Classification of Findings

<table>
<thead>
<tr>
<th>Subject Code</th>
<th>Description</th>
<th>Nr of Studies on this Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>S4</td>
<td>SLEEP</td>
<td>0</td>
</tr>
<tr>
<td>S4.1</td>
<td>Sleep career</td>
<td>0</td>
</tr>
<tr>
<td>S4.1.1</td>
<td>Earlier sleep</td>
<td>0</td>
</tr>
<tr>
<td>S4.1.2</td>
<td>Change in sleep</td>
<td>0</td>
</tr>
<tr>
<td>S4.1.3</td>
<td>Later sleep</td>
<td>0</td>
</tr>
<tr>
<td>S4.2</td>
<td>Current sleep-pattern</td>
<td>2</td>
</tr>
<tr>
<td>S4.2.1</td>
<td>Amount of sleep</td>
<td>5</td>
</tr>
<tr>
<td>S4.2.2</td>
<td>Quality of sleep</td>
<td>3</td>
</tr>
<tr>
<td>S4.3</td>
<td>Attitudes to sleep</td>
<td>0</td>
</tr>
<tr>
<td>S4.3.1</td>
<td>Satisfaction with amount of sleep</td>
<td>6</td>
</tr>
</tbody>
</table>

Appendix 1: Happiness Items used
Appendix 2: Statistics used
Appendix 3: About the World Database of Happiness
Appendix 4: Further Findings in the World Database of Happiness
Appendix 5: Related Subjects

Cite as: Veenhoven, R.: Findings on SLEEP
World Database of Happiness, Correlational Findings
Internet: worlddatabaseofhappiness.eur.nl
Erasmus University Rotterdam, 2009, Netherlands
Correlational finding on Happiness and Current sleep-pattern
Subject code: S4.2

Study

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

<table>
<thead>
<tr>
<th>Happiness Measure</th>
<th>Statistics</th>
<th>Elaboration/Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>M-FH/g/sq/ol/11/a</td>
<td>r=.40</td>
<td>All</td>
</tr>
<tr>
<td></td>
<td>p&lt;.001</td>
<td>males : r = -.41 (001)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>females: r = -.39 (001)</td>
</tr>
</tbody>
</table>
Findings on Happiness and SLEEP

Study LINN 1986


Population: Physicians, California, USA, 1984

Sample: Probability simple random sample

Non-Response:

N: 211

Correlate

Authors label: Sleeping

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

Measurement: Selfreported of typical behaviors 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

Observed Relation with Happiness

Happiness Measure Statistics Elaboration/Remarks

O-DT/u/sq/v/7/a r=-.09 ns

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

Study BAKKE 1974
Findings on Happiness and SLEEP


*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**

<table>
<thead>
<tr>
<th>Happiness Measure</th>
<th>Statistics</th>
<th>Elaboration/Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>O-HP/g/sq/ol/7/a</td>
<td>G =±: 0</td>
<td>ns</td>
</tr>
</tbody>
</table>

**Correlational finding on Happiness and Amount of sleep**

**Subject code:** S4.2.1

**Study**

**GORMA 1971**


*Population:* Undergraduate students, Nassau Community College, USA, 1970
Findings on Happiness and SLEEP

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

<table>
<thead>
<tr>
<th>Happiness Measure</th>
<th>Statistics</th>
<th>Elaboration/Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-BW/c/sq/l/11/b</td>
<td>$r=+.16$</td>
<td>ns</td>
</tr>
<tr>
<td>A-ARE/md/sqr/v/10/b</td>
<td>$r=+.16$</td>
<td>ns</td>
</tr>
</tbody>
</table>

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

Study

HAJ AK 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
Findings on Happiness and SLEEP

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
--- | --- | ---
O-SQL/c/sq/v5/b | DM= | no complaints $M = 3,82$ CI95 [3,70; 3,94]
 | p<0.0000 | 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.
Page in Report: 372,377

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

Sample: Non-probability chunk sample

Non-Response: 

N: 971
Findings on Happiness and SLEEP

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 mean ns (t=-1.71)

Remarks: Only measured in wave 1.

