

DOCUMENTATION
for
Psychosocial Constructs
And
Composite Variables
in
MIDUS 2 MILWAUKEE
SURVEY

University of Wisconsin ♦ Institute on Aging

Updated in 2023

INTRODUCTION

This document is intended as a basic reference for psychosocial constructs and other composite variables in the Milwaukee Survey of MIDUS 2 data sets (MKE1). The document provides comprehensive information regarding construction and usage of the scales.

For each construct scale or composite variable, items used to construct the scale, coding, and methods of scale construction are described. Also described is how missing data are dealt with for each scale. In addition, information regarding psychometric properties, source articles, published studies that use the scale, and other important notes are also included.

The variable name of a scale is presented in brackets with uppercase letters (e.g., [BACDEPAF] for depressed affect). Scale name and description is followed by individual items and by the description of how the scale score is constructed.

Cronbach's alpha reliability coefficient is reported for most scales, along with alpha, mean and standard deviation of the scale score.

"Sources" refer to articles, or other published studies that originally discussed the scale. There are a few scales for which sources could not be identified.

This document will be periodically revised and updated as more information is gathered and as researchers continue to work with the MIDUS data. If there are suggestions or comments, please submit a message through the MIDUS HelpDesk (<http://midus.wisc.edu/helpdesk.php>).

Moreover, if additional scales are constructed using these data, please contact us, so the work can be shared.

September, 2007.

Updated in 2023.

Table of Contents

HEALTH LOCUS OF CONTROL	1
SOMATIC AMPLIFICATION SCALE.....	2
SUBJECTIVE HEART ATTACK RISK	3
ANGINA (CHEST PAIN RESULTING FROM CARDIAC ISCHEMIA)	4
SUBJECTIVE CANCER RISK.....	5
CHRONIC CONDITION	6
PRESCRIPTION MEDICINE	7
VITAMIS AND SUPPLEMENTS	8
POSITIVE AND NEGATIVE AFFECT	9
ACTIVITY OF DAILY LIVING	12
DYSPNEA	13
PERSONALITY IN INTELLCTUAL AGING CONTEXTS (PIC) SCALE	14
BODY INDICES	15
SEEING DOCTOR AND MENTAL HEALTH PROFESSIONALS	16
ALCOHOL SCREENING TEST	17
DEPRESSION	19
GENERALIZED ANXIETY DISORDER	22
PANIC ATTACK (PANIC DISORDER).....	24
MARRIED OR COHABITATION	25
SPOUSE AGE	26
HOUSEHOLD INCOME VARIABLES.....	27
PARENTAL AFFECTION IN CHILDHOOD.....	30
FAMILY SUPPORT AND STRAIN.....	34
FAMILY SUPPORT PROVIDED	36
FRIEND SUPPORT AND STRAIN	37
MARITAL RISK	39
SPOUSE/PARTNER DISAGREEMENT	40
SPOUSE/PARTNER SUPPORT AND STRAIN.....	41
SPOUSE/PARTNER JOINT DECISION MAKING	44
HOUSEHOLD SIZE.....	45
CO-RESIDING ADULT CHILDREN	46
PERCEIVED INEQUALITY IN FAMILY	48
GENERATIVITY	50

PERSONAL BELIEFS ON NEIGHBORHOOD	52
PERCEIVED INEQUALITY IN HOME	53
PERCEIVED DISCRIMINATION	54
LIFE SATISFACTION (Domain Specific)	57
PSYCHOLOGICAL WELL-BEING (MIDUS-I VERSION)	59
PSYCHOLOGICAL WELL-BEING (MIDUS-II VERSION).....	63
SENSE OF CONTROL	66
SELF-ESTEEM	69
SELF-CONSTRUAL SCALE	70
PERSONALITY TRAITS	72
MULTIDIMENSIONAL PERSONALITY QUESTIONNAIRE.....	75
LIFE ORIENTATION TEST	79
PRIMARY AND SECONDARY CONTROL (MIDUS-I VERSION).....	81
PRIMARY AND SECONDARY CONTROL (MIDUS-II VERSION)	83
PLANNING AND MAKING SENSE OF PAST	86
SEEKING SOCIAL SUPPORT	88
COPING.....	89
WORK TO FAMILY AND FAMILY TO WORK SPILLOVER.....	93
JOB CHARACTERISTICS	95
CHRONIC JOB DISCRIMINATION	98
PERCEIVED INEQUALITY IN WORK.....	99
SOCIAL WELL-BEING	100
SYMPATHY SCALE.....	102
RELIGIOSITY	103

HEALTH LOCUS OF CONTROL

Scales/Items:

Health Locus of Control - Self [BACHLOCS]

Items: 4 items - CAPI Interviews, Section 1; Question As8 (a – d)

- a. "Keeping healthy depends on things that I can do"
- b. "There are certain things I can do for myself to reduce the risk of a heart attack"
- c. "There are certain things I can do for myself to reduce the risk of getting cancer"
- d. "I work hard at trying to stay healthy"

Health Locus of Control - Others [BACHLOCO]

Items: 2 items - CAPI Interviews, Section 1; Question AS8 (e – f)

- e. "When I am sick, getting better is in the doctor's hand"
- f. "It is difficult for me to get good medical care"

Coding: 1 Strongly agree; 2 Somewhat agree; 3 A little Agree; 4 Neither agree or disagree;
5 A little disagree; 6 Somewhat disagree; 7 Strongly disagree.

Scaling: Scales are constructed by calculating the **mean** across each set of items. Items were recoded so that higher scores reflect higher levels of positive/negative affect.

Missing Values: The scales are computed for cases that have valid values for **at least one** item on the particular scale. The scale scores are not calculated for cases with no valid item for the scales, and coded as "8" for "NOT CALCULATED (Due to missing data)."

Psychometrics:

Health Locus of Control – Self [BACHLOCS]

Sample (N)	Alpha	Mean	Std. dev
592	.52	6.19	.78

Health Locus of Control – Other [BACHLOCO]

Sample (N)	Alpha	Mean	Std. dev
592	.18	3.98	1.70

Source(s):

Studies using the scales:

SOMATIC AMPLIFICATION SCALE

Scales/Items:

Somatic Amplification Scale [BACAMPLI]

Items: 5 items – CAPI Interviews, Section 1; Question As9 (a – e)

- a. “I am often aware of various things happening within my body”
- b. “Sudden loud noises really bother me”
- c. “I hate to be too hot or too cold”
- d. “I am quick to sense hunger contractions in my stomach”
- e. “I have a low tolerance for pain”

Coding: 1 Not at all true; 2 A little bit true; 3 Moderately true; 4 Extremely true

Scaling: [BACAMPLI] is constructed by calculating the **mean** of the items. Higher scores indicate greater levels of amplification.

Missing Values: The scale is computed for cases that have valid values for **at least one** item on the scale. The scale score is not calculated for cases with for valid item for the scale, and coded as “8” for “NOT CALCULATED (Due to missing data).”

Psychometrics:

Somatic Amplification Scale [BACAMPLI]

Sample (N)	Alpha	Mean	Std. dev
592	.53	2.67	.63

Source(s):

Barsky, A. J., Goodson, J. D., Lane, R. S., & Cleary P. D. (1988). The amplification of somatic symptoms. *Psychosomatic Medicine*.50 (5):510-9.

Studies using the scales:

Keating, N. L., Cleary, P. D., Rossi, A. S., Zaslavsky, A. M., & Ayanian, J. Z. (1999). Use of hormone replacement therapy by postmenopausal women in the United States. *Annals of Internal Medicine*, 130, 545-553.

Cleary, P. D., Zaboriski, L. B., & Ayanian, J. Z. (2004). Sex differences in health over the course of midlife. In O. G. Brim, C. D. Ryff & R. C. Kessler (Eds.), *How healthy are we?: A national study of well-being at midlife*. (pp. 37 - 63). Chicago: Univ. of Chicago Press.

SUBJECTIVE HEART ATTACK RISK

Scales/Items:

Subjective Heart Attack Risk

[BACHRTRS]:

Items: 3 items – CAPI Interview, Section A, Question A9, A9a, A9b

A9. “Do you think your risk of a heart attack is higher, lower, or about the same as other (men/women) your age?”

A9a. “Would you say a lot higher, somewhat higher, or only a little higher?”

A9b. “Would you say a lot lower, somewhat lower, or only a little lower?”

Coding: A9: 1 Higher; 2 Lower; 3 About the Same.

A9a and A9b: 1 A Lot; 2 Somewhat; 3 A Little.

Scaling: [BACHRTRS] is constructed by combines the three questions A9, A9a, and A9b about heart attack risk into rank values from 0 (a lot lower risk) to 3 (average risk) to 6 (a lot higher risk).

[BACHRTRS]

= 0 if the respondent answered “Lower” to A9 and “A lot” to A9b.

= 1 if the respondent answered “Lower” to A9 and “Somewhat” to A9b.

= 2 if the respondent answered “Lower” to A9 and “A little” to A9b.

= 3 if the respondent answered “About the Same” to A9.

= 4 if the respondent answered “Higher” to A9 and “A Little” to A9a.

= 5 if the respondent answered “Higher” to A9 and “Somewhat” to A9a.

= 6 if the respondent answered “Higher” to A9a and “A Lot” to A9a.

Missing Values: For respondents who answered “Don’t Know” or “Refused” to Question A9, A9a or A9b, the scale was not calculated. A scale was also not constructed for respondents who indicated in Question A8 that they have had a heart attack.

[BACHRTDX]:

– A dummy variable based on [BACHRTDX]

= 0 if [BACHRTDX] = 0 THRU 3 (NEGATIVE).

= 1 if [BACHRTDX] = 4 THRU 6 (POSITIVE).

ANGINA (CHEST PAIN RESULTING FROM CARDIAC ISCHEMIA)

Scales/Items:

Angina Class Rating [BACANGIN]:

Items: 6 items – CAPI Interview, Section A, Question A17 to A22

A17. “Do you ever get chest pain or discomfort when you walk uphill or hurry?”

A18. “Do you ever get chest pain or discomfort when you walk at an ordinary pace on a level surface, not uphill?”

A19. “When you get pain or discomfort in your chest while you are walking, do you stop, slow down, or continue walking at the same pace?”

A20. “Does it go away when you stand still?”

A21. “How soon does it go away?”

A22. “Where do you get this pain or discomfort?”

Coding: A17: 1 Yes; 2 No.

A18: 1 Yes; 2 No; 3 Cannot walk because of chest pain; 4 Cannot walk for other reasons.

A19: 1 Stop; 2 Slow down; 3 Continue at the same pace.

A20: 1 Yes; 2 No.

A21: 1 10 minutes or less; 2 More than 10 minutes.

A22: 1 Center of chest; 2 Left side of chest only; 3 Left side of chest and left arm; 4 Somewhere else.

Scaling: [BACANGIN] is constructed by combines the responses to questions A17 to A22 about chest pain into rank values from 0 to 3, higher values imply worse angina class. 6 means that responses indicate chest pain that did not meet Rose criteria for angina.

[BACANGIN]

= 0 if the respondent answered “No” to A17.

= 1 if the respondent answered “Yes” to A17.

= 2 if the respondent answered “Yes” to both A17 and A18.

= 3 if the respondent answered “Yes” to both A17 and A18 and “Stop” to A19.

= 3 if the respondent answered “Cannot walk because of chest pain” to A18.

= 6 if the respondent answered “Continue at the same pace” to A19.

= 6 if the respondent answered “No” to A20.

= 6 if the respondent answered “More than 10 minutes” to A21.

= 6 if the respondent answered “Left side of chest only” or “Somewhere else” to A22.

SUBJECTIVE CANCER RISK

Scales/Items:

Subjective Cancer Risk

[BACCACRS]:

Items: 3 items – CAPI Interview, Section A, Question A27, A27a, A27b

A27. “Do you think your risk of a cancer is higher, lower, or about the same as other (men/women) your age?”

A27a. “Would you say a lot higher, somewhat higher, or only a little higher?”

A27b. “Would you say a lot lower, somewhat lower, or only a little lower?”

Coding: A27: 1 Higher; 2 Lower; 3 About the Same.

A27a and A27b: 1 A Lot; 2 Somewhat; 3 A Little.

Scaling: [B1PCACRS] is constructed by combines the three questions A27, A27a, and A27b about cancer risk into rank values from 0 (a lot lower risk) to 3 (average risk) to 6 (a lot higher risk).

[BACCACRS]

= 0 if the respondent answered “Lower” to A27 and “A lot” to A27b.

= 1 if the respondent answered “Lower” to A27 and “Somewhat” to A27b.

= 2 if the respondent answered “Lower” to A27 and “A little” to A27b.

= 3 if the respondent answered “About the Same” to A27.

= 4 if the respondent answered “Higher” to A27 and “A Little” to A27a.

= 5 if the respondent answered “Higher” to A27 and “Somewhat” to A27a.

= 6 if the respondent answered “Higher” to A27a and “A Lot” to A27a.

Missing Values: For respondents who answered “Don’t Know” or “Refused” to Question A27, A27a or A27b, the scale was not calculated. A scale was also not constructed for respondents who indicated in Question A26 that they have had cancer.

[BACCACDX]:

- A dummy variable based on [B1PHRTRS]
 - = 0 if [BACCACRS] = 0 THRU 3 (NEGATIVE).
 - = 1 if [BACCACRS] = 4 THRU 6 (POSITIVE).

CHRONIC CONDITION

Summary Variables:

Number of Chronic Conditions (in past 12 month) [BACCHRON]

- [BACCHRON] is a continuous variable based on the total number of chronic conditions the respondent check to have experienced in the past 12 months.
- Questions used to construct [BACCHRON]
: CAPI Questionnaire, Section 1, Question As11 (a to dd)

Coding: 1 Yes; 2 No.

Scaling: [BACCHRON] is constructed by taking the **total number** of “Yes” responses to the questions.

Missing Values: [BACCHRON] is computed for cases that have **at least one** valid response to questions in the summary variable. For cases that do not have any valid response to questions in the summary variable, [BACCHRON] is not calculated and coded as “98” for “NOT CALCULATED (Due to missing data).”

Having Chronic Condition [BACCHROX]

- : A dummy variable based on [BACCHRON]
 - = 1 if [BACCHRON] is greater than or equal to 1
 - = 0 if [BACCHRON] is 0

PREScription MEDICINE

Summary Variables:

Number of medicine taking (in past 30 days) [BACRXMED]

- [BACRXMED] is a continuous variable based on the total number of prescription medicines the respondent has taken during the past 30 days.
- Questions used to construct [BACRXMED]
: CAAPI Questionnaire, Section 1, Question As12 (a to l).

