r = +.22 (05) Closed ward: r = -.09 (ns)	AFF 5.1	r_{pm}				See above	PANDE 71 p. 329
PHYSICAL ABILITY	3-item index of direct questions on ease of reading, bending, and use of tub or shower without help		AFF 2.3	t_k	+.22		02	Aged female public housing residents, U.S.A. Probability systematic random sample N: 44, date: 1967 / 1971	GRANE 73A p. 7
SEVERITY OF INITIAL HEART ATTACK	number of cardiogenic complications of the acute heart attack; obtained from hospital reports		COMP 1.1	r_{pm}	+.21		ns	White males who had experienced a first heart attack, Durham, North Carolina, U.S.A. Non-probability quota sample N: 56, date: 1970	GARRI 73 p. 201

see also Types of Affect: 'Anxiety'(A 2.2.2) and 'Tranquility' (A 2.2.20)

SYMPTOM INVENTORIES

Symptom	Description	Findings	Source	Stat	Sign	Test	Sig	Sample	Reference
ANXIETY	6-item index of closed questions on dizziness, general aches and pains, headaches, muscle twitches, nervousness, and rapid heart beat; during last week (items from Stouffer et al., 1949)	Index of Positive Affects: $G' = +.02$ (ns) Index of Negative Affects: $G' = +.53$ (01)	AFF 2.3 HAPP 1.1	G' G'	– –.33	Gt' Gt'	 01	Inhabitants of 4 small communities, Illinois, U.S.A. Probability multi-stage samples N: 2006, date: March, 1962	BRADB 65/1 p. 29
PHYSICAL SYMPTOMS	5-item index of closed questions on general aches and pains, headaches, dizziness, rapid heart beat, and hands sweating and feeling damp and clammy; during the past few weeks (items from Stouffer et al., 1950)	Index of Positive Affects: males : $G = +.00$ females: $G = –.02$ Index of Negative Affects: males : $G = +.30$ females: $G = +.36$ Stronger among those who are healthy Not among those who are sick	AFF 2.3	G	–			Adults, urban areas, U.S.A. Probability area samples N: 2787, date: January, 1963 – January, 1964	BRADB 69 p. 110/119
PSYCHOLOGICAL ANXIETY	3-item index of closed questions on nervousness or tenseness during the last few weeks, having trouble getting to sleep at night, and having enough energy to do the things one would like to do	Index of Positive Affects: males : $G = +.04$ females: $G = +.02$ Index of Negative Affects: males : $G = +.47$ females: $G = +.45$ Stronger among those who are healthy than among those who are sick Unaffected by expecting a nervous breakdown	AFF 2.3	G	–			See above	BRADB 69 p. 110/117/119
DECREASING ANXIETY	3-item index (see above) The index was employed twice with an interval of ± 10 months (in wave 1 and 3) stable vs decreasing anxiety	See remarks in excerpt (Part II) Computed for Index of Negative Affects only: $\overline{DR} = –.11$	AFF 2.3	$\overline{DR}$	+	BCI	05	See above	BRADB 69 p. 111
INCREASING ANXIETY	See above stable vs increasing anxiety	Computed for Index of Negative Affects only: $\overline{DR} = +.08$	AFF 2.3	$\overline{DR}$	–	BCI	05	See above	BRADB 69 p. 111
PHYSICAL ANXIETY	Factor containing direct questions on having ever been bothered by shortness of breath, and by one's heart beating hard never / hardly ever / sometimes / many times (6 ranks)	males : $t_k = –.12$ (01) females: $t_k = –.15$ (01)	HAPP 1.1	t_k	–		01	Adult married population with children, U.S.A. Probability area sample N: 797, date: spring, 1957	VEROF 62 p. 196
PSYCHOLOGICAL ANXIETY	Factor of closed questions on having trouble falling asleep or staying asleep and being bothered by nervousness, feeling fidgety and tense	males : $t_k = –.16$ (01) females: $t_k = –.19$ (01)	HAPP 1.1	t_k	–		01	See above	VEROF 62 p. 196
IMMOBILIZATION	Factor containing direct questions on difficulties with getting up in the morning, and sweating hands (6 ranks)	Stronger among males: $t_k = –.12$ (01) Not among females : $t_k = –.02$ (ns)	HAPP 1.1	t_k	–			See above	VEROF 62 p. 196
PSYCHO-SOMATIC SYMPTOMS	Summary score of 16 symptoms indicative of psychological and psychosomatic symptom complaints (10 ranks) (adapted from McMillan, 1957)	males : $t_k = –.24$ (01) females: $t_k = –.18$ (01)	HAPP 1.1	t_k	–		01	See above	VEROF 62 p. 196

