

# World Database of Happiness



## Correlational Findings on Happiness and SLEEP

Subject Code: S4

© on data collection: [Ruut Veenhoven](#),  
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### Classification of Findings

<i>Subject Code</i>	<i>Description</i>	<i>Nr of Studies on this Subject</i>
S4	SLEEP	0
S4.1	Sleep career	0
S4.1.1	Earlier sleep	0
S4.1.2	Change in sleep	0
S4.1.3	Later sleep	0
S4.2	Current sleep-pattern	2
S4.2.1	Amount of sleep	5
S4.2.2	Quality of sleep	3
S4.3	Attitudes to sleep	0
S4.3.1	Satisfaction with amount of sleep	6
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Appendix 4	Further Findings in the World Database of Happiness	
Appendix 5	Related Subjects	

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 Internet: [worlddatabaseofhappiness.eur.nl](http://worlddatabaseofhappiness.eur.nl)  
 Erasmus University Rotterdam, 2009, Netherlands

## Correlational finding on Happiness and Current sleep-pattern

Subject code: S4.2

## Study ABDEL 2006A/2

*Reported in:* Abdel-Khalek, A.M.  
 Measuring Happiness by a Single Item Scale.  
 Social Behavior and Personality, 2006, Vol. 34, 139 - 150. ISSN 0301 2212  
 Page in Report: 21

*Population:* University undergraduates, Kuwait 2002

*Sample:* Non-probability chunk sample

*Non-Response:*

*N:* 503

## Correlate

*Authors label:* Insomnia

*Our classification:* Current sleep-pattern, code S4.2

*Measurement:* The Insomnia Scale (Abdel-Khalek 2004). It comprised 12 items answered on a 5-point scale. This scale is composed of two factors, i.e. difficulty in initiating and maintaining sleep, and consequences of insomnia

*Error Estimates:* Cronbach alpha = .86

## Observed Relation with Happiness

<i>Happiness Measure</i>	<i>Statistics</i>	<i>Elaboration/Remarks</i>
<a href="#">M-FH/g/sq/ol/11/a</a>	<u><math>r = -.40</math></u> <u><math>p &lt; .001</math></u>	All males : $r = -.41$ (001) females: $r = -.39$ (001)

## Correlational finding on Happiness and Current sleep-pattern

Subject code: S4.2

**Study**                      **LINN 1986**

*Reported in:* Linn, L.S.;Yager, J.; Dennis, W.;Cope, W.; Leake, B.  
 Factors Associated With Life Satisfaction Among Practicing Internist.  
 Medical Care, 1986, Vol. 24, 830 - 837. ISSN p 0125 7079; ISSN e 1537 1948  
 Page in Report: 834

*Population:* Physicians, California, USA, 1984

*Sample:* Probability simple random sample

*Non-Response:*

*N:* 211

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**Correlate**

*Authors label:* Sleeping

*Our classification:* Current sleep-pattern, code S4.2

*Measurement:* Selfreported of typical behavices in the past 6 month to  
 make one feel better:  
 - Getting an adequate amount of sleep  
 rated: never(1) to daily (6)

*Measured Values:* M = 5.15

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**Observed Relation with Happiness**

<i>Happiness Measure</i>	<i>Statistics</i>	<i>Elaboration/Remarks</i>
<a href="#">O-DT/u/sq/v/7/a</a>	<a href="#">r=-.09 ns</a>	

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**Correlational finding on Happiness and Amount of sleep**  
**Subject code: S4.2.1**

**Study**                      **BAKKE 1974**

*Reported in:* Bakker, P.; VandeBerg, N.  
 Determinanten en Correlaten van Geluk.(Determinants and Correlates of Happiness).  
 Unpublished Thesis, Erasmus University Rotterdam, 1974, Netherlands  
 Page in Report: 28

*Population:* 20-65 aged, general public, The Netherlands, 1968

*Sample:*

*Non-Response:* 34% refusal and unattainable.

*N:* 1552

## Correlate

*Authors label:* Amount of sleep. (1)

*Our classification:* Amount of sleep, code S4.2.1

*Measurement:* Difference between the time one usually goes to sleep and the time one usually awakes.

## Observed Relation with Happiness

<i>Happiness Measure</i>	<i>Statistics</i>	<i>Elaboration/Remarks</i>
<u>O-HP/g/sq/ol/7/a</u>	<u>G=±.0</u> <u>ns</u>	

## Correlational finding on Happiness and Amount of sleep

Subject code: S4.2.1

### Study **GORMA 1971**

*Reported in:* Gorman, B.S.  
 A Multivariate Study of the Relationship of Cognitive Control and Cognitive Style Principles to Reported Daily Mood Experiences.  
 Unpublished doctoral dissertation, 1971, City University of New York, USA  
 Page in Report: 216/222

*Population:* Undergraduate students, Nassau Community College, USA, 1970

*Sample:*

*Non-Response:* 4%, 3% refusal, 1% incomplete information

*N:* 67

## Correlate

*Authors label:* Amount of sleep (1)

*Our classification:* Amount of sleep, code S4.2.1

*Measurement:* Repeated closed question on amount of sleep last night; during one month: much less than average / less than average / average amount / more than average / much more than average.