Coding: 1 Yes; 2 No.

Scaling: [BACRXMED] is constructed by taking the **total number** of “Yes” responses to the questions.

Missing Values: [BACRXMED] is computed for cases that have **at least one** valid response to questions in the summary variable. For cases that do not have any valid response to questions in the summary variable, [BACRXMED] is not calculated and coded as “98” for “NOT CALCULATED (Due to missing data).”

Having Taken medicines [BACRXMEX]

- : A dummy variable based on [BACRXMED]
 - = 1 if [BACRXMED] is greater than or equal to 1
 - = 0 if [BACRXMED] equals 0

VITAMIS AND SUPPLEMENTS

Summary Variables:

- Number of Vitamin etc. taking (in past 30 days) [BACSPLMN]

- [BACSPLMN] is a continuous variable based on the total number of Vitamin/Mineral/Herbal Supplements the respondent has taken regularly (at least couple of times a week).
- Questions used to construct [BACSPLMN]
: CAPI Questionnaire, Section 1, Question As14 (a to o).

Coding: 1 Yes; 2 No.

Scaling: [BACSPLMN] is constructed by taking the **total number** of “Yes” responses to the questions.

Missing Values: [BACSPLMN] is computed for cases that have **at least one** valid response to questions in the summary variable. For cases that do not have any valid response to questions in the summary variable, [BACSPLMN] is not calculated and coded as “98” for “NOT CALCULATED (Due to missing data).”

Having Taken Vitamin or Other Supplements [BACSPLMX]

- : A dummy variable based on [BACSPLMN]
 - = 1 if [BACSPLMN] is greater than or equal to 1
 - = 0 if [BACSPLMN] equals 0

POSITIVE AND NEGATIVE AFFECT

Scales/Items:

Negative Affect [BACNEGAF]

Items: 6 items - CAPI Interview, Section 1, Question As24 (a - f)

(During the past 30 days, how much of the time did you feel...)

- a. "so sad nothing could cheer you up?"
- b. "nervous?"
- c. "restless or fidgety?"
- d. "hopeless?"
- e. "that everything was an effort?"
- f. "worthless?"

PANAS Negative adjectives [BACNEGPA]

Items: 5 items – CAPI Interview, Section 1, Question As24 (h - l)

(During the past 30 days, how much of the time did you feel...)

- h. "afraid?"
- i. "jittery?"
- j. "irritable?"
- k. "ashamed?"
- l. "upset?"

Positive Affect [BACPOSAF]

Items: 6 items – CAPI Interview, Section 1, Question As26 (a - f)

(During the past 30 days, how much of the time did you feel...)

- a. "cheerful?"
- b. "in good spirits?"
- c. "extremely happy?"
- d. "calm and peaceful?"
- e. "satisfied?"
- f. "full of life?"

PANAS Positive adjectives [BACPOSPA]

Items: 4 items – CAPI Interview, Section 1, Question As26 (i - l)

(During the past 30 days, how much of the time did you feel...)

- i. "enthusiastic?"
- j. "attentive?"

k. "proud?"

l. "active?"

Coding: 1 All of the time; 2 Most of the time; 3 Some of the time; 4 A little of the time;
5 none of the time.

Scaling: Scales are constructed by calculating the **mean** across each set of items. Items were recoded so that higher scores reflect higher levels of positive/negative affect.

Missing Values: The scales are computed for cases that have valid values for **at least one** item on the particular scale. Scale scores are not calculated for cases with no valid item on the scales, and coded as "8" for "NOT CALCULATED (Due to missing data)."

Psychometrics:

Negative Affect [BACNEGAF]

Sample (N)	Alpha	Mean	Std. dev
592	.86	1.77	.83

PANAS Negative adjectives [BACNEGPA]

Sample (N)	Alpha	Mean	Std. dev
592	.84	1.72	.76

Positive Affect [BACPOSAF]

Sample (N)	Alpha	Mean	Std. dev
592	.91	3.62	.83

PANAS Positive adjectives [BACPOSFA]

Sample (N)	Alpha	Mean	Std. dev
592	.86	3.759	.86

Source(s):

Mroczek, D. K., & Kolarz, C. M. (1998). The effect of age on positive and negative affect: A developmental perspective on happiness. *Journal of Personality and Social Psychology*, 75, 5, 1333-1349.

Additional References:

The Affect Balance Scale

Bradburn, N. M. (1969). *The structure of psychological well-being*. Chicago: Aldine.

The General Well-Being Schedule

Fazio, A. (1977). A concurrent validation study of the NCHS General Well-Being Schedule. In *Vital and health statistics publication* (Series 2, No. 73). Washington, DC: U.S. Government Printing Office.

The Center for Epidemiological Studies Depression Scale.

Radloff, L. S. (1977). The CES-D scales: A self-report depression scale for research in the general population. *Applied Psychological Measurement*, 1, 385-405.

The University of Michigan's Composite International Diagnostic Interview.

Kessler, R. C., MacGonagle, K. A., Zhao, S., Nelson, C. B., Hughes, M., Eshleman, S., Wittchen, H. U., & Kendler, K. S. (1994). Lifetime and 12-month prevalence of DSM-II-R psychiatric disorders in the United States. *Archives of General Psychiatry*, 51, 8-19.

The Health Opinion Survey.

MacMillan, A. M. (1957). The Health Opinion Survey: Techniques for estimating prevalence of psychoneurotic and related types of disorder in communities. *Psychological Reports*, 3, 325-339.

The Manifest Anxiety Scale.

Taylor, J. A. (1953). A personality scale of manifest anxiety. *Journal of Abnormal and Social Psychology*, 48, 285-290.

Studies using the scales:

Grzywacz, J. G. (2000). Work-family spillover and health during midlife: Is managing conflict everything? *American Journal of Health Promotion*, 14, 236-243.

Keyes, C. L. M. (2000). Subjective change and its consequences for emotional well-being. *Motivation and Emotion*, 24, 67-83.

Mroczek, D. K. (2004). Positive and negative affect at midlife. In O. G. Brim, C. D. Ryff & R. C. Kessler (Eds.), *How healthy are we?: A national study of well-being at midlife*. (pp. 205 – 226). Chicago: Univ. of Chicago Press.

Walen, H. R., & Lachman, M. E. (2000). Social support and strain from partner, family, and friends: Costs and benefits for men and women in adulthood. *Journal of Social and Personal Relationships*, 17, 5-30.

ACTIVITY OF DAILY LIVING

Summary Variables:

Basic Activity of Daily Living [BACBADL]

Basic Activity of Daily Living (2-item version) [BACBADL1]:

Items: 2 items – CAPI Interview, Section 1, Question As28 (b, h)

(How much does your health limit you in...?)

b. "Bathing or dressing yourself"

h. "Walking one block"

Basic Activity of Daily Living (3-item version) [BACBADL2]:

Items: 3 items – CAPI Interview, Section 1, Question As28 (b, d, h)

(How much does your health limit you in...?)

b. "Bathing or dressing yourself"

d. "Climbing one flight of stairs"

h. "Walking one block"

Intermediate Activity of Daily Living [BACMADL]:

Items: 7 items – CAPI Interview, Section 1, Question As28 (a, c, e, f, g, i, j)

(How much does your health limit you in...?)

a. "Lifting or carrying groceries"

c. "Climbing several flights of stairs"

e. "Bending, kneeling, or stooping"

f. "Walking more than a mile"

g. "Walking several blocks"

i. "Vigorous activities (e.g., running, lifting heavy objects)"

j. "Moderate activities (e.g., bowling, vacuuming)"

Coding: 1 A lot; 2 Some; 3 A little; 4 Not at all.

Scaling: The summary variables are constructed by calculating the mean of all the reverse-coded values of the items in each scale. Higher scores reflect a greater difficulty in performing each activities of daily life.

Missing Values: The summary variables are computed for cases that have **at least one** valid response to questions in the summary variable. For cases that do not have any valid response to questions in the summary variable, [BACBADL] and/or [BACIADL] is not calculated and coded as "98" for "NOT CALCULATED (Due to missing data)."

DYSPNEA

Summary Variables:

Progressive Levels of Dyspnea [BACDYSPN]

- Questions used to construct [BACDYSPN]
 - : CAPI Questionnaires, Section 1; Questions A29 (a to d)
(Do you get short of breath in the following situations?)
 - a. "When hurrying on ground level or walking up a slight hill."
 - b. "When walking with other people your age on level ground."
 - c. "When walking at your own pace on level ground."
 - d. "When washing or dressing."

Coding: 1 Yes; 2 No.

Scaling: [BACDYSPN] is constructed by determining the respondent's consecutive positive responses to the question (A29a through A29d). Higher scores indicates greater progressive levels of Dyspnea.

: [BACDYSPN]

- =1 if the respondent answered "Yes" to only A29a.
- = 2 if the respondent answered "Yes" to A29a AND A29b.
- = 3 if the respondent answered "Yes" to A29a, A29b, and A29c.
- = 4 if the respondent answered "Yes" to A29a, A29b, A29c and A29d.

Missing Values: The scale is computed for cases that had valid responses to **all four questions** used in the summary variable. [BACDYSPN] is not calculated for cases that have missing data in any questions in the summary variable, and coded as "8" for "NOT CALCULATED (Due to missing data)."

PERSONALITY IN INTELLECTUAL AGING CONTEXTS (PIC) SCALE

Scales/Items:

Personality in Intellectual Aging Contexts scale [BACINTAG]

Items: 9 items – CAPI Interviews, Section 1; Question As34 (a – i)

- a. “If I forget my friend’s zip code, I’d be able to learn it again.” ®
- b. “It’s evitable that my intellectual functioning will decline as I get older.”
- c. “I would have to ask a sales person to figure out how much I’d save with a 20% discount.”
- d. “The older I get the harder it is to think clearly.”
- e. “As long as I exercise my mind I will always be on top of things.” ®
- f. “My mental acuity (sharpness) is bound to decline. “
- g. “I can understand instructions only after someone explains them to me.”
- h. “I don’t remember things as well as I used to.”
- i. “There’s not much I can do to keep my memory from going down hill.”

Coding: 1 Strongly agree; 2 Somewhat agree; 3 A little Agree; 4 Neither agree or disagree; 5 A little disagree; 6 Somewhat disagree; 7 Strongly disagree.

Scaling: [BACINTAG] is constructed by calculating the **mean** of the items. Items marked with ® were reverse-coded so that high scores reflect higher standing in the scale.

Missing Values: The scale is computed for cases that have **at least five** items with valid value on the particular scale. The scale score is not calculated for cases with fewer than five valid items on the scale, and coded as “8” for “NOT CALCULATED (Due to missing data).”

Psychometrics:

Personality in Intellectual Aging Contexts scale [BACINTAG]:

Sample (N)	Alpha	Mean	Std. dev
592	.05	4.51	1.16

Source(s):

Lachman, M. E., Baltes, P., Nesselroade, J. R., & Willis, S. L. (1982). Examination of personality-ability relationships in the elderly: The role of the contextual (interface) assessment mode. *Journal of Research in Personality*, 16, 485-501.

Lachman, M. E. (1986), Locus of control in aging research: A case for multidimensional and domain specific assessment. *Psychology and Aging*, 1, 34-40.

BODY INDICES

Summary Variables:

Waist to Hip Ratio [BACWSTHI]

- Questions used to construct [BACWSTHI]

: CAPI Questionnaires, Section 1; Questions As35 (waist size) and Question As36 (hip size)

Scaling: [BACWSTHI] is calculated by dividing the waist size (in inches) by the hip size (in inches).

: In calculating waist to hip ratio, following rules were applied to handle extreme cases

1. To limit the extremes, any waist measurement below 20 was set to 20, and any hip measurement below 22 was set to 22, and anything above 75 to 75.
2. Any ratio that is beyond 4 standard deviations (above or below) from the mean within gender is coded as "9" to be an extreme case and defined as a missing value.

Body Mass Index [BACBMI]

- Questions used to construct [BACBMI]

: CAPI Questionnaires, Section 1; Questions As37a and As37b (height), and As39 (weight).

Scaling: [BACBMI] is calculated by dividing respondent's weight (mass) in kilograms by heights in meters squared. The height measure (in inches) was multiplied by 0.0254 to get the height in meters, and the weight (in pounds) was multiplied by 0.4536 to get the mass in kilograms.

: To limit the extremes, any heights greater than 84 inches were set to 84 inches

SEEING DOCTOR AND MENTAL HEALTH PROFESSIONALS

Summary Variables:

Number of Times Seeing Medical Doctors (in the past 12 months) [BACUSEMD]

- [BACUSEMD] is a continuous variable based on the total number of times the respondent reported seeing doctors for various reasons.
- Questions used to construct [BACUSEMD]
 - : CAPI Questionnaire, Section 1, Question As53 (a, d, e).
 - a. A doctor, hospital or clinic for a routine physical check-up or gynecological exam.
 - d. A doctor, emergency room, or clinic for urgent care treatment
 - e. A doctor, hospital, clinic, dentist or ophthalmologist for scheduled treatment or surgery.

Number of Times Seeing Mental Health Professionals (in the past 12 months) [BACUSEMH]

- [BACUSEMH] is a continuous variable based on the total number of times the respondent reported seeing professionals for emotional or mental health.
- Questions used to construct [BACUSEMH]
 - : CAPI Questionnaire, Section 1, Question As54 (a to d).
 - a. A psychiatrist.
 - b. A general practitioner or other medical doctor.
 - c. A psychologist, professional counselor, marriage therapist, or social worker.
 - d. A minister, priest, rabbi or other spiritual advisor.

Coding: number of times the respondent saw the doctors/professionals./

Scaling: [BACUSEMD] and [BACUSEMH] are constructed by summing up total number of times the respondent reported seeing doctors/professionals in each question.

Missing Values: [BACUSEMD] and [BACUSEMH] are computed for cases that have **at least one** valid response to questions in the summary variable. For cases that do not have any valid response to questions in the summary variable, [BACUSEMD] and/or [BACUSEMH] is not calculated and coded as “998” for “NOT CALCULATED (Due to missing data).”

ALCOHOL SCREENING TEST

Summary Variables:

Having alcohol related problems (during the past 12 months) [BACALCOH]

- Questions used to construct [BACALCOH]
- : CAPI Questionnaire, Section 1, Question As66 (a to e).
 - a. Were you under the effects of alcohol or feeling its after-effects in a situation which increased your chances of getting hurt, like when driving a car or boat, using knives or guns or machinery, crossing against traffic, climbing or swimming?
 - b. Did you have any emotional or psychological problems from using alcohol, such as feeling depressed, being suspicious of people, or having strange ideas?
 - c. Did you have such a strong desire or urge to use alcohol that you could not resist or could not think of anything else?
 - d. Did you have a period of a month or more when you spent a great deal of time using alcohol or getting over its effects?
 - e. Did you find that you had to use more alcohol than usual to get the same effect or that the same amount had less effect on you than before?