Concept	Description	Additional findings	Code	Stat	Value	Stat2	Sig	Sample	Reference
PSYCHO-PSYCHOLOGIC PROBLEMS	3-item index of closed questions on problems with energy, appetite, and/or sleep during past week rarely / occasionally / most days	When controlled for depressive affect: $G = -.31$	COMP 1.1	G	-.43		001	Adults, U.S.A. Probability cluster sample using households, and probability multi-stage sample N: 2168, date: 1972	BRENN 75B p. 352
ANXIETY	Index containing statements about feelings of nervousness, strain, distraction, embarrassment and fear (Taylor Manifest Anxiety Scale; see Taylor,1953)		AFF 2.1	r_{pm}	-.24		ns	Married females, U.S.A. Non-probability purposive sample by expert choice N: 62, date: —	HARDE 69 p. 50
ANXIETY SYMPTOMS	10-item index of closed questions on sleeping problems, trembling hands, nervousness, heart beating hard, pressures or pains in head, biting fingernails, shortness of breath, sweating hands, sick headaches, nightmares (see Rosenberg, 1965)	When standardized on: − usual mood : $G_s = -.21$ − having fun in life : $G_s = -.20$ − frequency of low mood : $G_s = -.18$ − tending to be a discouraged person: $G_s = -.20$ − tending to be a lonely person : $G_s = -.19$ Stronger among females: $G = -.35$ Lower among males : $G = -.28$	HAPP 1.1	G	-.28			Juniors and seniors attending public high schools in New York State, U.S.A. Probability cluster sample of 10 public high schools N: sample A: 1682, sample B: 1664, date: 1960	BRENN 70 p. 71/272
		Stronger among females: $G = -.32$ Lower among males : $G = -.23$	AFF 1.1	G / V	-.24 / .11	Chi^2	01		
SOMATIC SYMPTOMS	18-item checklist of physical complaints containing nervousness, headaches, loss of appetite, upset stomach, trouble getting out of bed, work affected by ill health, shortness of breath, hard heart beating, dizziness, nightmares, losing weight, trembling hands, sweating hands, troubles to get going, bad health, having a cold, trouble falling asleep, absent from school because of illness (adapted from Gurin et al., 1960)		COMP 1.2	r_{pm}	-.28		001	Public high school boys, U.S.A. Probability multi-stage sample N: 2213 in 1966, 1886 in 1968 and 1799 in 1969 date: fall, 1966; spring, 1968 and spring 1969	BACHM 67/70 p. 122
NEGATIVE AFFECT STATES	40-item index of closed questions on irritability (7 items), general anxiety (7 items), anxiety and tension (5 items), depression (6 items), anomie (8 items) and resentment (7 items)		COMP 1.2	r_{pm}	-.51		001	See above	BACHM 67/70 p. 122
ANXIETY	40-item questionnaire scored as 'true' or 'false' (IPAT Anxiety Scale Questionnaire; Self Analysis Form; see Cattell & Scheier, 1963)		HAPP 1.1	DM	-	r_1	001	University students, U.S.A. Non-probability chunk sample N: 313, date: 1966 - 1967	BRADB 67 p. 64
PSYCHO-PHYSIOLOGICAL CONDITION	Number of psycho-psychological disorders reported, e.g. psychophysiologic gastrointestinal reaction, asthma, hypertension, etc.	Index of Negative Affects: $r = +.37$ (01) Unrelated to Index of Positive Affects	AFF 2.3	r_{pm}	-			Residents of Stirling County, Maritime, Canada Proability sample stratified by sex, age, socio-environmental circumstances and mental health N: 112, date: 1963 - 1968	BEISE 74 p. 325
HEALTH STATUS	13-item index of physical and psychological symptoms; e.g. dizziness, headaches, upset stomach, nervousness	Index of Positive Affects: $G = +.02$ Index of Negative Affects: $G = +.13$	AFF 2.3	G	-			Employed males, England Non-probability purposive quota sample N: 192, date: —	PAYNE 74 p. 17
ANXIETY	Question on anxiousness about things, using a symptoms list, including nervousness, headache, insomnia, excessive appetite, nightmares, loneliness, chest pains, bad appetite, or trembling hands	unmarried employed males : $r = -.22$ (ns) unmarried employed females : $r = -.29$ (05) married employed males : $r = -.18$ (05) married employed females : $r = -.10$ (ns) married non-employed females: $r = +.07$ (ns)	HAPP 2.1	r_{pm}	-			Inhabitants of Helsinki, Finland Probability sample N: 442, date: spring - summer, 1966	HAAVI 71 p. 590
PSYCHO-SOMATIC COMPLAINTS	88-item inventory containing symptoms indicative of both physical bad health, and psycho-somatic and social problems	Unaffected by age and sex Lowest among those of medium S.E.S. and strongest among those of lower S.E.S. Stronger among those with lower education.	HAPP 1.1	G	-.41		05	National adult population, The Netherlands Probability area sample N: 1552, date: June, 1968	BAKKE 74 p. 28