## Observed Relation with Happiness

<i>Happiness Measure</i>	<i>Statistics</i>	<i>Elaboration/Remarks</i>
<u>C-BW/c/sq/l/11/b</u>	<u>r=+.16</u> <u>ns</u>	
<u>A-ARE/md/sqr/v/10/b</u>	<u>r=+.16</u> <u>ns</u>	

## Correlational finding on Happiness and Amount of sleep Subject code: S4.2.1

### Study **HAJAK 2001**

*Reported in:* Hajak, G  
Epidemiology of Severe Insomnia and Its Consequences in Germany.  
European Archives of Psychiatry and Clinical Neurosci, 2001, Vol. 251, 49 - 56. ISSN  
0940 1334  
Page in Report: 51,53,54

*Population:* 18+ aged, general public, Germany, 1997

*Sample:* Probability stratified sample

*Non-Response:*

*N:* 1913

## Correlate

*Authors label:* Severe Insomnia

*Our classification:* Amount of sleep, code S4.2.1

*Measurement:* Self report  
0: no sleep complaints  
1: severe insomnia

*Measured Values:* N=206: severe sleep complaints; N=162: no sleep complaints (=control group) -55%: no sleep complaints during last month; 4% severe insomnia

## Observed Relation with Happiness

Happiness Measure	Statistics	Elaboration/Remarks
<a href="#">O-SQL/c/sq/v/5/b</a>	<u>DM=-</u>	no complaints M = 3,82 CI95[ 3,70; 3,94]
	<u>p&lt;.00000</u>	severe insomania M = 3,05 CI95[ 2,94; 3,16]
		difference DM = -0,77 CI95[-0.93; -0,61] P2=4,9E-20

## Correlational finding on Happiness and Amount of sleep

Subject code: S4.2.1

### Study LEPPE 1997

*Reported in:* Lepper, H.S.  
Use of other Reports to Validate Subjective Well-Being Measures.  
Social Indicators Research, 1998, Vol. 44, 367 - 379. ISSN p 0303 8300; ISSN e 1573 0921 DOI:10.1023/A:1006872027638  
Page in Report: 372,377

*Population:* Retirees followed 9 months, Southern California, USA, 199?

*Sample:* Non-probability chunk sample

*Non-Response:*

N: 971

## Correlate

*Authors label:* Sleep disturbances

*Our classification:* Amount of sleep, code S4.2.1

*Measurement:* Self report on 3 questions:  
 How much of the time during the previous weeks  
 a enough sleep was obtained in order to feel rested upon waking  
 b had trouble falling asleep  
 c got the amount of sleep needed

*Error Estimates:* Correlation between self and other reports (only spouses): N=803,  $r=+.53$ ,  $p<.0001$   
 For the other-reporters, only spouses or "significant" others were asked to complete their items in order to ensure that the reporters had sufficient knowledge about the target's sleep quality. Test for difference in means ( $t=-1.71$ )

*Remarks:* Only measured in wave 1.

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## Observed Relation with Happiness

<i>Happiness Measure</i>	<i>Statistics</i>	<i>Elaboration/Remarks</i>
<u>A-BB/cm/mq/v/2/a</u>	<u><math>r=+.31</math></u> <u><math>p&lt;.0001</math></u>	
<u>O-HL*/mq/v/16/a</u>	<u><math>r=+.35</math></u> <u><math>p&lt;.0001</math></u>	
<u>M-AO*/mqr*/0/a</u>	<u><math>r=+.36</math></u> <u><math>p&lt;.0001</math></u>	

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## Correlational finding on Happiness and Amount of sleep

Subject code: S4.2.1

**Study**                      **WESSM 1966/2**

*Reported in:* Wessman, A.E.;Ricks, D.F.  
 Mood and Personality.  
 Holt, Rinehart and Wilson, 1966, New York, USA. ISBN 03 0541 151 8  
 Page in Report: 283

*Population:* Male college students, followed 3 years, Harvard University, USA, 1957-60

*Sample:* Non-probability chunk sample

*Non-Response:* 37%: 9 dropouts, incomplete; about the same happiness distribution.

*N:* 17

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## Correlate

*Authors label:* Amount of sleep (1)

*Our classification:* Amount of sleep, code S4.2.1

*Measurement:* Repeated direct question on number of hours sleep last night; during 6 weeks.