Coding: 1 Yes; 2 No.

Scaling: [BACALCOH] is a dummy variable indicating that the respondent has at least one alcohol-related problem.

[BACALCOH]

= 1 if the respondent answered "Yes" to any of four questions.

= 0 otherwise.

Missing Values: [BACALCOH] is computed for cases that have **at least one** valid response to questions in the summary variable. For cases that do not have any valid response to questions in the summary variable, [BACALCOH] is not calculated and coded as "8" for "NOT CALCULATED (Due to missing data)."

Sources:

Grzywacz, J. G., & Marks, N. F. (1999). Family solidarity and health behaviors: Evidence from the National Survey of Midlife Development in the United States. *Journal of Family Issues*, 20, 2, 243-268.

References:

Selzer, M. L. (1971). The Michigan Alcohol Screening Test: The quest for a new diagnostic instrument. *American Journal of Psychiatry*, 127, 89-94.

Note:

- The following item was accidentally omitted during final editing of the MIDUS 2 questionnaire.

“Were you ever, during the past 12 months, under the effects of alcohol or feeling its after-effects in a situation which increased your chances of getting hurt - such as when driving a car or boat, or using knives or guns or machinery?” (A44a in MIDUS 1)

DEPRESSION

Scales/Items:

Depressed Affect

[BACDEPAF] (continuous variable based on 7 items)

Items: - CAPI Interview, Section 1, Question A63-A69.

(During two weeks in past 12 months, when you felt sad, blue, or depressed, did you)

A63. "lose interest in most things?"

A64. "feel more tired out or low on energy than is usual?"

A65 "lose your appetite?" **OR** A65a "appetite increased"

A66. "have more trouble falling asleep than usual?" **AND** A66a = 1 or 2

A67. "have a lot more trouble concentrating than usual?"

A68. "feel down on yourself, no good, or worthless?"

A69. "think a lot about death?"

Coding: 1 Yes; 2 No

Scaling: [BACDEPAF] is constructed by taking the **total number** of "Yes" responses to the following items: A63, A64, A65/A65a, A67, A68, A69. A66 is only included if A66a equals 1 or 2.

[BACDEPAD] (dummy variable based on QA61, QA62, and [BACDEPAF])

= 1 if : The feeling of being sad, blue, or depressed lasted "All day long" or "Most of the day" (A61), **AND**

: You feel this way "Everyday" or "Almost every day" (A62), **AND**

: [BACDEPAF] is greater than or equal to "4."

= 0, otherwise.

Anhedonia

[BACANHED] (continuous variable based on 6 items)

Items: 6 items - CAPI Interview, Section 1, Question A75 to A80.

(During two weeks in past 12 months, when you lost interest in most things, did you)

A75. "feel more tired out or low on energy than is usual"

A76. "lose your appetite" **OR** A76a "appetite increased"

A77. "have more trouble falling asleep than usual" **AND** A77a = 1 or 2

A78. "have a lot more trouble concentrating than usual"

A79. "feel down on yourself, no good, or worthless"

A80, "think a lot about death".

Coding: 1 Yes; 2 No

Scaling: [BACANHED] is constructed by taking the **total number** of “Yes” responses to the following items: A75, A76/A76a, A78, A79, A80. A77 is only included if A77a equals 1 or 2.

[BACANHDX] (dummy variable based on QA73, QA74, and [BACANHED])

= 1 if : The loss of interest in most things lasted “All day long” or “Most of the day” (A73), AND

: You feel this way “Everyday” or “Almost every day” (A74), AND

: [BACANHED] is greater than or equal to “4.”

= 0 otherwise.

Depression

[BACDEPRE] (continuous variable based on [BACDEPAF] and [BACANHED] which are mutually exclusive. See skip pattern for QA60 and QA72.)

: ranging from 0 to 7

: = 0, if a respondent was diagnosed as negative for both depressed affect and anhedonia: i.e., BACDEPAD =0 and BACANHDX =0.

[BACDEPDX] (dummy variable for depression)

= 1 if BACDEPAD =1 or BACANHDX =1

= 0 otherwise.

Missing Values: All depression measures are computed for cases that have valid values for **at least one** item on the particular scale. Scores are not calculated for cases with no valid items for a given scale.

Source(s):

Wang, P. S., Berglund, P., & Kessler, R. C. (2000). Recent care of common mental disorder in the United States: Prevalence and conformance with evidence-based recommendations. *Journal of General Internal Medicine*, 15: 284-292.

Studies using the scales:

Kessler, R. C., Mickelson, K. D., & Williams, D. R. (1999). The prevalence, distribution, and mental health correlates of perceived discrimination in the United States. *Journal of Health and Social Behavior*, 40, 208-230.

- Kessler, R. C., Mickelson, K. D., Walters, E. E., Zhao, S., & Hamilton, L. (2004). Age and Depression in the MIDUS survey. In O. G. Brim, C. D. Ryff & R. C. Kessler (Eds.), *How healthy are we?: A national study of well-being at midlife*. (pp. 227 - 251). Chicago: Univ. of Chicago Press.
- Marmot, M. G., & Fuhrer, R. (2004). Socioeconomic position and health across midlife. In O. G. Brim, C. D. Ryff & R. C. Kessler (Eds.), *How healthy are we?: A national study of well-being at midlife*. (pp. 64 - 89). Chicago: Univ. of Chicago Press.

Additional References:

- American Psychiatric Association (1987). *Diagnostic and Statistical Manual of Mental Disorders*, 3rd edition. Washington, DC: American Psychiatric Association.
- Blazer, D. G., Kessler, R. C., McGonagle, K. A., & Swartz, M. S. (1994). The prevalence and distribution of major depression in a national community sample: The National Comorbidity Survey. *American Journal of Psychiatry*, 151, 979-986.
- Kessler, R. C., Andrews, A., Mroczek, D., Ustun, B., & Wittchen, H. U. (1998). The World Health Organization Composite International Diagnostic Interview Short-Form (CIDI-SF). *International Journal of Methods in Psychiatric Research*, 7, 171-185.
- Wittchen, H. U. (1994). Reliability and validity studies of the WHO Composite International Diagnostic Interview (CIDI): A critical review. *Psychiatric Research*, 28, 57-84.
- World Health Organization (1990). *Composite International Diagnostic Interview, CIDI, Version 10*. Geneva: World Health Organization.

* The above information is from: Kessler et al. (1999).

Notes:

- The disorder is based on the definitions and criteria specified in the third edition-revised of the American Psychiatric Association's (APA) Diagnostic and Statistical Manual of Mental Disorders (DSM-III-R; 1987). A diagnosis of Major Depression requires of period of at least two weeks of either depressed mood or anhedonia most of the day, nearly every day, and a series of at least four other associated symptoms typically found to accompany depression, including problems with eating, sleeping, energy, concentration, feelings of self-worth, and suicidal thoughts or actions.
- Major Depression was operationalized in screening versions of the World Health Organization's (WHO) "Composite International Diagnostic Interview", Version 10 (CIDI) (WHO, 1990; Kessler et al., 1998).
- WHO Field Trials (Wittchen, 1994) and other methodological studies (Blazer et al., 1994) have documented good test-retest reliability and clinical validity of these CIDI diagnoses.

GENERALIZED ANXIETY DISORDER

Scales/Items:

Anxiety Disorder

[BACANXIE] (continuous variable based on 10 items)

Items: 10 items - CAPI Interview, Section 1, Question A88 (a - j).

(How often - over the past 12 months-, you)

- a. "were restless because of your worry"
- b. "were keyed up, on edge, or had a lot of nervous energy"
- c. "were irritable because of your worry"
- d. "had trouble falling asleep"
- e. "had trouble staying asleep because of your worry"
- f. "had trouble keeping your mind on what you were doing"
- g. "had trouble remembering things because of your worry"
- h. "were low on energy"
- i. "tired easily because of your worry"
- j. "had sore or arching muscles because of tension"

(pre-condition)

- A respondent answered s/he

: worries "A lot more" than most people (A83a), AND

: worried "Every day, Just about every day, or Most days" (A84), AND

: worries about "More than one thing" (A85), OR has different worries "At the same time" (A85a)

Coding: 1 most days; 2 about half the days; 3 less than half the days; 4 never

Scaling: [BACANXIE] is constructed by taking the **total number** of "most days" responses to the items.

Missing Values: The scale is computed for cases that have valid values for **at least one** item on the scale. The scale score is not calculated for cases with no valid items for the scale.

[BACANXTD] (dummy variable based on [BACANXIE])

= 1 if [BACANXIE] greater than or equal to "3."

= 0 otherwise.

Source(s):

Wang, P. S., Berglund, P., & Kessler, R. C. (2000). Recent care of common mental disorder in the

United States: Prevalence and conformance with evidence-based recommendations. *Journal of General Internal Medicine*, 15: 284-292.

Studies using the scales:

Kessler, R. C., Mickelson, K. D., & Williams, D. R. (1999). The prevalence, distribution, and mental health correlates of perceived discrimination in the United States. *Journal of Health and Social Behavior*, 40, 208-230.

Additional References:

American Psychiatric Association (1987). *Diagnostic and Statistical Manual of Mental Disorders*, 3rd edition. Washington, DC: American Psychiatric Association.

Blazer, D. G., Kessler, R. C., McGonagle, K. A., & Swartz, M. S. (1994). The prevalence and distribution of major depression in a national community sample: The National Comorbidity Survey. *American Journal of Psychiatry*, 151, 979-986.

Kessler, R. C., Andrews, A., Mroczek, D., Ustun, B., & Wittchen, H. U. (1998). The World Health Organization Composite International Diagnostic Interview Short-Form (CIDI-SF). *International Journal of Methods in Psychiatric Research*, 7, 171-185.

Wittchen, H. U. (1994). Reliability and validity studies of the WHO Composite International Diagnostic Interview (CIDI): A critical review. *Psychiatric Research*, 28, 57-84.

World Health Organization (1990). *Composite International Diagnostic Interview, CIDI, Version 10*. Geneva: World Health Organization.

* The above information is from: Kessler et al. (1999).

Notes:

- The disorder is based on the definitions and criteria specified in the third edition-revised of the American Psychiatric Association's (APA) Diagnostic and Statistical Manual of Mental Disorders (DSM-III-R; 1987). A diagnosis of Major Depression requires of period of at least two weeks of either depressed mood or anhedonia most of the day, nearly every day, and a series of at least four other associated symptoms typically found to accompany depression, including problems with eating, sleeping, energy, concentration, feelings of self-worth, and suicidal thoughts or actions.
- GAD was operationalized in screening versions of the World Health Organization's (WHO) "Composite International Diagnostic Interview", Version 10 (CIDI) (WHO, 1990; Kessler et al., 1998).
- WHO Field Trials (Wittchen, 1994) and other methodological studies (Blazer et al., 1994) have documented good test-retest reliability and clinical validity of these CIDI diagnoses.

PANIC ATTACK (PANIC DISORDER)

Scales/Items:

PANIC ATTACK

[BACPANIC] (continuous variable based on 6 items)

Items: 6 items - CAPI Interview, Section 1, Question A92 (a - f).

(When you have attacks)

- a. "your heart pounds"
- b. "you have tightness, pain, or discomfort in your chest or stomach"
- c. "you sweat"
- d. "you tremble or shake"
- e. "you have hot flashes or chills"
- f. "you or things around you seem unreal"

(pre-condition)

: A respondents had a spell or an attack when they felt frightened... (A90 = YES), OR
had a spell or an attack for no reason... (A90a = YES), AND

: Attack happened when a respondent was NOT in danger or the center of attention
(A92 = NO / Don't know)

Coding: 1 Yes; 2 No

Scaling: [BACPANIC] is constructed by taking the **total number** of "Yes" responses to the items.

Missing Values: The scale is computed for cases that had valid values for **at least one** item on the scale. The scale score is not calculated for cases with no valid items for the scale.

[BACPANDX] (M1 scale name: PANDX): (dummy variable based on [BACPANIC])

= 1 if [BACPANIC] greater than or equal to "3."

= 0 otherwise.

Source(s):

Wang, P. S., Berglund, P., & Kessler, R. C. (2000). Recent care of common mental disorder in the United States: Prevalence and conformance with evidence-based recommendations. *Journal of General Internal Medicine*, 15: 284-292.

Studies using the scales:

Ettner, S. L. (2000). The relationship between labor market outcomes and physical and mental health; Exogenous human capital or endogenous health production? *Research in Human Capital and Development*, 13. 1-31.

MARRIED OR COHABITATION

Summary Variables:

Married or Cohabitation [BACPARTN]:

Items: 2 items – CAPI Interview, Section B, Question 19, 30

B19. “Are you married, separated, divorced, widowed, or never married?”

B30. “Are you currently living with someone in a steady, marriage-like relationship?”

Coding: B19: 1 Married; 2 Separated; 3 Divorced; 4 Widowed; 5 Never Married.

B30: 1 Yes; 2 No.

Scaling: [B1PPARTN] is constructed by combines the response to questions B19 and B30 into a dummy variable where

[BACPARTN]

= 1 if [BACB19] = 1 OR [BACB30] = 1.

= 2 Otherwise.

SPOUSE AGE

Summary Variables:

Age of Spouse/Partner [BACSAGE]:

Items: 2 items – CAPI Interview, Administrative Question, Interview Year, and Section B, Question 32

Administrative Information: “Year the CAPI interview was conducted.”

B32. “In what year was your spouse or partner born?”

Scaling: [BACSAGE] is constructed by taking the difference between the interview year and spouse/partner’s birth year.

Missing Values: [BACSAGE]’s missing values are the same as [BACB32Y]. It means that if spouse/partner’s birth year is “Don’t Know” or “Refused” or “INAPP”, spouse/partner’s age will be “Don’t Know” or “Refused” or “INAPP”, respectively.

HOUSEHOLD INCOME VARIABLES

Summary Variables:

Respondent's Income Variable [BACRINC1]

Items: 3 items – CAPI Interview, Section 4, Question Gs8 (a, b, c)

(In the last calendar year, what was your income from...)

- a. "Personal Earnings Income"
- b. "Pension Income"
- c. "Social Security Income"

Spouse's Income Variables [BACSINC1]

Items: 3 items – CAPI Interview, Section 4, Question Gs9 (a, b, c)

(In the last calendar year, what was your spouse/partner's income from...)