PSYCHO-SOMATIC COMPLAINTS	21-item index of psycho-somatic complaints (from the VOEG; see Dirken, 1967) no complaints / some complaints / a lot of complaints	U-shaped curve: Ss with some complaints being most happy	HAPP 1.1	G'	-.10	Gt' Chi^2	ns 05	Adults, Utrecht, The Netherlands Probability sample stratified by age N: 300, date: autumn, 1967	MOSER 69 p. 36

SPECIFIC SYMPTOMS

STOMACH COMPLAINTS	3-item index of direct questions on stomach complaints and gall-stones		HAPP 2.1	G	-.18	Chi^2	000	Male employees of age 40 - 65, The Netherlands Non-probability chunk sample N: 13000, date: —	SONDE 75
CHEST PAINS	10-item index of direct questions on various pains in one's chest		HAPP 2.1	G	-.29	Chi^2	000	See above	SONDE 75
CARDIAC PRESSURE	3-item index of direct questions on swollen ankles and feet , sleeping on high pillow, and often need to urinate at night		HAPP 2.1	G	-.27	Chi^2	000	See above	SONDE 75
SHORT OF BREATH	4-item index of direct questions on complaints when walking up a hill, walking normally, being exhausted when walking, when awaking		HAPP 2.1	G	-.24	Chi^2	000	See above	SONDE 75
RESPIRATORY COMPLAINTS	5-item index of direct questions on complaints when awaking, during the day, and on periods during the year		HAPP 2.1	G	-.17	Chi^2	000	See above	SONDE 75
DIZZINESS	Closed question: no vs yes		HAPP 2.1	G	-.33	Chi^2	000	See above	SONDE 75
SLEEPLESSNESS	Closed question: no vs yes		HAPP 2.1	G	-.54	Chi^2	000	See above	SONDE 75
FEELING TIRED	Closed question: no vs yes		HAPP 2.1	G	-.75	Chi^2	000	See above	SONDE 75
FEELING IRRITABLE	Closed question: no vs yes		HAPP 2.1	G	-.76	Chi^2	000	See above	SONDE 75
FEELING RESTLESS	Closed question: 'During the past week did you ever feel so restless that you couldn't sit long in a chair?' no vs yes	See second instrument in excerpt (Part II).	HAPP 1.1	Q	-.56			National adult population, Puerto Rico Probability simple random sample N: 1417, date: November, 1963 - January, 1964 and August - October, 1964	MATLI 66 p. 8
FEELING UNEASY	Closed question: 'During the past week, did you ever feel vaguely uneasy about something?' no vs yes	See above	HAPP 1.1	Q	-.60			See above	MATLI 66 p. 8
NERVOUSNESS (psychological tension)	Direct question: 'Have you taken something against the nerves, during the last 14 days?' nothing vs swallowed something		HAPP 1.1	G'	-.41	Gt'	01	Adults, Utrecht, The Netherlands Probability sample stratified by age N: 300, date: autumn, 1967	MOSER 69 p. 37
NERVOUSNESS	Closed question on being a nervous person definitely no / rather no / rather yes / decidedly yes		HAPP 2.1	T^2	-.11	Chi^2	001	National adult population, Poland Non-probability purposive quota sample stratified by sex, age, type of local community, employment and S.E.S. N: 2387, date: June - July, 1960	MAKAR 62 p. 115