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## Observed Relation with Happiness

<i>Happiness Measure</i>	<i>Statistics</i>	<i>Elaboration/Remarks</i>
<a href="#">A-ARE/md/sqr/v/10/a</a>	<a href="#">r=+.25</a> <a href="#">ns</a>	

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## Correlational finding on Happiness and Quality of sleep

Subject code: S4.2.2

### Study CLEME 1980/4

*Reported in:* Clement, F.J.  
De la Variation de Quelques Traits de Personnalité en Fonction, notamment, de l'Age, du Sexe et du Niveau Intellectuel. (The Variation of Certain Personality Traits in Relation to Age, Sex, and Intelligent Level).  
Psychologie Francaise, 1980, Vol. 25, 95 - 113  
Page in Report: 103-107

*Population:* 50-69 aged women, France, 1975

*Sample:*

*Non-Response:*

*N:* 747

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## Correlate

*Authors label:* Sleep quality (1)

*Our classification:* Quality of sleep, code S4.2.2

*Measurement:* Single direct question;  
 0 more or less disturbed  
 1 normal

## Observed Relation with Happiness

<i>Happiness Measure</i>	<i>Statistics</i>	<i>Elaboration/Remarks</i>		
<u>M-FH/u/sq/ol/9/a</u>	<u>DM=+</u> <u>p&lt;.001</u>	More or less disturbed Normal	M=6. M=6,87	Mt '=6,3 Mt '=7,3
<u>O-HL/u/sq/ol/9/a</u>	<u>DM=+</u> <u>p&lt;.05</u>	more or less disturbed normal	M=6,80 M=7,15	Mt '=7,3 Mt '=7,7
<u>O-SP/u/sq/ol/9/a</u>	<u>DM=+</u> <u>p&lt;.001</u>	More or less disturbed Normal	M=6,21 M=6,54	Mt '=6,5 Mt '=6,9

## Correlational finding on Happiness and Quality of sleep

Subject code: S4.2.2

### Study KAHNE 2006

*Reported in:* Kahneman, D.; Krueger, A. B.  
 Developments in the Measurement of Subjective Well-Being.  
 Journal of Economics Perspective, 2006, Vol. 20, 3 -24. ISSN 0895 3309  
 DOI:10.1257/089533006776526030  
 Page in Report: 17

*Population:* Adults, female, employed, USA (Texas)

*Sample:* Non-probability purposive sample

*Non-Response:*

N: 909

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## Correlate

*Authors label:* Sleep Quality

*Our classification:* Quality of sleep, code S4.2.2

*Measurement:* Self report on single question

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## Observed Relation with Happiness

<i>Happiness Measure</i>	<i>Statistics</i>	<i>Elaboration/Remarks</i>
<a href="#">O-SLW/c/sq/v/4/a</a>	<a href="#">r=+.29</a>	
<a href="#">A-AB/yd/mq/n/7/a</a>	<a href="#">r=+.30</a>	

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## Correlational finding on Happiness and Quality of sleep

Subject code: S4.2.2

### Study LEPPE 1997

*Reported in:* Lepper, H.S.  
 Use of other Reports to Validate Subjective Well-Being Measures.  
 Social Indicators Research, 1998, Vol. 44, 367 - 379. ISSN p 0303 8300; ISSN e 1573 0921 DOI:10.1023/A:1006872027638  
 Page in Report: 372,377

*Population:* Retirees followed 9 months, Southern California, USA, 199?

*Sample:* Non-probability chunk sample

*Non-Response:*

N: 971

---

## Correlate

*Authors label:* Sleep disturbances

*Our classification:* Quality of sleep, code S4.2.2

*Measurement:* Self report on 3 questions:  
 How much of the time during the previous weeks  
 a enough sleep was obtained in order to feel rested upon waking  
 b had trouble falling asleep  
 c got the amount of sleep needed

*Error Estimates:* Correlation between self and other reports (only spouses): N=803,  $r=+.53$ ,  $p<.0001$   
 For the other-reporters, only spouses or "significant" others were asked to complete their items in order to ensure that the reporters had sufficient knowledge about the target's sleep quality. Test for difference in means ( $t=-1.71$ )

*Remarks:* Only measured in wave 1.