Observed Relation with Happiness

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

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
Findings on Happiness and SLEEP

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

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.

Observed Relation with Happiness

<table>
<thead>
<tr>
<th>Happiness Measure</th>
<th>Statistics</th>
<th>Elaboration/Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-ARE/md/sqr/v10/a</td>
<td>r=+.25</td>
<td>ns</td>
</tr>
</tbody>
</table>

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 Personalité 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: N: 747
Correlate

Authors label: Sleep quality (1)

Our classification: Quality of sleep, code S4.2.2

Measurement: Single direct question;
- more or less disturbed
- normal

Observed Relation with Happiness

<table>
<thead>
<tr>
<th>Happiness Measure</th>
<th>Statistics</th>
<th>Elaboration/Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>M-FH/u/sq/ol/9/a</td>
<td>DM=+</td>
<td>More or less disturbed</td>
</tr>
<tr>
<td></td>
<td>p&lt;.001</td>
<td>Normal</td>
</tr>
<tr>
<td>O-HL/u/sq/ol/9/a</td>
<td>DM=+</td>
<td>more or less disturbed</td>
</tr>
<tr>
<td></td>
<td>p&lt;.05</td>
<td>normal</td>
</tr>
<tr>
<td>O-SP/u/sq/ol/9/a</td>
<td>DM=+</td>
<td>More or less disturbed</td>
</tr>
<tr>
<td></td>
<td>p&lt;.001</td>
<td>Normal</td>
</tr>
</tbody>
</table>

Correlational finding on Happiness and Quality of sleep
Subject code: S4.2.2

Study KAHNE 2006


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

Sample: Non-probability purposive sample

Non-Response:
Findings on Happiness and SLEEP

N: 909

Correlate

Authors label: Sleep Quality

Our classification: Quality of sleep, code S4.2.2

Measurement: Self report on single question

Observed Relation with Happiness

<table>
<thead>
<tr>
<th>Happiness Measure</th>
<th>Statistics</th>
<th>Elaboration/Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>O-SLW/c/sq/v/4/a</td>
<td>r=+.29</td>
<td></td>
</tr>
<tr>
<td>A-AB/yd/mq/n/7/a</td>
<td>r=+.30</td>
<td></td>
</tr>
</tbody>
</table>

Correlational finding on Happiness and Quality of sleep

Subject code: S4.2.2

Study

LEPPE 1997

Reported in: Lepper, H.S.
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
Findings on Happiness and SLEEP

**Measurement:** Self report on 3 questions:
- How much of the time during the previous weeks
  - enough sleep was obtained in order to feel rested upon waking
  - had trouble falling asleep
  - 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 mean ns (t=1.71)

**Remarks:** Only measured in wave 1.

---

**Observed Relation with Happiness**

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<th>Happiness Measure</th>
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<th>Elaboration/Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-BB/cm/mq/v/2/a</td>
<td>r=+.31</td>
<td>p&lt;.0001</td>
</tr>
<tr>
<td>O-HL/*/mq/v/16/a</td>
<td>r=+.35</td>
<td>p&lt;.0001</td>
</tr>
<tr>
<td>M-AO/<em>/mqr/</em>/0/a</td>
<td>r=+.36</td>
<td>p&lt;.0001</td>
</tr>
</tbody>
</table>

**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
Page in Report: 112

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

*Sample:* 38%
**Findings on Happiness and SLEEP**

*N*: 1072

### 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

### Observed Relation with Happiness

<table>
<thead>
<tr>
<th>Happiness Measure</th>
<th>Statistics</th>
<th>Elaboration/Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>O-DT/u/sqt/v/7/a</td>
<td>$E^2 = .31$</td>
<td></td>
</tr>
</tbody>
</table>

### 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
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
Findings on Happiness and Sleep