see also 'Types of Affect' (A 2.2), 'Life Quality' (L 2), 'Personality' (P 1), 'Problems, Worries and Fears' (P 5), 'Self-Image' (S 2)

H 2.3.1 - GENERAL MENTAL HEALTH RATINGS

Variable	Description	Notes	Instr	Stat	Value	Test	Sig	Sample	Source
MENTAL HEALTH	Twenty-two Item Screening Score of psychiatric symptoms indicating impairment (see Langner, 1962)	Unaffected by age, S.E.S. and sex	HAPP 1.1	G'	+.39	Gt'	01	Adults, New Hampshire, U.S.A. Probability sample N: 593, date: —	PHILL 67B p. 288
MENTAL ILLNESS	Twenty-two Item Screening Score (see above)	Unaffected by age Index of Positive Affects: r = -.02 (ns) Index of Negative Affects: r = +.57 (01)	AFF 2.3	r_{pm}	-.41	Chi^2	01	Adults, Houston, Texas, U.S.A. Non-probability purposive quota sample stratified by age, sex, occupational skill level and ethnicity N: 1441, date: autumn, 1969	GAITZ 72 p. 65
			COMP 1.1	r_{pm}	-.34	Chi^2	01		
MENTAL HEALTH	20-item checklist of psychoneurotic and psychophysiologic symptoms, indicative of mental health (Health Opinion Survey; see Leighton et al, 1963) high stress vs low stress		HAPP 1.1	G'	+1.00	Gt'	01	Student teachers, Chapel Hill, U.S.A. Probability sample proportionally stratified by teaching level N: 75, date: spring, 1967	GONZA 67 p. 126
PSYCHIATRIC 'CASENESS' (probability that someone is suffering from a psychiatric disorder)	Rating by two psychiatrists on a 4-point scale, based on 6 years accumulated clinical information.	Index of Positive Affects: r = -.19 (05) Index of Negative Affects: r = +.42 (01)	AFF 2.3	r_s	-		s	Residents of Stirling County, Maritime, Canada Probability sample stratified by sex, age, socio-environmental circumstances and mental health N: 112, date: 1963 - 1968	BEISE 74 p. 325
PSYCHOLOGICAL RESOURCES (positive mental health)	14 indicators of psychological resources including measures of mutuality (familial and extra-familial), resolution of losses, contextual and temporal perspective, growth, competence, insight, perceived and judged encroachment, hope, and satisfaction with intrapersonal and interpersonal competence in general.	In total significant correlations were found between two indicators of resources and psychological well-being.	HAPP 1.1	r	+			People in transition, U.S.A. Stratified random sample N: 216, date: —	CHIRI 71 p. 603
		There were four significant or near significant correlations with positive affect, four with negative affect (including two inverse relationships), and eight with affect balance.	AFF 2.3	r	+				
PSYCHOLOGICAL DEFICITS (mental illness)	10 indicators of psychological deficits including number of symptoms mentioned, plus a psychiatrist's ratings of the degree of psychopathology implicit in each symptom response, long- and short-term symptoms, and total symptom response set per respondent; Gottschalk anxiety scores, derived from TAT cards, global ratings by an interdisciplinary team of social scientists on perceived stress, stress impact, degree and direction of impairment.	Six of the deficit indicators correlated significantly (05) with both affect balance and with negative affect. No relationships with positive affect were found	AFF 2.3	r	-		05	See above	CHIRI 71 p. 603
EGO STRENGTH	68-item index tapping a general factor of psychopathology, reflecting degree of maladjustment or ego-dysfunction, irrespective of differential diagnosis. (Ego Strength Scale; see Barron, 1956)		AFF 2.1	r_{pm}	+.27		01	Female college seniors, U.S.A. Non-probability chunk sample N: 162, date: May - June, 1966	PORTE 67 p. 93/95
MALADJUSTMENT	Scale containing MMPI items, designed to identify maladjustment in a college population. (Mt scale; see Kleinmuntz, 1961)	Stronger among females: r = -.45 (05) Lower among males : r = -.20 (ns)	COMP 1.1	r_{pm}	-			Undergraduate students, Ohio, U.S.A. Non-probability accidental sample N: 132, date: 1966/1967	MILLE 68 p. 1082