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## Observed Relation with Happiness

<i>Happiness Measure</i>	<i>Statistics</i>	<i>Elaboration/Remarks</i>
<u>A-BB/cm/mq/v/2/a</u>	<u><math>r=+.31</math></u> <u><math>p&lt;.0001</math></u>	
<u>O-HL*/mq/v/16/a</u>	<u><math>r=+.35</math></u> <u><math>p&lt;.0001</math></u>	
<u>M-AO*/mqr*/10/a</u>	<u><math>r=+.36</math></u> <u><math>p&lt;.0001</math></u>	

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Correlational finding on Happiness and Satisfaction with amount of sleep  
 Subject code: S4.3.1

## Study ANDRE 1976/3

*Reported in:* Andrews, F.M.; Withey, S.B.  
 Social Indicators of Well-being: Americans' Perceptions of Life Quality  
 Plenum Press, 1976, New York, USA. ISBN 0 306 30935 1  
 Page in Report: 112

*Population:* 18+ aged, general public, non institutionalized, USA, 1972/11

*Sample:*

*Non-Response:* 38%

N: 1072

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## Correlate

*Authors label:* Satisfaction with amount of sleep (1)

*Our classification:* Satisfaction with amount of sleep, code S4.3.1

*Measurement:* Closed question: "How do you feel about the sleep you get?"  
Rated on a 7-point scale: terrible/ unhappy/ mostly  
dissatisfied/ mixed/ mostly satisfied/ pleased/ delighted

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## Observed Relation with Happiness

<i>Happiness Measure</i>	<i>Statistics</i>	<i>Elaboration/Remarks</i>
<u>O-DT/u/sqt/v/7/a</u>	<u>E<sup>2</sup>=+.31</u>	

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Correlational finding on Happiness and Satisfaction with amount of sleep  
Subject code: S4.3.1

## Study ANDRE 1976/3

*Reported in:* Andrews, F.M.; Withey, S.B.  
Social Indicators of Well-being: Americans' Perceptions of Life Quality  
Plenum Press, 1976, New York, USA. ISBN 0 306 30935 1  
Page in Report: 112

*Population:* 18+ aged, general public, non institutionalized, USA, 1972/11

*Sample:*

*Non-Response:* 38%

N: 1072

---

## Correlate

*Authors label:* Satisfaction with amount of sleep (2)

*Our classification:* Satisfaction with amount of sleep, code S4.3.1

*Measurement:* Closed question: "How do you feel about the sleep you get?"  
 Rated on a 7-point scale: terrible/ unhappy/ mostly  
 dissatisfied/ mixed/ mostly satisfied/ pleased/ delighted

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## Observed Relation with Happiness

<i>Happiness Measure</i>	<i>Statistics</i>	<i>Elaboration/Remarks</i>
<u>O-DT/u/sqrt/v/7/a</u>	<u>E<sup>2</sup>=+.31</u>	

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## Correlational finding on Happiness and Satisfaction with amount of sleep

Subject code: S4.3.1

### Study **ANDRE 1976/3**

*Reported in:* Andrews, F.M.; Withey, S.B.  
 Social Indicators of Well-being: Americans' Perceptions of Life Quality  
 Plenum Press, 1976, New York, USA. ISBN 0 306 30935 1  
 Page in Report: 112

*Population:* 18+ aged, general public, non institutionalized, USA, 1972/11

*Sample:*

*Non-Response:* 38%

*N:* 1072

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## Correlate

*Authors label:* Satisfaction with the amount of sleep (1)

*Our classification:* Satisfaction with amount of sleep, code S4.3.1

*Measurement:* Closed question: "How do you feel about the sleep you get?"  
 Rated on a 7-point scale: terrible/ unhappy/ mostly  
 dissatisfied/ mixed/ mostly satisfied/ pleased/ delighted

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## Observed Relation with Happiness

<i>Happiness Measure</i>	<i>Statistics</i>	<i>Elaboration/Remarks</i>
<u>O-DT/u/sqrt/v/7/a</u>	<u>E<sup>2</sup>=+.31</u>	

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Correlational finding on Happiness and Satisfaction with amount of sleep  
Subject code: S4.3.1

## Study ANDRE 1976/5

*Reported in:* Andrews, F.M.; Withey, S.B.  
Social Indicators of Well-being: Americans' Perceptions of Life Quality  
Plenum Press, 1976, New York, USA. ISBN 0 306 30935 1  
Page in Report: 112

*Population:* 18+ aged, general public, non-institutionalized, USA, 1973/7

*Sample:*

*Non-Response:*

*N:* 222

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## Correlate

*Authors label:* Satisfaction with amount of sleep (1)

*Our classification:* Satisfaction with amount of sleep, code S4.3.1

*Measurement:* Closed question: "How do you feel about the sleep you get?"  
Rated on a 7-point scale: terrible/ unhappy/ mostly  
dissatisfied/ mixed/ mostly satisfied/ pleased/ delighted

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## Observed Relation with Happiness

<i>Happiness Measure</i>	<i>Statistics</i>	<i>Elaboration/Remarks</i>
<u>O-DT/u/sqrt/v/7/a</u>	<u>r=+.24</u>	

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Correlational finding on Happiness and Satisfaction with amount of sleep  
Subject code: S4.3.1



*Population:* 18+ aged, general public, non-institutionalized, USA, 1973/7

*Sample:*

*Non-Response:*

*N:* 222

## Correlate

*Authors label:* Satisfaction with amount of sleep (3)

*Our classification:* Satisfaction with amount of sleep, code S4.3.1

*Measurement:* Closed question: "How do you feel about the sleep you get?"