- a. "Personal Earnings Income"
- b. "Pension Income"
- c. "Social Security Income"

Other Family Member's Income Variable [BACHINC1]:

Items: 3 items – CAPI Interview, Section 4, Question Gs10 (a, b, c)

(In the last calendar year, what was the other family members in your household income from ...)

- a. "Personal Earnings Income"
- b. "Pension Income"
- c. "Social Security Income"

Household Income from Wages [BACEARN1]

Items: 3 items – CAPI Interview, Section 4, Question 8a, 9a, and 10a

Household Income from Pension [BACPNSN1]

Items: 3 items – CAPI Interview, Section 4, Question 8b, 9b, and 10b

Household Income from Social Security [BACSEC1]

Items: 3 items – CAPI Interview, Section 4, Question 8c, 9c, and 10c

Household Total Income from Wage, Pension, Social Security [BACTINC1]

Items: 9 items – CAPI Interview, Section 4, Question 8(a - c), 9(a - c), and 10(a - c)

Coding: All the income variables are coded as following:

- 1 "LESS THAN \$0 (LOSS)"
- 2 "\$0 (NONE)"
- 3 "\$1 - \$1,999"
- 4 "\$2,000 - \$3,999"
- 5 "\$4,000 - \$5,999"
- 6 "\$6,000 - \$7,999"
- 7 "\$8,000 - \$9,999"
- 8 "\$10,000 - \$11,999"
- 9 "\$12,000 - \$13,999"
- 10 "\$14,000 - \$15,999"
- 11 "\$16,000 - \$17,999"
- 12 "\$18,000 - \$19,999"
- 13 "\$20,000 - \$22,499"
- 14 "\$22,500 - \$24,999"
- 15 "\$25,000 - \$27,499"
- 16 "\$27,500 - \$29,999"
- 17 "\$30,000 - \$32,499"
- 18 "\$32,500 - \$34,999"
- 19 "\$35,000 - \$37,499"
- 20 "\$37,500 - \$39,999"
- 21 "\$40,000 - \$42,499"
- 22 "\$42,500 - \$44,999"
- 23 "\$45,000 - \$47,499"
- 24 "\$47,500 - \$49,999"
- 25 "\$50,000 - \$54,999"
- 26 "\$55,000 - \$59,999"
- 27 "\$60,000 - \$64,999"
- 28 "\$65,000 - \$69,999"
- 29 "\$70,000 - \$74,999"
- 30 "\$75,000 - \$79,999"
- 31 "\$80,000 - \$84,999"
- 32 "\$85,000 - \$89,999"
- 33 "\$90,000 - \$94,999"
- 34 "\$95,000 - \$99,999"
- 35 "\$100,000 - \$109,999"
- 36 "\$110,000 - \$119,999"
- 37 "\$120,000 - \$129,999"
- 38 "\$130,000 - \$139,999"
- 39 "\$140,000 - \$149,999"
- 40 "\$150,000 - \$174,999"
- 41 "\$175,000 - \$199,999"
- 42 "\$200,000 - \$249,999"
- 43 "\$250,000 - \$299,999"
- 44 "\$300,000 OR MORE"
- 97 "DON'T KNOW"
- 98 "REFUSED"
- 99 "INAPP".

Scaling: Each reported source of income was recoded from an income category into actual dollar amounts using mid-point of the category range. Then, summing up the dollar amounts reported from the items used in the income summary variable.

Missing Values: The income summary variables are computed for cases that have **at least one** valid response to questions used in the income summary variable. For cases that do not have any valid response, the summary variable is not calculated and coded as “999998” for “NOT CALCULATED (Due to missing data)”.

NOTE: In the public release, all income variables are top-coded at \$200,000 except [BACTINC1] which is top-coded at \$300,000.

PARENTAL AFFECTION IN CHILDHOOD

Scales/Items

Maternal Affection [BACMA]

Items: 7 items – CAPI Interview, Section 5, Question Ea13, Ea14 (a - e, k)

13. “How would you rate your relationship with your mother during the years you were growing up?”

Coding: 1 Excellent; 2 Very good; 3 Good; 4 Fair; 5 Poor.

14a. “How much did she understand your problems and worries?”

b. “How much could you confide in her about things that were bothering you?”

c. “How much love and affection did she give you?”

d. “How much time and attention did she give you when you needed it?”

e. “How much effort did she put into watching over you and making sure you had a good upbringing?”

k. “How much did she teach you about life?”

Coding: 1 A lot; 2 Some; 3 A little; 4 Not at all.

Scaling: [BACMA] was constructed by calculating the mean of the reverse coded seven items.

The reverse coded value of Ea13 was multiplied by .75 factorial to maintain continuity with other variables. Higher scores reflect greater levels of maternal affect the respondent received during their childhood.

Maternal Discipline [BACMD]

Items: 4 items – CAPI Interview, Section 5, Question Ea14 (f - i)

f. “How strict was she with her rules for you?”

g. “How consistent was she about the rules?”

h. “How harsh was she when she punished you?”

i. “How much did she stop you from doing things that other kids your age were allowed to do?”

Coding: 1 A lot; 2 Some; 3 A little; 4 Not at all.

Scaling: [BACMD] was constructed by calculating the mean of the four items. Items were reverse coded so high scores reflect higher levels of maternal discipline the respondent received during their childhood.

Maternal Model of Generosity [BACMMOD]

Items: 2 items – CAPI Interview, Section 5, Question Ea14 (l, m)

l. “How generous and helpful was she to people outside the family?”

m. "How sociable and friendly was she to people outside the family?"

Coding: 1 A lot; 2 Some; 3 A little; 4 Not at all.

Scaling: [BACMMOD] was constructed by calculating the mean of the two items. Items were reverse coded so that high scores reflect higher levels of maternal generosity.

Paternal Affection [BACFA]

Items: 7 items – CAPI Interview, Section 5, Question Ea15, Ea16 (a - e, k)

15. "How would you rate your relationship with your father during the years you were growing up"

Coding: 1 Excellent; 2 Very good; 3 Good; 4 Fair; 5 Poor.

16a. "How much did he understand your problems and worries?"

b. "How much could you confide in him about things that were bothering you?"

c. "How much love and affection did he give you?"

d. "How much time and attention did he give you when you needed it?"

e. "How much effort did he put into watching over you and making sure you had a good upbringing?"

k. "How much did he teach you about life?"

Coding: 1 A lot; 2 Some; 3 A little; 4 Not at all.

Scaling: [BACFA] was constructed by calculating the mean of the reverse coded seven items.

The reverse coded value of Ea15 was multiplied by .75 factorial to maintain continuity with other variables. Higher scores reflect greater levels of paternal affect the respondent received during their childhood.

Paternal Discipline [BACFD]

Items: 4 items – CAPI Interview, Section 5, Question Ea16 (f - i)

f. "How strict was he with his rules for you?"

g. "How consistent was he about the rules?"

h. "How harsh was he when he punished you?"

i. "How much did he stop you from doing things that other kids your age were allowed to do?"

Coding: 1 A lot; 2 Some; 3 A little; 4 Not at all.

Scaling: [BACFD] was constructed by calculating the mean of the four items. Items were reverse coded so that high scores reflect higher levels of paternal discipline.

Paternal Model of Generosity [BACFMOD]

Items: 2 items – CAPI Interview, Section 5, Question Ea16 (l, m)

l. “How generous and helpful was he to people outside the family?”

m. “How sociable and friendly was he to people outside the family?”

Coding: 1 A lot; 2 Some; 3 A little; 4 Not at all.

Scaling: [BACFMOD] was constructed by calculating the mean of the two items. Items were reverse coded so that high scores reflect higher levels of paternal generosity.

Parental Affection [BACMAPA]

Scaling: [BACMAPA] was constructed from the mean of [BACMA] and [BACFA].

Missing Values: All the parental affection in childhood scales are computed for cases that have valid values for **at least one** item on the scale. Scores are not calculated for cases with no valid item on the scales, and coded as “8” for “NOT CALCULATED (Due to missing data)” and “9” for “NOT CALCULATED (Due to Does not apply)”.

Psychometrics:

Maternal Affection [BACMA]:

Sample (N)	Alpha	Mean	Std. dev
583	.90	3.45	.70

Maternal Discipline [BACMD]:

Sample (N)	Alpha	Mean	Std. dev
582	.73	3.35	.63

Maternal Mode of Generosity [BACMMOD]:

Sample (N)	Alpha	Mean	Std. dev
579	.83	3.65	.64

Paternal Affection [BACFA]:

Sample (N)	Alpha	Mean	Std. dev
476	.92	3.00	.89

Paternal Discipline [BACFD]:

Sample (N)	Alpha	Mean	Std. dev
475	.84	3.04	.89

Paternal Mode of Generosity [BACFMOD]:

Sample (N)	Alpha	Mean	Std. dev
471	.85	3.34	.83

Parental Affection [BACMAPA]:

Sample (N)	Alpha	Mean	Std. dev
589	.90	3.25	.67

Source(s):

Rossi, A. S. (2001). *Caring and doing for others: Social responsibility in the domains of family, work, and community*. Chicago: University of Chicago Press.
: Ch. 7. Developmental Roots of Adult Social Responsibility.

Studies using the scales:

Ryff, C. D., Singer, B. H., & Palmersheim, K. A. (2004). Social Inequalities in health and well-being: The role of relational and religious protective factors. In O. G. Brim, C. D. Ryff & R. C. Kessler (Eds.), *How healthy are we?: A national study of well-being at midlife*. (pp. 90 - 123). Chicago: Univ. of Chicago Press.

FAMILY SUPPORT AND STRAIN

Scales/Items:

Family Support [BACKINPO]

Items: 4 items – CAPI Questionnaire, Section 6, Questions Js2 (a – d).

- a. “Not including your spouse or partner, how much do members of your family really care about you?”
- b. “How much do they understand the way you feel about things?”
- c. “How much can you rely on them for help if you have a serious problem?”
- d. “How much can you open up to them if you need to talk about your worries?”

Coding: 1 A lot; 2 Some; 3 A little; 4 Not at all.

Family Strain [BACKINNE]

Items: 4 items – CAPI Interview, Section 6, Questions Js2 (g – j).

- g. “Not including your spouse or partner, how often do members of your family make too many demands on you?”
- h. “How often do they criticize you?”
- i. “How often do they let you down when you are counting on them?”
- j. “How often do they get on your nerves?”

Coding: 1 Often; 2 Sometimes; 3 Rarely; 4 Never.

Scaling: Scales are constructed by calculating the **mean** of the values of the items in each scale. Items were reverse-coded so that high scores reflect higher standing in the scale.

Missing Values: The scales are computed for cases that have valid values for **at least one** item on the particular scale. Scores are not calculated for cases with no valid item on the scales, and coded as “8” for “NOT CALCULATED (Due to missing data).”

Family Affectual Solidarity [BACFAMSO]

Items: 8 item scale combining the four “family support” items and four “family strain” items.

Scaling: The scale is constructed by calculating the **mean** of the values of the items. Items for the “family support” scale (Js2a to Js2d) were recoded, so that a high score signifies high levels of family affectual solidarity.

Missing Values: The scale is computed for cases that had valid values for **at least one** item on the scale. The scale score is not calculated for cases with no valid items on the scale, and coded as “8” for “NOT CALCULATED (Due to missing data).”

Psychometrics:

Family Support [BACKINPO]:

Sample (N)	Alpha	Mean	Std. dev
588	.84	3.41	.68

Family Strain [BACKINNE]:

Sample (N)	Alpha	Mean	Std. dev
586	.80	2.21	.80

Family Affectual Solidarity [BACFAMSO]:

Sample (N)	Alpha	Mean	Std. dev
588	.68	3.10	.61

Source(s):

Schuster, T. L., Kessler, R. C., & Aseltine, R. H. (1990). Supportive interactions, negative interactions, and depressive mood. *American Journal of Community Psychology*, 18, 423-438.

: MIDUS scales are revised from this study.

Whalen, H. R., & Lachman, M. E. (2000). Social support and strain from partner, family and friends: Costs and benefits for men and women in adulthood. *Journal of Social and Personal Relationships*, 17, 1, 5-30.

Studies using the scales:

Grzywacz, J. G., & Marks, N. F. (2001). Social inequalities and exercise during adulthood: Toward an ecological perspective. *Journal of Health and Social Behavior*, 42, 202-220.

Grzywacz, J. G., & Marks, N. F. (2000). Reconceptualizing the work-family interface: An Ecological perspective on the correlates of positive and negative spillover between work and family. *Journal of Occupational Health Psychology*, 5, 111-126.

Grzywacz, J. G., & Marks, N. F. (1999). Family solidarity and health behavior: Evidence from the National survey of Midlife Development in the United State. *Journal of Family Issues*, 20, 243-268.

Walen, H. R., & Lachman, M. E. (2000). Social support and strain from partner, family, and friends: Costs and benefits for men and women in adulthood. *Journal of Social and Personal Relationships*, 17, 5-30.

FAMILY SUPPORT PROVIDED

Scales/Items:

Providing Family Support [BACPKINS]

Items: 2 items – CAPI Questionnaire, Section 6, Questions Js2 (e, f).

e. “How much do you really care about the members of your family, not including your partner or spouse?”

f. “How much do you understand the way they feel about things?”

Coding: 1 Often; 2 Sometimes; 3 Rarely; 4 Never.

Scaling: The scale is constructed by calculating the **mean** of the values of the items. Items were reverse-coded so that high scores reflect higher standing in the scale.

Missing Values: The scale is computed for cases that had valid values for **at least one** item on the scale. The scale score is not calculated for cases with no valid items on the scale, and coded as “8” for “NOT CALCULATED (Due to missing data).”

Psychometrics:

Providing Family Support [BACPKINS]:

Sample (N)	Alpha	Mean	Std. dev
586	.68	3.67	.50

Source(s):

H. Markus.

FRIEND SUPPORT AND STRAIN

Scales/Items:

Friend Support [BACFDSPO]

Items: 4 items – CAPI Interview, Section 6, Questions Js4 (a – d).

- a. “How much do your friends really care about you?”
- b. “How much do they understand the way you feel about things?”
- c. “How much can you rely on them for help if you have a serious problem?”
- d. “How much can you open up to them if you need to talk about your worries?”

Coding: 1 A lot; 2 Some; 3 A little; 4 Not at all.

Friend Strain [BACFDSNE]

Items: 4 items – CAPI Interview, Section 6, Questions Js4 (e – h).

- e. “How often do your friends make too many demands on you?”
- f. “How often do they criticize you?”
- g. “How often do they let you down when you are counting on them?”
- h. “How often do they get on your nerves?”

Coding: 1 Often; 2 Sometimes; 3 Rarely; 4 Never.