**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

---

**Observed Relation with Happiness**

<table>
<thead>
<tr>
<th>Happiness Measure</th>
<th>Statistics</th>
<th>Elaboration/Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>O-DT/u/sqt/v/7/a</td>
<td>$E^2 = .31$</td>
<td></td>
</tr>
</tbody>
</table>

---

**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
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 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

---

**Observed Relation with Happiness**
Findings on Happiness and SLEEP

<table>
<thead>
<tr>
<th>Happiness Measure</th>
<th>Statistics</th>
<th>Elaboration/Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>O-DT/u/sqt/v/7/a</td>
<td>E²=+.31</td>
<td></td>
</tr>
</tbody>
</table>

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  
Page in Report: 112

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

Sample:  
Non-Response:  
N: 222

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

Observed Relation with Happiness

<table>
<thead>
<tr>
<th>Happiness Measure</th>
<th>Statistics</th>
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</tr>
</thead>
<tbody>
<tr>
<td>O-DT/u/sqt/v/7/a</td>
<td>r=+.24</td>
<td></td>
</tr>
</tbody>
</table>

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

**Study**  
**ANDRE 1976/5**

*Reported in:* Andrews, F.M.; Withey, S.B.  
Social Indicators of Well-being: Americans' Perceptions of Life Quality  
Page in Report: 112

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

*Sample:*

*Non-Response:*  
*N:* 222

### 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

### Observed Relation with Happiness

**Happiness Measure**  
**Statistics**  
**Elaboration/Remarks**

| O-DT/u/sqt/v/7/a | r=+.24 |

**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  
Page in Report: 112
Findings on Happiness and SLEEP

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

Happiness Measure   Statistics   Elaboration/Remarks
O-DT/u/sqt/v/7/a     r=+.24

Appendix 1: Happiness Items used

Happiness Item Code   Full Text
Findings on Happiness and SLEEP

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....?"
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.

Name: Wessman & Ricks' `Elation - Depression Scale" (adapted version)
Findings on Happiness and SLEEP

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'

Selfreport on 10 questions:

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

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
Findings on Happiness and SLEEP

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'
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

Self report 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.

Self report 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.
Findings on Happiness and SLEEP

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

<table>
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<tr>
<th>Symbol</th>
<th>Explanation</th>
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| DM     | 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.  
Meaning: the difference of the mean happiness, as measured on the author's rating scale, between the two correlate levels. |
| $E^2$  | CORRELATION RATIO (Elsewhere sometimes called $h^2$ or ETA)  
Type: test statistic  
Measurement level: Correlate: nominal or ordinal, Happiness: metric  
Range: $[0; 1]$  
Meaning: correlate is accountable for $E^2 \times 100\%$ of the variation in happiness.  
$E^2 = 0 \iff$ knowledge of the correlate value does not improve the prediction quality of the happiness rating.  
$E^2 = 1 \iff$ knowledge of the correlate value enables an exact prediction of the happiness rating. |
| $G$    | GOODMAN & Kruskal's GAMMA  
Type: test statistic  
Measurement level: Correlate: ordinal, Happiness: ordinal  
Range: $[-1; +1]$  
Meaning:  
$G = 0 \iff$ no rank correlation  
$G = +1 \iff$ strongest possible rank correlation, where high correlate values correspond with high happiness ratings.  
$G = -1 \iff$ strongest possible rank correlation, where high correlate values correspond with low happiness ratings. |
| $r$    | PRODUCT-MOMENT CORRELATION COEFFICIENT (Also "Pearson's correlation coefficient" or simply 'correlation coefficient')  
Type: test statistic.  
Measurement level: Correlate: metric, Happiness: metric  
Range: $[-1; +1]$  
Meaning:  
$r = 0 \iff$ no correlation,  
$r = 1 \iff$ perfect correlation, where high correlate values correspond with high happiness values, and  
$r = -1 \iff$ perfect correlation, where high correlate values correspond with low happiness values. |
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
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A report of the World Database of Happiness, Correlational Findings