H 2.3.2 - SPECIFIC MENTAL HEALTH CHARACTERISTICS

SEVERITY OF PATHOLOGY	Rating by a psychiatrist on the basis of a detailed symptom check-list 1-3 (minimal impairment) / 4-6 / 7-9 / 8-12 (marked impairment)	Index of Negative Affects: $r = +.16$ (ns) U-shaped curve: Ss with pathology ratings of 7-9 having most negative feelings Significant differences between those with ratings of 4-6 and those with ratings of 7-9 only. Unrelated to the Index of Positive Affects	HAPP 1.1 AFF 2.3	G' r	-.27 -	Gt'	01	Non-hospitalized schizophrenic males, Monroe County, New York, U.S.A. Probability sample drawn from the Monroe County psychiatric case register N: 178, date: 1964 - 1965	ALEXA 68 p. 29/67
BEING DEFINITELY SCHIZOPHRENIC	Possibly schizophrenic vs definitely schizophrenic, as assessed by relative number of independant diagnoses, and having schizophrenic symptoms		HAPP 1.1			Chi^2	ns	See above	ALEXA 68 p. 33
NEUROTICISM	Adapted Super Neuroticism Scale, focussing on behavior and early childhood experiences, indicative of neuroticism (see Shaffer, 1968)		AFF 2.1	r_{pm}	-.34		01	Married females, U.S.A. Non-probability purposive sample by expert choice N: 62, date: —	HARDE 69 p. 50
EVER EXPECTED A NERVOUS BREAKDOWN	Direct questions no vs yes	Index of Positive Affects: males : $G = +.04$ (wave 3: $G = -.05$) females: $G = +.00$ (wave 3: $G = -.06$) Index of Negative Affects: males : $G = +.48$ (wave 3: $G = +.50$) females: $G = +.47$ (wave 3: $G = +.35$) Unaffected by amount of worries	AFF 2.3	G	-			Adults, urban areas, U.S.A. Probability area samples N: 2787, date: January, 1963 - January, 1964	BRADB 69 p. 110
EVER EXPECTED A NERVOUS BREAKDOWN	Direct question: no vs yes	males : $t_k = -.10$ (05) females: $t_k = -.11$ (01)	HAPP 1.1	t_k	-		05	Adult married population with children, U.S.A. Probability area sample N: 797, date: spring, 1957	VEROF 62 p. 196
EVER EXPECTED A NERVOUS BREAKDOWN	Direct question: no vs yes	Index of Positive Affects: $G = +.08$ Index of Negative Affects: $G = +.19$	AFF 2.3	G	-			Employed males, England Non-probability purposive quota sample N: 192, date: —	PAYNE 74 p. 17
EXPECTED A NERVOUS BREAKDOWN MORE THAN ONCE	Direct question: no vs yes	Index of Positive Affects: $G = +.44$ Index of Negative Affects: $G = +.41$	AFF 2.3	G				See above	PAYNE 74 p. 17
NEED FOR HELP WITH EMOTIONAL PROBLEMS OR FAMILY TROUBLES	Closed question: 'During the past year did you ever feel that you could use some help in dealing with emotional problems or family troubles?' never / not very often / sometimes / often	Computed for 1973 data only: Index of Positive Affects: $r = +.01$ (ns) Index of Negative Affects: $r = +.40$ (001)	AFF 2.3	r	-.25		001	Adults, Los Angeles County, U.S.A. Multi-stage probability samples of households N: 1078 in 1972 and 1008 in 1973 date: spring, 1972 and spring, 1973	CHERL 75 p. 197