Scaling: Scales are constructed by calculating the **mean** of the values of the items in each scale. Items were reverse-coded so that high scores reflect higher standing in the scale.

Missing Values: The scales are computed for cases that have valid values for **at least one** item on the particular scale. Scores are not calculated for cases with no valid item on the scales, and coded as “8” for “NOT CALCULATED (Due to missing data).”

Friend Affectual Solidarity [BACFDSOL]:

Items: 8 item scale combining the four “friend support” items and four “friend strain” items.

Scaling: The scale is constructed by calculating the **mean** of the values of the items. Items for the “friend support” scale were recoded, so that a high score signifies high levels of family affectual solidarity.

Missing Values: The scale is computed for cases that had valid values for **at least one** item on the scale. The scale score is not calculated for cases with no valid items on the scale, and coded as “8” for “NOT CALCULATED (Due to missing data).”

Psychometrics:

Friend Support [BACFDSPO]:

Sample (N)	Alpha	Mean	Std. dev
576	.90	3.07	.86

Friend Strain [BACFDSNE]:

Sample (N)	Alpha	Mean	Std. dev
579	.82	1.92	.73

Friend Affectual Solidarity [BACFDSO]:

Sample (N)	Alpha	Mean	Std. dev
579	.76	3.08	.59

Source(s):

Schuster, T. L., Kessler, R. C., & Aseltine, R. H. (1990). Supportive interactions, negative interactions, and depressive mood. *American Journal of Community Psychology*, 18: 423-438.

: MIDUS scales are revised from this study.

Whalen, H. R., & Lachman, M. E. (2000). Social support and strain from partner, family and friends: Costs and benefits for men and women in adulthood. *Journal of Social and Personal Relationships*, 17, 1, 5-30.

MARITAL RISK

Scales/Items:

Marital risk scale [BACMARRS]

Items: 2 items – CAPI Interview, Section 6, Question Ls7, Ls8

Ls7. “During the past year, how often have you thought your relationship might be in trouble?”

Coding: 1 Never; 2 Once; 3 A few times; 4 Most of the time; 5 All the time.

Ls8. “(Realistically) what do you think the chances are that you and your partner will eventually separate?” (R)

Coding: 1 Very likely; 2 Somewhat likely; 3 Not very likely; 4 Not likely at all.

Scaling: The scale is constructed by calculating the **sum** of the values of the items. Items marked with (R) were reverse-coded so that higher values indicate higher levels of marital risk.

Missing Values: The scale is computed for cases that had valid values for **both** item on the scale. The scale score is not calculated for cases with any missing item on the scale, and coded as “98” for “NOT CALCULATED (Due to missing data).”

Psychometrics:

Marital risk scale [BACMARRS]:

Sample (N)	Alpha	Mean	Std. dev
215	.68	3.42	1.75

Source(s):

Rossi, A.

SPOUSE/PARTNER DISAGREEMENT

Scales/Items:

Spouse/Partner Disagreement [BACSPDIS]

Items: 3 items - CAPI Interview, Section 6, Questions Ls9 (a – c).

(How much do you and your spouse or partner disagree on the following issues?)

- a. "Money matters such as how much to spend, save, or invest."
- b. "Household tasks, such as what needs doing and who does it."
- c. "Leisure time activities, such as what to do and with whom."

Coding: 1 A lot; 2 Some; 3 A little; 4; not at all.

Scaling: The scale is constructed by calculating the **sum** of the values of the items. Items were reverse-coded so that high scores reflect higher standing in the scale.

Missing Values: The scale is computed for cases that had valid values for **at least one** item on the scale. The scale score is not calculated for cases with no valid items on the scale, and coded as "8" for "NOT CALCULATED (Due to missing data)."

Psychometrics:

Spouse/Partner Disagreement [BACSPDIS]:

Sample (N)	Alpha	Mean	Std. dev
222	.72	6.68	2.45

Source(s):

Grzywacz, J. G., & Marks, N. F. (2000). Family, work, work-family spillover, and problem drinking during midlife. *Journal of Marriage and Family*, 62, 336-348.

SPOUSE/PARTNER SUPPORT AND STRAIN

Scales/Items:

Spouse/ Partner Support (Marital Empathy Scale) [BACSPEMP]

Items: 6 items – CAPI Interview, Section 6, Questions Ls11 (a – f).

- a. “How much does your spouse or partner really care about you?”
- b. “How much does he or she understand the way you feel about things?”
- c. “How much does he or she appreciate you?”
- d. “How much do you rely on him or her for help if you have a serious problem?”
- e. “How much can you open up to him or her if you need to talk about your worries?”
- f. “How much can you relax and be yourself around him or her?”

Coding: 1 A lot; 2 Some; 3 A little; 4; not at all.

Spouse/Partner Strain [BACSPCRI]

Items: 6 items –CAPI Questionnaire, Section 6, Questions Ls11 (g – l).

- g. “How often does your spouse or partner make too many demands on you?”
- h. “How often does he or she argue with you?”
- i. “How often does he or she make you feel tense?”
- j. “How often does he or she criticize you?”
- k. “How often does he or she let you down when you are counting on him or her?”
- l. “How often does he or she get on your nerves?”

Coding: 1 Often; 2 Sometimes; 3 Rarely; 4 Never.

Scaling: Scales are constructed by calculating the **mean** of the values of the items in each scale. Items were reverse-coded so that high scores reflect higher standing in the scale.

Missing Values: The scales are computed for cases that have valid values for **at least one** item on the particular scale. Scores are not calculated for cases with no valid item on the scales, and coded as “8” for “NOT CALCULATED (Due to missing data).”

Spouse/Partner Affectual Solidarity [BACSPSOL]

Items: 12 item scale combining the six “spouse/partner support” items and six “spouse/partner strain” items.

Scaling: The scale is constructed by calculating the **mean** of the values of the items. Items for the “spouse/partner support” scale (Ls11a to Ls11f) were recoded, so that a high score signifies high levels of family affectual solidarity.

Missing Values: The scale is computed for cases that had valid values for **at least one** item on

the scale. The scale score is not calculated for cases with no valid items on the scale, and coded as “8” for “NOT CALCULATED (Due to missing data).”

Psychometrics:

Spouse/ Partner Support (Marital Empathy Scale) [BACSPEMP]:

Sample (N)	Alpha	Mean	Std. dev
222	.83	3.65	.55

Spouse/Partner Strain [BACSPCRI]:

Sample (N)	Alpha	Mean	Std. dev
222	.83	2.09	.72

Spouse/Partner Affectual Solidarity [BACSPSOL]:

Sample (N)	Alpha	Mean	Std. dev
222	.84	3.28	.55

Source(s):

Grzywacz, J. G., & Marks, N. F. (1999). Family solidarity and health behaviors: Evidence from the National Survey of Midlife Development in the United States. *Journal of Family Issues*, 20, 2, 243-268.

Schuster, T. L., Kessler, R. C., & Aseltine, R. H. (1990). Supportive interactions, negative interactions, and depressive mood. *American Journal of Community Psychology*, 18: 423-438.

: MIDUS scales are revised from this study.

Whalen, H. R., & Lachman, M. E. (2000). Social support and strain from partner, family and friends: Costs and benefits for men and women in adulthood. *Journal of Social and Personal Relationships*, 17, 1, 5-30.

Studies using the scales:

Grzywacz, J. G., & Marks, N. F. (2001). Social inequalities and exercise during adulthood: Toward an ecological perspective. *Journal of Health and Social Behavior*, 42, 202-220.

Grzywacz, J. G., & Marks, N. F. (2000). Reconceptualizing the work-family interface: An Ecological perspective on the correlates of positive and negative spillover between work and family. *Journal of Occupational Health Psychology*, 5, 111-126.

Ryff, C. D., Singer, B. H., & Palmersheim, K. A. (2004). Social Inequalities in health and well-being: The role of relational and religious protective factors. In O. G. Brim, C. D. Ryff & R. C. Kessler (Eds.), *How healthy are we?: A national study of well-being at midlife*. (pp. 90 - 123). Chicago: Univ. of Chicago Press.

Ryff, C. D., Singer, B. H., Wing, E. & Love, G. D. (2001). Elective affinities and uninvited agonies: Mapping emotion with significant others onto health. In C. D. Ryff & B. H. Singer (Eds.), *Emotion, Social Relationships, and Health* (pp. 133-175). New York: Oxford Univ. Press.

SPOUSE/PARTNER JOINT DECISION MAKING

Scales/Items:

Spouse/Partner Decision Making [BACSPDEC]

Items: 4 items – CAPI Interview, Section 6, Questions Ls17 (a-d).

- a. “My partner and I are a team when it comes to making decisions.”
- b. “Things turn out better when I talk things over with my partner.”
- c. “I don’t make plans for the future without talking it over with my partner.”
- d. “When I have to make decisions about medical, financial, or family issues, I ask my partner for advice.”

Coding: 1 Strongly agree; 2 Somewhat agree; 3 A little agree; 4 Neither agree or disagree;

5 A little disagree; 6 Somewhat disagree; 7 Strongly disagree.

Scaling: The scale is constructed by calculating the **sum** of the values of the items. Items were reverse-coded so that high scores reflect higher standing in the scale. For an item with a missing value, the mean value of completed items is imputed.

Missing Values: The scale is computed for cases that had valid values for **at least two** items on the scale. The scale score is not calculated for cases with fewer than two valid items on the scales, and coded as “98” for “NOT CALCULATED (Due to missing data).”

Psychometrics:

Spouse/Partner Decision Making [BACSPDEC]:

Sample (N)	Alpha	Mean	Std. dev
221	.99	24.47	5.00

Sources:

Lachman, M. E.

HOUSEHOLD SIZE

Summary Variables:

Number of Respondent's Children Living in Household [BACKIDHH]:

- [BACKIDHH] is a continuous variable based on the total number of children currently lives with the respondent.
- Variables used to construct [BACKIDHH] (from CAPI Interview, Household Roster Section)
BACCHHx (child number x currently lives in the respondent's household) = 1 (YES).

Scaling: [BACKIDHH] is constructed by taking the **total number** of children in the household member roster who currently lives in the respondent's household.

Total Number of Individuals Living in Household [BACHHSIZE]

- [BACHHSIZE] is a continuous variable based on the total number of individuals currently lives in the household.
- Variables used to construct [BACHHSIZE] (from CAPI Interview, Household Roster Section)
[BACHHMBR]: Number of household members besides children or self.
[BACKIDHH]: Number of respondent's children living in household.

Scaling: [BACHHSIZE] is constructed by taking the **sum** of [BACHHMBR] and [BACKIDHH], then add 1 (respondent self).

CO-RESIDING ADULT CHILDREN

Summary Variables:

Number of Co-residing Adult Children (not including foster child and other child) [BACCHM1N]:

- [BACCHM1N] is a continuous variable based on the total number of child (biological, step, adopted children or child of partner/lover) who is 18 years old or older and currently lives with the respondent.
- Variables used to construct [BACCHM1N] (from CAPI Interview, Section 9)
 - BACCHAx (child number x's age) = 18 or higher, AND
 - BACCHRx (child number x's relationship to the respondent)
 - = 3 (biological child), 4 (adopted child), 5 (step child), or 7 (child of lover/partner), AND
 - BACCHHx (child number x currently lives in the respondent's household) = 1 (YES).

Scaling: [BACCHM1N] is constructed by taking the **total number** of children in the household member roster who meet three conditions described above.

Missing Values: [BACCHM1N] is computed for cases that have mentioned at least one child in the household roster interview. For a respondent who had no child, [BACCHM1N] is not calculated and coded as "9" for "INAPP".

Having Co-residing Adult Children (not including foster child and other child) [BACCHM1X]:

- A dummy variable based on [BACCHM1N]
 - = 1 if [BACCHM1N] is greater than or equal to "1".
 - = 0 if [BACCHM1N] is "0".

Number of Co-residing Adult Children (including foster child and other child) [BACCHM2N]:

- [BACCHM2N] is a continuous variable based on the total number of child (biological, step, adopted children, child of partner/lover, foster child, or other child) who is 18 years old or older and currently lives with the respondent.
- Variables used to construct [BACCHM2N] (from CAPI Interview, Section 9)
 - BACCHAx (child number x's age) = 18 or higher, AND
 - BACCHRx (child number x's relationship to the respondent)
 - = 3 (biological child), 4 (adopted child), 5 (step child), 6 (foster child), 7 (child of lover/partner), or 8 (other child) AND
 - BACCHHx (child number x currently lives in the respondent's household) = 1 (YES).

Scaling: [BACCHM2N] is constructed by taking the **total number** of children in the household member roster who meet three conditions described above.

Missing Values: [BACCHM2N] is computed for cases that have mentioned at least one child in the household roster interview. For a respondent who had no child, [BACCHM2N] is not calculated and coded as “9” for “INAPP”.

Having Co-residing Adult Children (not including foster child and other child) [BACCHM2X]:

- A dummy variable based on [BACCHM2N]
 - = 1 if [BACCHM2N] is greater than or equal to “1”.
 - = 0 if [BACCHM2N] is “0”.

PERCEIVED INEQUALITY IN FAMILY

Scales/Items:

Perceived Inequality in Family [BACPIFAM]

Items: 6 items – CAPI Interview, Section 8, Question Ks6 (a-f).

- a. "I feel good about the opportunities I have been able to provide for my children." (R)
- b. "It seems to me that family life with my children has been more negative than most people's."
- c. "Problems with my children have caused me shame and embarrassment at times."
- d. "As a family, we have not had the resources to do many fun things together with the children."
- e. "I believe I have been able to do as much for my children as most other people." (R)
- f. "I feel a lot of pride about what I have been able to do for my children." (R)

Coding: 1 Not at all true; 2 A little true; 3 Moderately true; 4 extremely true.

Scaling: The scale is constructed by calculating the **mean** of the values of the items. Items marked with (R) were reverse-coded so that high scores reflect higher standing in the scale.

Missing Values: The scale is computed for cases that had valid values for **at least one** item on the scale. The scale score is not calculated for cases with no valid items on the scale, and coded as "8" for "NOT CALCULATED (Due to missing data)."

Psychometrics:

Perceived Inequality in Family (Relationship with Children) [BACPIFAM]

Sample (N)	Alpha	Mean	Std. dev
526	.56	1.55	.50

Source(s):

Ryff, C. D., Magee, W. J., Kling, K. C., & Wing, E. H. (1999). Forging macro-micro linkages in the study of psychological well-being. In C.D. Ryff & V.W. Marshall (Eds.), *The self and society in aging processes* (pp.247-278). New York: Springer Publishing.

Studies using the scales:

Lachman, M. E., & Weaver, S. L. (1998). Sociodemographic variations in the sense of control by domain: Findings from the MacArthur Studies of Midlife. *Psychology and Aging*, 13, 4, 553-562.