Rated:

1 terrible

2 unhappy

3 mostly dissatisfied

4 mixed

5 mostly satisfied

6 pleased

7 delighted

## Observed Relation with Happiness

<i>Happiness Measure</i>	<i>Statistics</i>	<i>Elaboration/Remarks</i>
<a href="#">O-DT/u/sqt/v/7/a</a>	<a href="#">r=+.24</a>	

## Appendix 1: Happiness Items used

<i>Happiness Item Code</i>	<i>Full Text</i>
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A-AB/yd/mq/n/7/a Selfreport on yesterdays activities using a diary format.

Nine affects were rated for each episode:

- A happy
- B warm, friendly
- C enjoying myself
- D frustrated, annoyed
- E depressed, blue
- F hassled, puushed around
- G angry, hostile
- H worried, anxious
- I criticized, put down

Rating: 0 'not at all' to 6 'very much'

Computation:  $(A+B+C)/3 - (D+E+F+H+H+I)/6$

Name: Kahneman's Net Affect

.  
.  
6

A-ARE/md/sqr/v/10/a Selfreport on single question, repeated every evening before retiring during 3 weeks (experience sampling).

"On the average, how happy or unhappy did you feel today....?"

- 1 Extremely unhappy. Utterly depressed. Completely down.
- 2 Very unhappy. Depressed. Spirits very low.
- 3 Pretty unhappy. Somewhat 'blue'. Spirits down.
- 4 Mildly unhappy. Just a little low.
- 5 Barely unhappy. Just this side of neutral.
- 6 Barely happy. Just this side of neutral.
- 7 Mildly happy. Feeling fairly good and somewhat cheerful.
- 8 Pretty happy. Spirits high. Feeling good.
- 9 Very happy. Feeling really good. Elated.
- 10 Extremely happy. Feeling ecstatic, joyous, fantastic.

Name: Wessman & Ricks' `Elation - Depression Scale" (adapted version)

A-ARE/md/sqr/v/10/  
b Selfreport on single question, answered every evening before retiring during six weeks (experience sampling)

"On average; how elated or depressed, happy or unhappy you felt today....?"

10 Complete elation, rapturous joy and soaring ecstasy

9 Very elated and in very high spirits. Tremendous delight and buoyancy

8 Elated and in high spirits

7 Feeling very good and cheerful

6 Feeling pretty good , "OK"

5 Feeling a little bit low. Just so-so

4 Spirits low and somewhat 'blue'

3 Depressed and feeling very low.  
Definitely 'blue'

2 Tremendously depressed.

Feeling terrible, really miserable, "just awful"

1 Utter depression and gloom. Completely down.

All is black and leaden. Wish it were all over.

Name: Wessman & Ricks' `Elation - depression scale'

A-BB/cm/mq/v/2/a Selfreport on 10 questions:

During the past few weeks, did you ever feel ...? (yes/no)

A Particularly excited or interested in something?

B So restless that you couldn't sit long in a chair?

C Proud because someone complimented you on something you had done?

D Very lonely or remote from other people?

E Pleased about having accomplished something?

F Bored?

G On top of the world?

H Depressed or very unhappy?

I That things were going your way?

J Upset because someone criticized you?

Answer options and scoring:

yes = 1

no = 0

Summation:

-Positive Affect Score (PAS): A+C+E+G+I

-Negative Affect Score (NAS): B+D+F+H+J

-Affect Balance Score (ABS): PAS minus NAS

Possible range: -5 to +5

Name: Bradburn's 'Affect Balance Scale' (standard version)

C-BW/c/sq/l/11/b

Selfreport on single question:

"Above you see a numbered ladder. Consider the top of the ladder as the best possible life and the bottom of the ladder as the worst possible life.

A Please place an X where you feel you are now.

B Place an Y at the point where you were five years ago.

C Please place a Z at the point that you feel you will be at five years from now.

[ 10 ] best possible life

[ 9 ]

[ 8 ]

[ 7 ]

[ 6 ]

[ 5 ]

[ 4 ]

[ 3 ]

[ 2 ]

[ 1 ]

[ 0 ] worst possible life

Question A is the case question.

Name: Cantril's self anchoring ladder rating of life (modified version)

M-AO\*/mqr\*/0/a

Various self reports and informant rating

A Selfreport on five questions repeated three times during semester:

a In most ways my life is close to ideal

b The conditions of my life are excellent

c I am satisfied with my life

d So far, I have gotten the important things I want in life

e If I could live my life over, I would change nothing

Answers rated: 7 strongly agree ... 1 strongly disagree

(Diener's Satisfaction With Life Scale, SWLS)

B Selfreport on 24 questions:

How much of each mood did you experience in the last month?