H 2.3.3 - BEING TREATED FOR MENTAL ILLNESS

MENTAL DISTURBANCES	normals vs out-patients of psychiatric hospital, diagnosed as suffering from anxiety and depression (Puerto Ricans vs validation sample; see sample construction in excerpt, Part II)	Index of Positive Affects: $G' = +.03$ (ns) Index of Negative Affects: $G' = +.65$ (01)	HAPP 1.1 AFF 2.3	G' G'	-.35 -.57	Gt' Gt'	01 01	National adult population, Puerto Rico Probability simple random sample N: 1417, date: November, 1963 - January, 1964 and August - October, 1964	MATLI 66 p. 44
MENTAL ILLNESS	community subjects vs hospital subjects (see sample construction in excerpt, Part II)		HAPP 1.1 AFF 1.1 HAPP 2.1	G' G' G'	-.50 -.57 -.47	Gt' Gt' Gt'	01 01 01	Aged persons, San Francisco, U.S.A. Probability sample of community subjects and non-probability chunk sample of hospital subjects N: 435, date: —	PIERC 73 p. 88

MENTAL HEALTH	normals vs psychiatric out-patients (see sample construction in excerpt, Part II)	Normal subjects also scored significantly higher than the psychiatric out-patients on the Index of Positive Affects (005) and lower on the Index of Negative Affects (001).	AFF 2.3	DM	–	t	001	Aged persons, Los Angeles County, U.S.A. Non-probability purposive samples by expert choice of psychiatric out-patients and normal community subjects N: 27, date: 1971	MORIW 74 p. 76
MENTAL ILLNESS	expatients vs inpatients (see sample construction in excerpt, Part II)	Significant differences for the Index of Negative Affects only.	AFF 2.3		–	t	05	Aged mental patients, U.S.A. Non-probability accidental sample N: 36, date: 1966	HACKE 69 p. 125
HAVING RECEIVED PSYCHIATRIC TREATMENT PRIOR TO COLLEGE YEARS	controls vs patients (see sample construction in excerpt, Part II)		AFF 1.1	G'	–.68	Gt'	01	Full-time university students, Berkeley Campus, California, U.S.A. Probability samples N: 280, date: 1971 – 1972	ESTES 73 p. 471

H 2.4 – LONGEVITY

LONGEVITY	Longevity Index: number of years lived after initial testing (1955 – 1959)	For those who are still living (about half the panel), an estimate was made of how many years they will have lived since initial testing by adding the present number of years since initial testing (about 15) to the expected number of years now remaining according to actuarial life expectancy tables, based on age, sex and race.	COMP 4.4	r	+.01			Aged non-institutionalized persons, North Carolina, U.S.A. Non-probability accidental sample, using volunteers	PALMO 69 p. 248
LONGEVITY	Longevity Quotient: number of years lived after initial testing divided by the expected number of years remaining after examination for persons of a given age, sex and race	See above Unaffected by sex and race	COMP 4.4	r	+.26			See above	PALMO 69 p. 249