Notes:

- The study of perceived inequalities follows from the observation that individuals live in social worlds that are filled with conspicuous symbols of class standing (e.g., occupation, car, clothing, home, leisure activities). MIDUS perceived inequality questions were designed to assess the extent to which individuals have an awareness of an unequal distribution of life resources.
- A set of six questions were asked in each of three life domains: how individuals compare their work opportunities with other, their ability to provide for their children, and their living environments (see Ryff et al., 1999).

GENERATIVITY

Scales/Items:

Loyola Generativity Scale (LGS: Contributions domain measures)

[BACGENER]

Items: 6 items – CAPI Interview, Section 11, Question Hs6 (a-f)

- a. "Others would say that you have made unique contributions to society."
- b. "You have important skills you can pass along to others."
- c. "Many people come to you for advice."
- d. "You feel that other people need you."
- e. "You have had a good influence on the lives of many people."
- f. "You like to teach things to people."

Coding: 1 A lot; 2 Some; 3 A little; 4 Not at all.

Scaling: The scale is constructed by calculating the **sum** of the values of the items. Items were reverse-coded so that high scores reflect higher standing in the scale. For an item with a missing value, the mean value of completed items is imputed.

Missing Values: The scale is computed for cases that had valid values for **at least three** items on the scale. The scale score is not calculated for cases with fewer than three valid items on the scales, and coded as "98" for "NOT CALCULATED (Due to missing data)."

Psychometrics:

[BACGENER]

Sample (N)	Alpha	Mean	Std. dev
589	.84	18.93	3.70

Source(s):

McAdams, D. P., & de St. Aubin, E. (1992). A theory of generativity and its assessment through self-report, behavioral acts, and narrative themes in autobiography. *Journal of Personality and Social Psychology*, 62, 1003-1015.

Rossi, A. S. (2001). *Caring and doing for others: Social responsibility in the domains of family, work, and community*. Chicago: University of Chicago Press.
: Ch. 7. Developmental Roots of Adult Social Responsibility.

Studies using the scales:

Lachman, M. E., & Weaver, S. L. (1998). Sociodemographic variations in the sense of control by domain: Findings from the MacArthur Studies of Midlife. *Psychology and Aging*, 13, 4, 553-562.

Marks, N. F., Bumpass, L. L., & Jun, H. J. (2004). Family roles and well-being during the middle life courses. In O. G. Brim, C. D. Ryff & R. C. Kessler (Eds.), *How healthy are we?: A national study of well-being at midlife*. (pp. 514 – 549). Chicago: Univ. of Chicago Press.

PERSONAL BELIEFS ON NEIGHBORHOOD

Scales/Items

Perceived Neighborhood Quality/Health [BACHOMET]

Items: 4 items- CAPI Interviews, Section 11; Questions Is6 (a, b, e, g)

(Please indicate how much each of the following statements describes your situation.

a. "I feel safe being out alone in my neighborhood during the daytime."

b. "I feel safe being out alone in my neighborhood at night."

e. "I could call on a neighbor for help if I needed it."

g. "People in my neighborhood trust each other."

Coding: 1 A lot; 2 Some; 3 A little; 4 Not at all.

Scaling: The scale is constructed by calculating the **mean** of the values of the items. Items were reverse-coded so that high scores reflect higher standing in the scale.

Missing Values: The scale is computed for cases that had valid values for **at least one** item on the scale. The scale score is not calculated for cases with no valid items on the scale, and coded as "8" for "NOT CALCULATED (Due to missing data)."

Psychometrics:

Perceived Neighborhood Quality/Health [BACHOMET]:

Sample (N)	Alpha	Mean	Std. dev
591	.59	3.08	.71

Source(s):

Keyes, C. L. M (1998). Social well-being. *Social Psychology Quarterly*, 61. 121-137.

PERCEIVED INEQUALITY IN HOME

Scales/Items

Perceived Inequality In Home [BACPIHOM]

Items: 6 items - CAPI Interviews, Section 11; Questions Is6 (c, d, f, h, j, l)

(Please indicate how much each of the following statements describes your situation.

c. "I live in as nice a home as most people."

d. "I'm proud of my home."

f. "Most people live in a better neighborhood than I do." (R)

h. "I don't like to invite people to my home because I do not live in a very nice place." (R)

j. "I feel very good about my home and neighborhood."

l. "It feels hopeless to try to improve my home and neighborhood situation." (R)

Coding: 1 A lot; 2 Some; 3 A little; 4 Not at all.

Scaling: The scale is constructed by calculating the **sum** of the values of the items. All items marked with (R) were reverse-coded so that high scores reflect higher standing in the scale. For an item with a missing value, the mean value of completed items is imputed.

Missing Values: The scale is computed for cases that had valid values for **at least one** item on the scale. The scale score is not calculated for cases with no valid items on the scale, and coded as "8" for "NOT CALCULATED (Due to missing data)."

Psychometrics:

Perceived Inequality In Home [BACPIHOM]:

Sample (N)	Alpha	Mean	Std. dev
591	.65	1.71	.54

Source(s):

Ryff, C. D., Magee, W. J., Kling, K. C., & Wing, E. H. (1999). Forging macro-micro linkages in the study of psychological well-being. In C.D. Ryff & V.W. Marshall (Eds.), *The self and society in aging processes* (pp.247-278). New York: Springer Publishing.

PERCEIVED DISCRIMINATION

Scales/Items:

Lifetime Discrimination [BACLFEDI]

Items: 11 items - CAPI Interview, Section 13, Questions Ps1 (a - k).

(How many times in your life have you been discriminated against in each of the following ways because of such things as your race, ethnicity, gender, age, religion, physical appearance, sexual orientation, or other characteristics?)

- a. "You were discouraged by a teacher or advisor from seeking higher education."
- b. "You were denied a scholarship."
- c. "You were not hired for a job."
- d. "You were not given a promotion."
- e. "You were fired."
- f. "You were prevented from renting or buying a home in the neighborhood you wanted."
- g. "You were prevented from remaining in a neighborhood because neighbors made life so uncomfortable."
- h. "You were hassled by the police."
- i. "You were denied a bank loan."
- j. "You were denied or provided inferior medical care."
- k. "You were denied or provided inferior service by a plumber, care mechanic, or other service provider."

Coding: Each item is answered by frequency (# of times) of its happening.

Scaling: The scale was constructed by taking the number of "1 or higher" responses to the items.

Missing Values: The scales are computed for cases that have valid values for **at least one** item on the scale. Scores are not calculated for cases with no valid item on the scales, and coded as "99998" for "NOT CALCULATED (Due to missing data)."

Daily Discrimination [BACDAYDI]

Items: 9 items – CAPI Interview, Section 13, Questions Ps2 (a - i)

- a. "You are treated with less courtesy than other people."
- b. "You are treated with less respect than other people."
- c. "You receive poorer service than other people at restaurants or stores."
- d. "People act as if they think you are not smart."
- e. "People act as if they are afraid of you."
- f. "People act as if they think you are dishonest."

- g. "People act as if they think you are not as good as they are."
- h. "You are called names or insulted."
- i. "You are threatened or harassed."

Coding: 1 Often; 2 Sometimes; 3 Rarely; 4 Never.

Scaling: The scale is constructed by calculating the **sum** of the values of the items. Items were reverse-coded so that high scores reflect higher standing in the scale. For an item with a missing value, the mean value of completed items is imputed.

Missing Values: The scales is computed for cases that have valid values for **at least five** items on the scale. The scale score is not calculated for cases with fewer than five valid items on the scales, and coded as "98" for "NOT CALCULATED (Due to missing data)."

Psychometrics:

Daily Discrimination [BACDAYDI]:

Sample (N)	Alpha	Mean	Std. dev
544	.88	13.42	5.78

Sources:

*The perceived discrimination questions were developed by one of the authors for use in a study of racial discrimination in Detroit (Williams et al., 1997). The questions were based largely on the results of previous qualitative studies of discrimination (Essed, 1991; Feagin, 1991). – from *Kessler et. al. (1999) [see below]*

Williams, D. R., YU, Y., Jackson, J. S., & Anderson, N. B. (1997). Racial differences in physical and mental health: Socioeconomic status, stress and discrimination. *Journal of Health Psychology*, 2, 335-351.

Studies using the scales:

Kessler, R. C., Mickelson, K. D., & Williams, D. R. (1999). The prevalence, distribution, and mental health correlates of perceived discrimination in the United States. *Journal of Health and Social Behavior*, 40, 208-230.

Ryff, C. D., Keyes, C. L. M., & Hughes, D. L. (2004). Psychological well-being in MIDUS: Profiles of ethnic/racial diversity and life-course uniformity. In O. G. Brim, C. D. Ryff & R. C. Kessler (Eds.), *How healthy are we?: A national study of well-being at midlife*. (pp. 398 - 422). Chicago: Univ. of Chicago Press.

References:

Essed, P. (1991). *Understanding everyday racism*. Newbury Park, California: Sage.

Feagin, J. R. (1991). The continuing significance of race: Anti-black discrimination in public places. *American Sociological Review*, 56, 101-116.

LIFE SATISFACTION (Domain Specific)

Scales/Items:

Life Satisfaction

[BACSATIS] (5-item version):

Items: 2 items - Self-Administered Questionnaire:

Section A, Question 1: Rate your health overall

Section I, Question 1: Rate your life overall

3 items - CAPI Interview:

Section 2, Question Fs1: Rate your work situation overall

Section 8, Question Ks1: Rate your relationship with your children overall

Section 6, Question Ls1: Rate your marriage or close relationship overall

[BACSATIS] (6-item version):

Items: 2 items - Self-Administered Questionnaire:

Section A, Question 1: Rate your health overall

Section I, Question 1: Rate your life overall

4 items - CAPI Interview:

Section 2, Question Fs1: Rate your work situation overall

Section 5, Question Gs1: Rate your financial situation these days

Section 8, Question Ks1: Rate your relationship with your children overall

Section 6, Question Ls1: Rate your marriage or close relationship overall

Coding: Each item was coded from 0 (the worst possible) to 10 (the best possible).

Scaling: [BACSATIS] and [BACSATIS2] are constructed by calculating the mean of the items.

The scores for relationship with spouse/partner and relationship with children are averaged to create one “item”. Then, this score is used along with the remaining items to calculate an **overall mean** score. Higher scores reflect higher levels of overall life satisfaction.

Missing Values: The scale is computed for cases that have valid values for **at least one** item on the scale. The scale score is not calculated for cases with no valid item for the scales, and coded as “98” for “NOT CALCULATED (Due to missing data).”

Psychometrics:

Life Satisfaction [BACSATIS]

Sample (N)	Alpha	Mean	Std. dev
588	.58	7.43	1.71

Source(s):

Prenda, K. M. & Lachman, M. E. (2001). Planning for the future: A life management strategy for increasing control and life satisfaction in adulthood. *Psychology and Aging*, 16, 2, 206-216.

Studies using the scales:

Fleeson, W. (2004). The quality of American life at the end of the century. In O. G. Brim, C. D. Ryff & R. C. Kessler (Eds.), *How healthy are we?: A national study of well-being at midlife*. (pp. 252 - 272). Chicago: Univ. of Chicago Press.

Note:

In Fleeson's study (2004), three additional domains of life satisfaction – finance, sexuality, and contributions to others – were included in the analysis.

PSYCHOLOGICAL WELL-BEING (MIDUS-I VERSION)

Scales/Items:

Autonomy [BASPWBA1]

Items: 3 items - Self-Administered Questionnaire, Section C, Question 1 (m, s, kk)

m. "I tend to be influenced by people with strong opinions."

s. "I have confidence in my-opinions, even if they are contrary to the general consensus."
(R)

kk. "I judge myself by what I think is important, not by the values of what others think is important." (R)

Environmental Mastery [BASPWBE1]

Items: 3 items - Self-Administered Questionnaire, Section C, Question 1 (b, h, t,)

b. "In general, I feel I am in charge of the situation in which I live." (R)

h. "The demands of everyday life often get me down."

t. "I am quite good at managing the many responsibilities of my daily life." (R)

Personal Growth [BASPWBG1]

Items: 3 items - Self-Administered Questionnaire, Section C, Question 1 (i, aa, gg)

i. "I think it is important to have new experiences that challenge how you think about yourself and the world." (R)

aa. "For me, life has been a continuous process of learning, changing, and growth." (R)

gg. "I gave up trying to make big improvements or changes in my life a long time ago."

Positive Relations with Others [BASPWBR1]

Items: 3 items - Self-Administered Questionnaire, Section C, Question 1 (j, bb, hh)

j. "Maintaining close relationships has been difficult and frustrating for me."

bb. "People would describe me as a giving person, willing to share my time with others."
(R)

hh. "I have not experienced many warm and trusting relationships with others."

Purpose in Life [BASPWBU1]

Items: 3 items - Self-Administered Questionnaire, Section C, Question 1 (e, oo, qq)

e. "I live life one day at a time and don't really think about the future."

oo. "Some people wander aimlessly through life, but I am not one of them." (R)

qq. "I sometimes feel as if I've done all there is to do in life."

Self-Acceptance [BASPWBS1]

Items: 3 items -Self-Administered Questionnaire, Section C, Question 1 (f, x, dd)

f. "When I look at the story of my life, I am pleased with how things have turned out." (R)

x. "I like most parts of my personality." (R)

dd. "In many ways I feel disappointed about my achievements in life."

Coding: 1 Strongly agree; 2 Somewhat agree; 3 A little Agree; 4 Neither agree or disagree;
5 A little disagree; 6 Somewhat disagree; 7 Strongly disagree.

Scaling: Psychological well-being scales are constructed by calculating the **sum** of each set of items. Items marked with (R) were reverse-coded so that high scores reflect higher standing in the scale. For an item with a missing value, the mean value of completed items is imputed.

Missing Values: The scales are computed for cases that have valid values for **at least one** item on the particular scale. Scores are not calculated for cases with no valid item on the scales, and coded as "98" for "NOT CALCULATED (Due to missing data)."

Psychometrics:

Autonomy [BASPWBA1]:

Sample (N)	Alpha	Mean	Std. dev
394	.19	16.27	3.39

Environmental Mastery [BASPWBE1]:

Sample (N)	Alpha	Mean	Std. dev
395	.44	15.89	3.82

Personal Growth [BASPWBG1]:

Sample (N)	Alpha	Mean	Std. dev
395	.39	17.14	3.56

Positive Relations with Others [BASPWBR1]:

Sample (N)	Alpha	Mean	Std. dev
395	.52	15.36	4.31

Purpose in Life [BASPWBU1]:

Sample (N)	Alpha	Mean	Std. dev
395	.29	15.28	4.01

Self-Acceptance [BASPWBS1]:

Sample (N)	Alpha	Mean	Std. dev
395	.59	15.35	4.30

Source(s):

Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology* 57, 1069-1081.