BA LOVE

a Affection

b love

c caring

d fondness

BB JOY

a joy

b happiness

c contentment

d pride

BC FEAR

a fear

b worry

c anxiety

d nervous

BD ANGER

- a anger
- b irritation
- c disgust
- d rage

BE SHAME

- a shame
- b guilt
- c regret
- d embarrassment

BF SADNES

- a sadness
- b loneliness
- c unhappiness
- d depression

Rated: 0 = not at all ....6 extremely much

Summation: balance score  $(BA+BB)/2 - (BC+BD+BE+BF)/4$

C Rating of B by five informants

D Selfreport of daily affect on B

Summation: z-scores

M-FH/g/sq/ol/11/a

Selfreport on single question:

Do you feel happy in general?

0 minimum score

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9

10 maximal score

Numbers presented on a horizontal line scale.

M-FH/u/sq/ol/9/a

Selfreport on single question:

Place a cross on the line on the place you estimate to be what corresponds best with your state.

1 | I don't feel very well in my skin  
2 |  
3 |  
4 |  
5 | I don't feel too well in my skin  
6 |  
7 |  
8 |  
9 | I feel very well in my skin

Scoring: rated on open horizontal line scale divided afterwards in 9 sections.

O-DT/u/sq/v/7/a

Selfreport on single question:

How do you feel about your life as a whole.....?

7 delighted  
6 pleased  
5 mostly satisfied  
4 mixed  
3 mostly dissatisfied  
2 unhappy  
1 terrible

Name: Andrews & Withey's 'Delighted-Terrible Scale' (original version)

O-DT/u/sqt/v/7/a

Selfreport on single question, asked twice in interview:

How do you feel about your life as a whole.....?

7 delighted  
6 pleased  
5 mostly satisfied  
4 mixed  
3 mostly dissatisfied  
2 unhappy  
1 terrible

Summation: arithmetic mean

Name: Andrews & Withey's "Delighted-Terrible Scale" (original version)  
Also known as Lehman's 'Global lifesatisfaction'

O-HL/\*/mq/v/16/a

Self report on three questions:

A During the past 4 weeks..... Have you been a happy person?

- 6 all of the time
- 5 most of the time
- 4 a good bit of the time
- 3 some of the time
- 2 a little of the time
- 1 none of the time

B Considering your life as a whole, would you describe it as...?"

- 1 very unhappy
- 2 unhappy
- 3 unhappy
- 4 mixed
- 5 happy
- 6 happy
- 7 very happy

C Taking all together, how would you say things are these days?

- 3 very happy
- 2 pretty happy
- 1 not too happy

O-HL/u/sq/ol/9/a

Selfreport on single question:

Place a cross, on each line, on the place you estimate to be that which corresponds best with your state

- 1 I am not very happy
- 2 |
- 3 |
- 4 |
- 5 | I am not too happy
- 6 |
- 7 |
- 8 |
- 9 I am quite happy

Scoring: rated on an open horizontal line scale, divided afterwards in 9 sections.

O-HP/g/sq/ol/7/a

Selfreport on single question:

"Generally speaking are you a happy person.....?"

Responses were made on an open line scale, and were later coded in 7 categories:

- 1 very unhappy
- 2
- 3
- 4
- 5
- 6
- 7 very happy.

O-SLW/c/sq/v/4/a Selfreport on single question:

In general, how satisfied are you with your life these days? Would you way that you are....?

- 4 very satisfied
- 3 somewhat satisfied
- 2 somewhat dissatisfied
- 1 very dissatisfied

O-SP/u/sq/ol/9/a Selfreport on single question:

Place a cross on the line below, on the spot you estimate that corresponds best with your state.

- 1 | I am not very satisfied
- 2 |
- 3 |
- 4 |
- 5 | I am not too satisfied
- 6 |
- 7 |
- 8 |
- 9 | I am very satisfied

Scoring: rated on an open horizontal line scale divided afterwards in 9 sections.

O-SQL/c/sq/v/5/b Selfreport on single question:

How satisfied are you the quality of your life these days?