H 2.5 – VARIOUS FACTORS CONCERNING HEALTH

REPORT OF HOPES CONCERNING HEALTH OF SELF OR FAMILY	Open-ended question on personal wishes and hopes for the future. Responses rated as concerning one's own health and health of family		HAPP 3.1	G'	+.29	Gt'	01	Adult population of 5 westernized nations, 3 underdeveloped giants, 2 countries in the Middle East, 3 Caribbean nations and the Philippines Representative sample N: 18653, date: ± 1960	CANTR 65/1 p. 263
REPORT OF FEARS CONCERNING HEALTH OF SELF OR FAMILY	Open-ended question on personal worries and fears for the future. Responses rated as concerning ill health, accident, death; for self or for members of the family		HAPP 3.1	G'	+.22	Gt'	01	See above	CANTR 65/1 p. 263
MOST IMPORTANT WORRY: HEALTH (PERSONAL AND FAMILY)	Open-ended question on most important worry other worries vs health	Computed for those having worries only (N = 2040).	HAPP 1.1	G'	+.15	Gt'	01	National adult population, U.S.A. Non-probability quota sample N: 2377, date: February, 1946	WESSM 56 p. 213
DESIRED PERSONAL CHANGES: HEALTH	Open-ended question on desired personal changes other changes vs change mentioned	Computed for those who desire to change only. (N = 1591)	HAPP 1.1	G'	–.12	Gt'	05	See above	WESSM 56 p. 211

THINKING OFTEN ABOUT HEALTH	Closed question: not at all / sometimes / often, during last week	Gammas computed on the basis of the proportion 'often' answers Lower among those of high S.E.S. : G' = -.31 (01) Stronger among those of low S.E.S.: G' = -.37 (01)	HAPP 1.1	G'	-	Gt'		Inhabitants of 4 small communities, Illinois, U.S.A. Probability multi-stage samples N: 2006, date: March, 1962	BRADB 65/1 p. 54
WORRYING ABOUT HEALTH OF SELF AND FAMILY	Direct question rated on an open graphic scale ranging from 'not worried' to 'very worried'		HAPP 1.1	G	+.24			National adult population, The Netherlands Probability area sample N: 1552, date: June, 1968	BAKKE 74 p. 27
BEING INTERESTED IN HEALTH	Closed question	College students only L-shaped curve: significant negative among unhappier students only	COMP 4.1		-			Students, U.S.A. Non-probability chunk sample N: 1651, date: —	SYMON 37 p.292
HAVING PROBLEMS WITH HEALTH	Closed question		COMP 4.1				ns	See above	SYMON 37 p. 292
BEING INTERESTED IN MENTAL HYGIENE	Closed question		COMP 4.1				ns	See above	SYMON 37 p. 292
HAVING PROBLEMS WITH MENTAL HYGIENE	Closed question	high school students: significant positive relationship college students: significant negative relation-ship L-shaped curve: stronger among happier students graduate students: negative relationship L-shaped curve: significant negative among happier students only	COMP 4.1					See above	SYMON 37 p. 292
ALTERATIONS IN HEALTH STATUS	Major change in health during past 2 years	Unaffected by life change in general	AFF 1.3	r	-.12		05	Adults, Renton, Washington, U.S.A. Probability systematic random sample of households N: 536, date: —	PESZN 75 p. 445

H 2.6 - HEALTHCARE

READINESS TO SEEK HELP:

READINESS FOR SELF-REFERRAL (a person's psychological prepared-ness to turn to professional help with an emotional problem)	3-item index, containing attitude to profession-al help, use of professional help, and perceived competence to handle one's problems oneself strong self help / self help / might need help / could have used help / has used help	When elaborated for educational level: grade school: G' = -.09 (05) high school : G' = -.15 (01) college : G' = -.24 (01)	HAPP 1.1	G'	-	Gt'		Non-institutionalized adults, U.S.A. Probability multi-stage area sample N: 2460, date: spring, 1957	GURIN 60 p. 262
READINESS FOR SELF-REFERRAL	3 item index (see above)		HAPP 1.1	G'	-.34	Gt'	05	Students teachers, Chapel Hill, U.S.A. Probability sample proportionally stratified by teaching level N: 75, date: spring, 1967	GONZA 67 p. 130
READINESS TO SEEK CARE	Likelihood of seeking medical care in eight hypothetical situations involving pain and symptomatology		AFF 1.1	r_{pm}	+.01		ns	Families of hourly workers and salaried employees, U.S.A. N: 712, date: summer, 1973	TESSL 75 p. 103
NEED FOR HELP WITH EMOTIONAL PROBLEMS OR FAMILY TROUBLES	Closed question: 'During the past year did you ever feel that you could use some help in deal-ing with emotional problems or family troubles?' never / not very often / sometimes / often.	Computed for 1973 data only. Index of Positive Affects: r = +.01 (ns) Index of Negative Affects: r = +.40 (001)	AFF 2.3	r	-.25		001	Adults, Los Angeles County, U.S.A. Multi-stage probability samples of households N: 1078 in 1972 and 1008 in 1973 date: spring, 1972 and spring, 1973	CHERL 75 p. 197