Additional References:

Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology*, 69, 4, 719-727.

Studies using the scales:

- Carr, D. (2004). Psychological well-being across three cohorts: A response to shifting work-family opportunities and expectations? In O. G. Brim, C. D. Ryff & R. C. Kessler (Eds.), *How healthy are we?: A national study of well-being at midlife*. (pp. 452 - 484). Chicago: Univ. of Chicago Press.
- Horton, R. & Shweder, R. A. (2004). Ethnic conservatism, psychological well-being, and the downside of mainstreaming: Generational differences. In O. G. Brim, C. D. Ryff & R. C. Kessler (Eds.), *How healthy are we?: A national study of well-being at midlife*. (pp. 373 - 397). Chicago: Univ. of Chicago Press.
- used Chicago and New York oversample of Hispanic population.
- Kessler, R. C., Gilman, S. E., Thornton, L. M., & Kendler, K. S. (2004). Health, well-being, and social responsibility in the MIDUS twin and sibling subsamples. In O. G. Brim, C. D. Ryff & R. C. Kessler (Eds.), *How healthy are we?: A national study of well-being at midlife*. (pp. 124 - 152). Chicago: Univ. of Chicago Press.
- Keyes, C. L. M., Shmotkin, D., & Ryff, C. D. (2002). Optimizing well-being: The empirical encounter of two traditions. *Journal of Personality and Social Psychology* 82, 1007-1022.
- Maier, E. H., & Lachman, M. E. (2000). Consequences of early parental loss and separation for health and well-being in midlife. *International Journal of Behavioral Development*, 24, 183-189.
- Marmot, M. G., & Fuhrer, R. (2004). Socioeconomic position and health across midlife. In O. G. Brim, C. D. Ryff & R. C. Kessler (Eds.), *How healthy are we?: A national study of well-being at midlife*. (pp. 64-89). Chicago: Univ. of Chicago Press.
- Ryff, C. D., Keyes, C. L. M., & Hughes, D. L. (2004). Psychological well-being in MIDUS: Profiles of ethnic/racial diversity and life-course uniformity. In O. G. Brim, C. D. Ryff & R. C. Kessler (Eds.), *How healthy are we?: A national study of well-being at midlife*. (pp. 398 - 422). Chicago: Univ. of

Chicago Press.

- Ryff, C. D. & Singer, B. (1998). Middle age and well-being. *Encyclopedia of Mental Health*, 2. 707-719.
- Ryff, C. D., Singer, B. H., & Palmersheim, K. A. (2004). Social Inequalities in health and well-being: The role of relational and religious protective factors. In O. G. Brim, C. D. Ryff & R. C. Kessler (Eds.), *How healthy are we?: A national study of well-being at midlife*. (pp. 90 - 123). Chicago: Univ. of Chicago Press.
- Staudinger, U. M., Fleeson, W. & Baltes, P. B. (1999). Predictors of subjective physical health and global well-being: Similarity and differences between the United States and Germany. *Journal of Personality and Social Psychology* 76, 305-319.

Notes:

The six dimensions of psychological well-being were generated from the multiple theoretical accounts of positive functioning. In the initial validation study (Ryff, 1989), each dimension was operationalized with a 20-item scale (that showed high internal consistency and test-retest reliability as well as convergent and discriminant validity with other measures).

PSYCHOLOGICAL WELL-BEING (MIDUS-II VERSION)

Scales/Items:

Autonomy [BASPWBA2]

Items: 7 items - Self-Administered Questionnaire, Section C, Question 1 (a, g, m, s, y, ee, kk)

- a. "I am not afraid to voice my opinions, even when they are in opposition to the opinions of most people." (R)
- g. "My decisions are not usually influenced by what everyone else is doing." (R)
- m. "I tend to be influenced by people with strong opinions."
- s. "I have confidence in my-opinions, even if they are contrary to the general consensus." (R)
- y. "It's difficult for me to voice my own opinions on controversial matters."
- ee. "I tend to worry about what other people think of me."
- kk. "I judge myself by what I think is important, not by the values of what others think is important." (R)

Environmental Mastery [BASPWBE2]

Items: 7 items - Self-Administered Questionnaire, Section C, Question 1 (b, h, n, t, z, ff, ll)

- b. "In general, I feel I am in charge of the situation in which I live." (R)
- h. "The demands of everyday life often get me down."
- n. "I do not fit very well with the people and the community around me."
- t. "I am quite good at managing the many responsibilities of my daily life." (R)
- z. "I often feel overwhelmed by my responsibilities."
- ff. "I have difficulty arranging my life in a way that is satisfying to me."
- ll. "I have been able to build a living environment and a lifestyle for myself that is much to my liking." (R)

Personal Growth [BASPWBG2]

Items: 7 items - Self-Administered Questionnaire, Section C, Question 1 (c, i, o, u, aa, gg, mm)

- c. "I am not interested in activities that will expand my horizons."
- i. "I think it is important to have new experiences that challenge how you think about yourself and the world." (R)
- o. "When I think about it, I haven't really improved much as a person over the years."
- u. "I have the sense that I have developed a lot as a person over time." (R)
- aa. "For me, life has been a continuous process of learning, changing, and growth." (R)
- gg. "I gave up trying to make big improvements or changes in my life a long time ago."
- mm. "I do not enjoy being in new situations that require me to change my old familiar

ways of doing things.”

Positive Relations with Others [BASPWBR2]

Items: 7 items - Self-Administered Questionnaire, Section C, Question 1 (d, j, p, v, bb, hh, nn)

d. “Most people see me as loving and affectionate.” (R)

j. “Maintaining close relationships has been difficult and frustrating for me.”

p. “I often feel lonely because I have few close friends with whom to share my concerns.”

v. “I enjoy personal and mutual conversations with family members and friends.” (R)

bb. “People would describe me as a giving person, willing to share my time with others.”
(R)

hh. “I have not experienced many warm and trusting relationships with others.”

nn. “I know that I can trust my friends, and they know they can trust me.” (R)

Purpose in Life [BASPWBU2]

Items: 7 items - Self-Administered Questionnaire, Section C, Question 1 (e, k, q, w, cc, oo, qq)

e. “I live life one day at a time and don't really think about the future.”

k. “I have a sense of direction and purpose in life.” (R)

q. “I don't have a good sense of what it is I'm trying to accomplish in life.”

w. “My daily activities often seem trivial and unimportant to me.”

cc. “I enjoy making plans for the future and working to make them a reality.” (R)

oo. “Some people wander aimlessly through life, but I am not one of them.” (R)

qq. “I sometimes feel as if I've done all there is to do in life.”

* Note: The original M2 Purpose in Life scale was created using 8 items. In order to make this scale comparable to the other related M2 PWB scales (all of which use 7 items), one item needed to be removed from the 8-item Purpose in Life scale. Based on item-to-scale reliability coefficients as well as factor analysis of the items, Core determined that the item B1SE1II (“I am an active person in carrying out the plans I set for myself”) should be removed when computing the 7-item Purpose in Life score.

Self-Acceptance [BASPWBS2]

Items: 7 items -Self-Administered Questionnaire, Section C, Question 1 (f, l, r, x, dd, jj, pp)

f. “When I look at the story of my life, I am pleased with how things have turned out.” (R)

l. “In general, I feel confident and positive about myself.” (R)

r. “I feel like many of the people I know have gotten more out of life than I have.”

x. “I like most parts of my personality.” (R)

dd. “In many ways I feel disappointed about my achievements in life.”

jj. "My attitude about myself is probably not as positive as most people feel about themselves."

pp. "When I compare myself to friends and acquaintances, it makes me feel good about who I am." (R)

Coding: 1 Strongly agree; 2 Somewhat agree; 3 A little Agree; 4 Neither agree or disagree; 5 A little disagree; 6 Somewhat disagree; 7 Strongly disagree.

Scaling: Psychological well-being scales were constructed by calculating the **sum** of each set of items. Items marked with (R) were reverse-coded so that high scores reflect higher standing in the scale. For an item with a missing value, the mean value of completed items is imputed.

Missing Values: The scales are computed for cases that have **at least four** items with valid value on the particular scale. Scores are not calculated for cases with fewer than four valid items on the scales, and coded as "98" for "NOT CALCULATED (Due to missing data)."

Psychometrics:

Autonomy [BASPWBA2]:

Sample (N)	Alpha	Mean	Std. dev
394	.53	37.25	6.97

Environmental Mastery [BASPWBE2]:

Sample (N)	Alpha	Mean	Std. dev
394	.69	35.96	7.98

Personal Growth [BASPWBG2]:

Sample (N)	Alpha	Mean	Std. dev
394	.60	37.47	7.20

Positive Relations with Others [BASPWBR2]:

Sample (N)	Alpha	Mean	Std. dev
394	.72	37.81	8.08

Purpose in Life [BASPWBU2]:

Sample (N)	Alpha	Mean	Std. dev
393	.67	37.79	7.48

Self-Acceptance [BASPWBS2]:

Sample (N)	Alpha	Mean	Std. dev
394	.76	36.56	8.42

SENSE OF CONTROL

Scales/Items:

Personal Mastery [BASMASTE]

Items: 4 items - Self-Administered Questionnaire, Section C, Question 4 (c, f, h, l)

- c. "I can do just about anything I really set my mind to."
- f. "When I really want to do something, I usually find a way to succeed at it."
- h. "Whether or not I am able to get what I want is in my own hands."
- l. "What happens to me in the future mostly depends on me."

Perceived Constraints [BASCONST]

Items: 8 items - Self-Administered Questionnaire, Section C, Question 4 (a, b, d, e, g, i, j, k)

- a. "There is little I can do to change the important things in my life."
- b. "I often feel helpless in dealing with the problems of life."
- d. "Other people determine most of what I can and cannot do."
- e. "What happens in my life is often beyond my control."
- g. "There are many things that interfere with what I want to do."
- i. "I have little control over the things that happen to me."
- j. "There is really no way I can solve the problems I have."
- k. "I sometimes feel I am being pushed around in my life."

Coding: 1 Strongly agree; 2 Somewhat agree; 3 A little agree; 4 Neither agree or disagree;
5 A little disagree; 6 Somewhat disagree; 7 Strongly disagree.

Scaling: Scales are constructed by calculating the **mean** across each set of items. Items were recoded so that high scores reflect higher standing in each dimension.

Perceived Control [BASCTRL]

Items: 12-item scale combining the 4 "personal mastery" items and the 8 "perceived constraints" items.

Scaling: [BASCTRL] is constructed by calculating the **mean** of the 12 items. Items from "personal mastery" were reverse-coded so that higher scores represent higher levels of the overall perceived control.

Missing Values: The scales are computed for cases that have valid values for **at least half of** the items on the particular scale. Scale scores are not calculated for cases with fewer than half of the items on the scales, and coded as "8" for "NOT CALCULATED (Due to missing data)."

Psychometrics:**Personal Mastery [BASMASTE]:**

Sample (N)	Alpha	Mean	Std. dev
393	.65	5.68	1.17

Perceived Constraints [BASCONST]:

Sample (N)	Alpha	Mean	Std. dev
393	.56	3.07	1.44

Perceived Control (combined scale) [BASCTRL]:

Sample (N)	Alpha	Mean	Std. dev
393	.53	5.18	1.12

Source(s):

Lachman, M. E., & Weaver, S. L. (1998a). The sense of control as a moderator of social class differences in health and well-being. *Journal of Personality and Social Psychology*, 74, 763-773.

Additional References:

Bandura, A. (1977). *Self-efficacy: The exercise of control*. New York: Freeman.

Lachman, M. E. (1986). Locus of control and aging research: A case for multidimensional and domain-specific assessment. *Psychology and Aging*, 1, 34-40.

Pearlin, L. I., & Schooler, C. (1978). The structure of coping. *Journal of Health and Social Behavior* 19, 2-21.

Skinner, E. A. (1996). A guide to constructs of control. *Journal of Personality and Social Psychology*, 71, 549-570.

Studies using the scales:

Ettner, S. L. & Gryzywacz, J. S. (2001). Worker's perception of how jobs affect health: A Social ecological perspective. *Journal of Occupational Health Psychology*, 6, 101-113.

Lachman, M. E., & Prenda Firth, K. M. (2004). The adaptive value of feeling in control during midlife. In O. G. Brim, C. D. Ryff & R. C. Kessler (Eds.), *How healthy are we?: A national study of well-being at midlife*. (pp. 320 - 349). Chicago: Univ. of Chicago Press.

Lachman, M. E., & Weaver, S. L. (1998b). Sociodemographic variations in the sense of control by domain: Findings from the MacArthur Studies of Midlife. *Psychology and Aging*, 13, 553-562.

Prenda, K. M., & Lachman, M. E. (2001). Planning for the future: A life management strategy for increasing control and life satisfaction in adulthood. *Psychology and Aging*, 16, 206-216.

Soederberg Miller, L. M. & Lachman, M. E. (2000). Cognitive performance and the role of control beliefs in midlife. *Aging, Neuropsychology, and Cognition*, 7: 69-85.

Notes:

- The mastery items consist of 2 items (h, and l) from Pearlin and Schooler's (1978) Mastery Scale, and 2 items (c, and f) created by Lachman and Weaver (1998).
- The perceived constraints scale consists of 5 items (a, b, i, j, and k) from Pearlin and Schooler's Mastery Scale, and 3 items (d, e, and g) created by Lachman and Weaver (1998).
- The sense of control was operationalized with two dimensions: personal mastery and perceived constraints. Personal mastery refers to one's sense of efficacy or effectiveness in carrying out goals. Perceived constraints indicates to what extent one believes there are obstacles or factors beyond one's control that interfere with reaching goals. These dimensions are consistent with Skinner's (1996) two-fold conceptualization of control as comprised of competence and contingency. Some researchers have advocated the use of domain-specific measures of control to maximize the likelihood of finding relationships in a given domain (e.g., Bandura, 1997; Lachman, 1986), however, because there were multiple domains in the study (health and psychological well-being), the use of generalized control measures was deemed more appropriate. Moreover, if the relationships with health and well-being were found by using the generalized measures, this would be even more compelling than with domain-specific measures.

SELF-ESTEEM

Scales/Items:

Self-Esteem [BASESTEE]

Items: 7 items - Self-Administered Questionnaire, Section C, Question 4 (m - s)

- m. "I am no better and no worse than others."
- n. "I take a positive attitude toward myself." (R)
- o. "At times I feel that I am no good at all."
- p. "I am able to do things as well as most people." (R)
- q. "I wish I could have more respect for myself."
- r. "On the whole, I am satisfied with myself." (R)
- s. "I certainly feel useless at times."