- 1 very dissatisfied
- 2 dissatisfied
- 3 neither nor
- 4 satisfied
- 5 very satisfied

Numbering reversed in original rating scale

## Appendix 2: Statistics used

<i>Symbol</i>	<i>Explanation</i>
DM	<p>DIFFERENCE of MEANS            Type: descriptive statistic only.            Measurement level: Correlate: dichotomous, Happiness: metric            Range: depending on the happiness rating scale of the author; range symmetric about zero.</p> <p>Meaning: the difference of the mean happiness, as measured on the author's rating scale, between the two correlate levels.</p>
E <sup>2</sup>	<p>CORRELATION RATIO (Elsewhere sometimes called h<sup>2</sup> or ETA)            Type: test statistic            Measurement level: Correlate: nominal or ordinal, Happiness: metric            Range: [0; 1]</p> <p>Meaning: correlate is accountable for E<sup>2</sup> x 100 % of the variation in happiness.            E<sup>2</sup> = 0 « knowledge of the correlate value does not improve the prediction quality of the happiness rating.            E<sup>2</sup> = 1 « knowledge of the correlate value enables an exact prediction of the happiness rating</p>
G	<p>GOODMAN &amp; Kruskal's GAMMA            Type: test statistic            Measurement level: Correlate: ordinal, Happiness: ordinal            Range: [-1; +1]</p> <p>Meaning:            G = 0 « no rank correlation            G = +1 « strongest possible rank correlation, where high correlate values correspond with high happiness ratings.            G = -1 « strongest possible rank correlation, where high correlate values correspond with low happiness ratings.</p>
r	<p>PRODUCT-MOMENT CORRELATION COEFFICIENT (Also "Pearson's correlation coefficient" or simply 'correlation coefficient')            Type: test statistic.            Measurement level: Correlate: metric, Happiness: metric            Range: [-1; +1]</p> <p>Meaning:            r = 0 « no correlation ,            r = 1 « perfect correlation, where high correlate values correspond with high happiness values, and            r = -1 « perfect correlation, where high correlate values correspond with low happiness values.</p>



## Appendix 3: About the World Database of Happiness

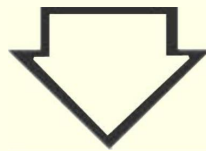
### Structure of the collections

The World Database of Happiness is an ongoing register of scientific research on the subjective enjoyment of life.

It brings together findings that are scattered throughout many studies and provides a basis for synthetic work.

World literature on Happiness

Selection on subject



Bibliography and Directory

Selection of empirical studies



Selection on valid measurement: Item

Bank

Abstracting and classification of findings



How happy people are, distributional findings  
Happiness in Nations , Happiness in Publics



What goes together with happiness  
Correlational Findings



Listing of comparable findings in Nations

States of Nations , Trends in Nations



### Size of the collections

1226 Happiness measures (Item Bank)

4258 Nations surveys in 206 Nations

149 Distinguished publics in 1199 studies

12032 Correlational findings in 1196 studies

## Appendix 4 Further Findings in the World Database of Happiness

<i>Main Subjects</i>	<i>Subject Description</i>	<i>Number of Studies</i>
A1	ACTIVITY: LEVEL (how much one does)	58
A2	ACTIVITY: PATTERN (what one does)	32
A3	AFFECTIVE LIFE	48
A4	AGE	400
A5	AGGRESSION	12
A6	ANOMY	32
A7	APPEARANCE (good looks)	15
A8	ATTITUDES	6
A9	AUTHORITARIANISM	4
B1	BIRTH CONTROL	1
B2	BIRTH HISTORY (own birth)	201
B3	BODY	77
C1	CHILDREN	1
C2	CHILDREN: WANT FOR (Parental aspirations)	6
C3	CHILDREN: HAVING (parental status)	195
C4	CHILDREN: CHARACTERISTICS OF ONE'S CHILDREN	25
C5	CHILDREN: RELATION WITH ONE'S CHILDREN	8
C6	CHILDREN: REARING OF ONE'S CHILDREN (parental behavior)	26
C7	COMMUNAL LIVING	9
C8	CONCERNS	18
C9	COPING	43
C10	CREATIVENESS	6
C11	CULTURE (Arts and Sciences)	8
D1	DAILY JOYS & HASSLES	5
E1	EDUCATION	302
E2	EMPLOYMENT	363
E3	ETHNICITY	98
E4	EXPRESSIVE BEHAVIOR	12
F1	FAMILY OF ORIGIN (earlier family for adults, current for young)	236
F2	FAMILY OF PROCREATION	58
F3	FAMILY OF RELATIVES	157
F4	FARMING	25
F5	FREEDOM	32
F6	FRIENDSHIP	152
G1	GENDER	370
G2	GRIEF	1
H1	HABITS	1
H2	HANDICAP	25