-302-

AVAILABILITY OF HELP:

AVAILABILITY OF HELP IN CASE OF ILLNESS	Question: 'If you were sick in bed at home for a short time, is there someone you could count on for help?'		HAPP 2.1	G'	+.35	Gt'	05	Aged chronically-ill patients, U.S.A. Probability sample N: 167, date: 1959	HENLE 67 p. 70

EVALUATION OF HEALTHCARE:

FAITH IN DOCTORS	Choice between the following alternatives: – I have a great faith in doctors – In general I think doctors do a good job – In general I think doctors are overrated – I distrust doctors		AFF 1.1	r_{pm}	+.03		ns	Families of hourly workers and salaried employees, U.S.A. N: 712, date: summer, 1973	TESSL 75 p. 103
SCEPTICISM TOWARDS MEDICAL CARE	6-item index (see Bice & Kalimos, 1971) A typical item is: 'Do you often doubt some of the things doctors say they can do?'		AFF 1.1	r_{pm}	-.07		05	See above	TESSL 75 p. 103
SATISFACTION WITH MEDICAL CARE	11-item satisfaction with medical care index containing satisfaction with doctor's concern about health, warmth and personal interest, friendliness, training and technical competence, willingness to listen, amount of time spent with you, amount of privacy in doctor's office, amount of health information given, quality of medical care, adequacy of office facilities and equipment, and friendliness of nurses, receptionists etc.	Investigated among those who received some medical services in the past year	AFF 1.1	r_{pm}	+.12		001	See above	TESSL 75 p. 102
SATISFACTION WITH MEDICAL CARE OF CHILDREN	11-item satisfaction with medical care index rephrased so as to be appropriate to measure satisfaction with care received by children	Computed for Ss with children under 12 years only (N = 386)	AFF 1.1	r_{pc}			ns	See above	TESSL 75 p. 105
SATISFACTION WITH COMMUNITY'S MEDICAL FACILITIES	Closed question rated on a graphic rating scale very dissatisfied / somewhat dissatisfied / neither dissatisfied nor satisfied / somewhat satisfied / very satisfied	males : r = +.09 (ns) females: r = +.05 (ns)	HAPP 3.1	r_{pm}	+	t	ns	Workers, Columbia, Canada Non-probability purposive sample by expert choice N: 470, date: —	HULIN 69 p. 285
SATISFACTION WITH AVAILABILITY OF DOCTORS IN THE COMMUNITY	See above	males only	HAPP 3.1	r_{pm}	+.13	t	05	See above	HULIN 69 p. 285
SATISFACTION WITH AVAILABILITY OF DENTISTS IN THE COMMUNITY	See above	males only	HAPP 3.1	r_{pm}	+.13	t	05	See above	HULIN 69 p. 285
SATISFACTION WITH MEDICAL SERVICES	Closed question		HAPP 1.1	mc	+.15			Urban Jewish population, Israel Probability area sample using dwelling units N: 1830, date: summer, 1973	LEVY 75/2 p. 373
			AFF 1.1	mc	+.20				
POSITIVE EVALUATION OF THE WAY THE HEALTH MIN. HANDLES HEALTH PROBLEMS	Closed question		HAPP 1.1	mc	+.13			See above	LEVY 75/2 p. 373
			AFF 1.1	mc	+.04				