H3	HAPPINESS: VIEWS ON HAPPINESS	49
H4	HAPPINESS: DISPERSION OF HAPPINESS	10
H5	HAPPINESS: CAREER	191
H6	HAPPINESS: CORRESPONDENCE OF DIFFERENT MEASURES	310
H7	HAPPINESS OF OTHERS	0
H8	HAPPINESS: REPUTATION OF HAPPINESS	19
H9	HEALTH-BEHAVIOR	25
H10	HELPING	5
H11	HOPE	8
H12	HOUSEHOLD: COMPOSITION	137
H13	HOUSEHOLD: WORK	32
H14	HOUSING	106
I1	INCOME	552
I2	INSTITUTIONAL LIVING	43
I3	INTELLIGENCE	71
I4	INTERESTS	8
I5	INTERVIEW	73
I6	INTIMACY	103
L1	LANGUAGE	2
L2	LEADERSHIP	8
L3	LEISURE	206
L4	LIFE APPRAISALS: OTHER THAN HAPPINESS	368
L5	LIFE CHANGE	35
L6	LIFE EVENTS	86
L7	LIFE GOALS	75
L8	LIFE HISTORY	2
L9	LIFE STYLE	22
L10	LOCAL ENVIRONMENT	374
L11	LOTTERY	8
L12	LOVE-LIFE	31
M1	MARRIAGE: MARITAL STATUS CAREER	64
M2	MARRIAGE: CURRENT MARITAL STATUS	543
M3	MARRIAGE: RELATIONSHIP	115
M4	MARRIAGE: PARTNER	46
M5	MEANING	23
M6	MEDICAL TREATMENT	81
M7	MENTAL HEALTH	218
M8	MIGRATION: TO OTHER COUNTRY	29
M9	MIGRATION: MOVING WITHIN COUNTRY (residential mobility)	17

M10	MIGRATION: MIGRANT WORK	3
M11	MILITARY LIFE	7
M12	MODERNITY	6
M13	MOOD	246
M14	MOTIVATION	7
N1	NATION: NATIONALITY	29
N2	NATION: ERA (temporal period)	41
N3	NATION: NATIONAL CHARACTER (modal personality)	29
N4	NATION: CONDITION IN ONE'S NATION	430
N5	NATION: POSITION OF ONE'S NATION	1
N6	NATION: ATTITUDES TO ONES NATION	152
N7	NATION: LIVABILITY OF ONE'S NATION	17
N8	NATION i: ATTITUDES IN	1
N9	REGION IN NATION	59
N10	NUTRITION	23
N21	ERA	0
O1	OCCUPATION	178
O2	ORGAN TRANSPLANTATION	17
P1	PERSONALITY: HISTORY	48
P2	PERSONALITY: CHANGE	10
P3	PERSONALITY: CURRENT ORGANIZATION	7
P4	PERSONALITY: CURRENT TRAITS	462
P5	PERSONALITY: LATER	23
P6	PHYSICAL HEALTH	427
P7	PLANNING	11
P8	POLITICAL BEHAVIOUR	231
P9	POPULARITY	26
P10	POSSESSIONS	60
P11	PRISON	1
P12	PROBLEMS	25
P13	PSYCHO-SOMATIC COMPLAINTS	62
P14	PETS	3
R1	RELIGION	251
R2	RESOURCES	9
R3	RETIREMENT	89
R4	ROLES	23
S1	SCHOOL	129
S2	SELF-IMAGE	237
S3	SEX-LIFE	61

S4	SLEEP	16
S5	SOCIAL MOBILITY	17
S6	SOCIAL PARTICIPATION: PERSONAL CONTACTS	69
S7	SOCIAL PARTICIPATION : VOLUNTARY ASSOCIATIONS	131
S8	SOCIAL PARTICIPATION: TOTAL (personal + associations)	34
S9	SOCIO-ECONOMIC STATUS	154
S10	SOCIAL SUPPORT: RECEIVED	62
S11	SOCIAL SUPPORT: PROVIDED	6
S12	SPORTS	38
S13	STIMULANTS	49
S14	SUICIDE	8
S15	SUMMED DETERMINANTS	92
T1	TIME	53
T2	THERAPY	38
T3	TOLERANCE	37
V1	VALUES: CAREER	8
V2	VALUES: CURRENT PREFERENCES (own)	73
V3	VALUES: CLIMATE (current values in environment)	7
V4	VALUES: SIMILARITY (current fit with others)	12
V5	VICTIM	14
W1	WAR	5
W2	WISDOM	2
W3	WORK: CAREER	2
W4	WORK: CONDITIONS	68
W5	WORK: ATTITUDES	347
W6	WORK: PERFORMANCE (current)	29
W7	WORRIES	31
XX	UNCLASSIFIED	25

## Appendix 5: Related Subjects

<i>Subject</i>	<i>Related Subject(s)</i>
S4.2 Current sleep-pattern	P12.2 Current problems
S4.2.1 Amount of sleep	A2.2 Current activity pattern
S4.2.2 Quality of sleep	M13.3.4 Feeling energetic (vs lethargic, tired)
S4.2.2 Quality of sleep	P6.2.3.1 . fatigue

## A report of the World Database of Happiness, Correlational Findings