Coding: 1 Strongly agree; 2 Somewhat agree; 3 A little agree; 4 Neither agree or disagree; 5 A little disagree; 6 Somewhat disagree; 7 Strongly disagree.

Scaling: [BASESTEE] is constructed by calculating the **sum** of the values of the items in each scale. Items marked with (R) were reverse-coded so that high scores reflect higher standing in the scale. For an item with a missing value, the mean value of completed items is imputed.

Missing Values: The scale is computed for cases that had valid values for **at least four** items on the scale. The scale score is not calculated for cases with fewer than five valid items on the scales, and coded as "98" for "NOT CALCULATED (Due to missing data)."

Psychometrics:

Self-Esteem [BASESTEE]:

Sample (N)	Alpha	Mean	Std. dev
.394	.69	36.55	7.57

Source(s):

Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton Univ. Press.

SELF-CONSTRUAL SCALE

Scales/Items:

Interdependence [BASINTER]

Items: 3 items - Self-Administered Questionnaire, Section C, Question 4 (v, w, y)

v. "My happiness depends on the happiness of those around me."

w. "I often have the feeling that my relationships with others are more important than my own accomplishments."

y. "It is important to listen to others' opinions."

Independence [BASINDEP]

Items: 3 items - Self-Administered Questionnaire, Section C, Question 4 (t, u, x)

t. "I act in the same way no matter who I am with."

u. "I enjoy being unique and different from others in many respects."

x. "Being able to take care of myself is a primary concern for me."

Coding: 1 Strongly agree; 2 Somewhat agree; 3 A little agree; 4 Neither agree or disagree; 5 A little disagree; 6 Somewhat disagree; 7 Strongly disagree.

Scaling: The scales are constructed by calculating the **mean** of the values of the items in each scale. Items were reverse-coded so that high scores reflect higher standing in the scale. For an item with a missing value, the mean value of completed items is imputed.

Missing Values: The scales are computed for cases that have **at least two** items with valid value on the particular scale. Scale scores are not calculated for cases with fewer than two valid items on the scales, and coded as "8" for "NOT CALCULATED (Due to missing data)."

Psychometrics:

Interdependence [BASINTER]:

Sample (N)	Alpha	Mean	Std. dev
392	.51	4.19	1.40

Independence [BASINDEP]:

Sample (N)	Alpha	Mean	Std. dev
392	.49	5.76	1.18

Source(s):

Singelis, T. M. (1994). The measurement of independent and interdependent *self*-construals.
Personality and Social Psychology Bulletin, 20, 580-591.

PERSONALITY TRAITS

Scales/Items:

Respondents were asked how much each of 31 self-descriptive adjectives described them (Section C, Question 6, a - ee). The adjectives measure six personality traits as follows:

Neuroticism [BASNEURO]

4 items; Self-Administered Questionnaire, Section C, Question 6 (c, h, m, s)

Adjectives: Moody, Worrying, Nervous, Calm (R)

Extraversion [BASEXTRA]

5 items; Self-Administered Questionnaire, Section C, Question 6 (a, f, k, w, aa)

Adjectives: Outgoing, Friendly, Lively, Active, Talkative

Openness to Experience [BASOPEN]

7 items; Self-Administered Questionnaire, Section C, Question 6 (n, q, u, v, y, bb, cc)

Adjectives: Creative, Imaginative, Intelligent, Curious, Broad-minded, Sophisticated, Adventurous

Conscientiousness [BASCONS1]

4 items; Self-Administered Questionnaire, Section C, Question 6 (d, i, p, x)

Adjectives: Organized, Responsible, Hardworking, Careless (R),

Conscientiousness [BASCONS2]

5 items; Self-Administered Questionnaire, Section C, Question 6 (d, i, p, x, ee)

Adjectives: Organized, Responsible, Hardworking, Careless (R), **Thorough**

Agreeableness (communion) [BASAGREE]

5 items; Self-Administered Questionnaire, Section C, Question 6 (b, g, l, r, z)

Adjectives: Helpful, Warm, Caring, Softhearted, Sympathetic

Agency [BASAGENC]

5 items; Self-Administered Questionnaire, Section C, Question 6 (e, j, o, t, dd,)

Adjectives: Self-confident, Forceful, Assertive, Outspoken, Dominant,

Coding: 1 A lot; 2 Some; 3 A little; 4 Not at all.

Scaling: Personality traits scales are constructed by calculating the **mean** across each set of items. All items except ones marked with (R) were reverse-coded so that high scores reflect higher standings in each dimension.

Missing Values: The scales are computed for cases that have valid values for **at least half of** the items on the particular scale. Scale scores are not calculated for cases with fewer than half of the items on the scales, and coded as “8” for “NOT CALCULATED (Due to missing data).”

Psychometrics:

Neuroticism [BASNEURO]:

Sample (N)	Alpha	Mean	Std. dev
393	.69	2.17	.66

Extraversion [BASEXTRA]:

Sample (N)	Alpha	Mean	Std. dev
394	.73	3.22	.57

Openness to Experience [BASOPEN]:

Sample (N)	Alpha	Mean	Std. dev
386	.80	2.96	.59

Conscientiousness [BASCONS1]:

Sample (N)	Alpha	Mean	Std. dev
394	.58	3.32	.54

Conscientiousness [BASCONS2]:

Sample (N)	Alpha	Mean	Std. dev
392	.61	3.26	.51

Agreeableness [BASAGREE]:

Sample (N)	Alpha	Mean	Std. dev
394	.71	3.44	.51

Agency [BASAGENC]:

Sample (N)	Alpha	Mean	Std. dev
391	.71	2.81	.61

Source(s):

Rossi, A.S. (2001). *Caring and doing for others: Social responsibility in the domains of family, work, and community*. Chicago: University of Chicago Press.

: Ch. 7. Developmental Roots of Adult Social Responsibility.

Studies using the scales:

- Keyes, C. L. M., Shmotkin, D., & Ryff, C. D. (2002). Optimizing well-being: The empirical encounter of two traditions. *Journal of Personality and Social Psychology*, 82, 1007-1022.
- Lachman, M. E., & Weaver S. L. (1997). The Midlife Development Inventory (MIDI) Personality Scales: Scale construction and scoring. Technical report.
- Staudinger, U. M., Fleeson, W. & Baltes, P. B. (1999). Predictors of subjective physical health and global well-being: Similarity and differences between the United States and Germany. *Journal of Personality and Social Psychology* 76, 305-319.

Additional References:

- Bem, S. L. (1981). *Bem Sex-Role Inventory Manual*. Palo Alto, CA: Consulting Psychologists Press.
- Goldberg, L. R. (1992). The development of markers for the Big-Five factor structure. *Psychological Assessment*, 4, 26-42.
- John, O. P. (1990). The "Big Five" factor taxonomy: Dimensions of personality in the natural language and in questionnaires. In L. A. Pervin (Ed.), *Handbook of personality theory and research*, (pp. 66-100). New York: Guilford.
- Trapnell, P. D., & Wiggins, J. S. (1990). Extension of the Interpersonal Adjective Scales to include the Big Five dimensions of personality. *Journal of Personality and Social Psychology*, 59, 781-790.

Notes:

- Adjectives were selected from existing trait lists and inventories (Bem, 1981; Goldberg, 1992; John, 1990; Trapnell & Wiggins, 1990). Also, some items were generated by Margie Lachman and Alice Rossi.
- A Pilot Study was conducted in 1994 with a probability sample of 1000 men and women, age 30-70 (574 valid cases were usable for item analysis). Items with the highest item to total correlations and factor loadings were selected for MIDI. Forward regressions were also run to determine the smallest number of items needed to account for over 90% of the total scale variance. Many of the negatively worded items (unemotional, unreliable, unsophisticated, unsympathetic, shy, unsociable) were dropped due to low variance. New items were added to increase reliabilities on some scales.

MULTIDIMENSIONAL PERSONALITY QUESTIONNAIRE

Scales/Items

POSITIVE EMOTIONALITY

Well-being [BASMPQWB]

items: 3 items - Self-Administered Questionnaires, Section C; Questions 7 (q, aa, gg).

q. "I usually find ways to liven up my day."

aa. "For me life is a great adventure."

gg. "I always seem to have something pleasant to look forward to."

Social Potency [BASMPQSP]

items: 4 items - Self-Administered Questionnaires, Section C; Questions 7 (e, j, n, dd)

e. "On most social occasions I like to have someone else take the lead." (R)

j. "I am quite effective at talking people into things."

n. "I am very good at influencing people."

dd. "When it is time to make decisions, others usually turn to me."

Achievement [BASMPQAC]

items: 4 items - Self-Administered Questionnaires, Section C; Questions 7 (l, o, r, ff)

l. "I often go on working on a problem long after others would have given up."

o. "I like to try difficult things."

r. "I like hard work."

ff. "I set very high standards for myself in my work."

Social Closeness [BASMPQSC]

items: 4 items - Self-Administered Questionnaires, Section C; Questions 7 (a, c, h, cc).

a. "I usually like to spend my leisure time with friends rather than alone."

c. "When I am unhappy about something, I tend to seek the company of a friend rather than remaining alone."

h. "I am a warm person rather than cool and detached."

cc. "I often prefer not to have people around me." (R)

NEGATIVE EMOTIONALITY

Stress Reactivity [BCSMPQSR]

items: 3 items - Self-Administered Questionnaires, Section C; Questions 7 (k, w, x).

k. "My mood often goes up and down."

w. "I sometimes get myself into a state of tension and turmoil as I think of the day's

events.”

x. “Minor setbacks sometimes irritate me too much.”

Aggression [BASMPQAG]

items: 4 items - Self-Administered Questionnaires, Section C; Questions 7 (i, t, bb, ee).

i. “When I get angry I am often ready to hit someone.”

t. “Sometimes I seem to enjoy hurting someone by saying something mean.”

bb. “When people insult me, I try to get even.”

ee. “Sometimes I just like to hit someone.”

Alienation [BASMPQAL]

items: 3 items - Self-Administered Questionnaires, Section C; Questions 7 (g, p, s).

g. “People often try to take advantage of me.”

p. “I would be more successful if people did not make things difficult for me.”

s. “People often say mean things about me.”

CONSTRAINT

Control [BASMPQCN]

items: 3 items - Self-Administered Questionnaires, Section C; Questions 7 (b, f, y).

b. “When faced with a decision, I usually take time to consider and weigh all options.”

f. “I like to stop and think things over before I do them.”

y. “I am a cautious person.”

Traditionalism [BASMPQTR]

items: 3 items - Self-Administered Questionnaires, Section C; Questions 7 (m, u, z).

m. “I am opposed to more censorship of books and movies because it would go against free speech.” (R)

u. “People should observe moral laws more strictly than they do.”

z. “I don’t like to see religious authority overturned by so-called progress and logical reasoning.”

Harm Avoidance [BASMPQHA]

items: 4 items - Self-Administered Questionnaires, Section C; Questions 7 (d, v), 8, 9.

7d. “It might be fun and exciting to experience an earthquake.” (R)

7v. “It might be fun learning to walk a tightrope.” (R)

8. Of these two situations, I would dislike more:*

- Situation 1: Riding a long stretch of rapids in a canoe.
 - Situation 2: Waiting for someone who's late..
9. Of these two situations, I would dislike more:*
- Situation 1: Being at the circus when two lions suddenly get loose down in the ring
 - Situation 2: Bringing my whole family to the circus and then not being able to get in because a clerk sold me tickets for the wrong night.

Coding: 1 True of you; 2 Somewhat true; 3 Somewhat false; 4 False.

* For C8 and C9,

- 1 Definitely dislike Situation 2; 2 Somewhat dislike Situation 2;
- 3 Somewhat dislike Situation 1; 4 Definitely dislike Situation 1;

Scaling: All scales are constructed by calculating the **sum** of the values of the items. All items except ones marked with (R) were reverse-coded so that high scores reflect higher standing in each dimension. For an item with a missing value, the mean value of completed items is imputed.

Missing Values: The scales are computed for cases that have valid values for **at least half of** the items on the particular scale. Scale scores are not calculated for cases with fewer than half of the items on the scales, and coded as "98" for "NOT CALCULATED (Due to missing data)."

Psychometrics:

Well-being [BASMPQWB]:

Sample (N)	Alpha	Mean	Std. dev
393	.70	9.28	1.95

Social Potency [BASMPQSP]:

Sample (N)	Alpha	Mean	Std. dev
394	.51	10.28	2.40

Achievement [BASMPQAC]:

Sample (N)	Alpha	Mean	Std. dev
393	.59	12.14	2.40

Social Closeness [BASMPQSC]:

Sample (N)	Alpha	Mean	Std. dev
394	.56	11.74	2.45

Stress Reactivity [BASMPQSR]:

Sample (N)	Alpha	Mean	Std. dev
394	.74	6.73	2.57

Aggression [BASMPQAG]:

Sample (N)	Alpha	Mean	Std. dev
394	.73	5.80	2.33

Alienation [BASMPQAL]:

Sample (N)	Alpha	Mean	Std. dev
393	.64	6.38	2.39

Control [BASMPQCN]:

Sample (N)	Alpha	Mean	Std. dev
3494	.65	10.25	1.56

Traditionalism [BASMPQTR]:

Sample (N)	Alpha	Mean	Std. dev
391	.04	8.75	1.69

Harm Avoidance [BASMPQHA]:

Sample (N)	Alpha	Mean	Std. dev
395	.50	12.61	2.78

Source(s):

Tellegen, A. (1985). Structure of mood and personality and their relevance to assessing anxiety, with an emphasis on self-report. In A. H. Tuma & J. D. Maser (Eds.), *Anxiety and the anxiety disorders* (pp. 681-706). Hillsdale, NJ: Erlbaum.

Patrick, C. J., Curtin, J. J. & Tellegen, A. (2002). Development and validation of a brief form of the multidimensional personality questionnaire. *Psychological Assessment*, 14, 2, 150-163.

Additional References:

Krueger, R. F. (2000). Phenotypic, genetic, and nonshared environmental parallels in the structure of personality: a view from the multidimensional personality questionnaire. *Journal of Personality and Social Psychology*. 79, 6, 1057-1067.

Church, A. T. (1994). Relating the Tellegen and five-factor models of personality structure. *Journal of Personality and Social Psychology*. 67, 5 898-909.

LIFE ORIENTATION TEST

Scales/Items:

Optimism [BASOPTIM]

Items: 3 items - Self-Administered Questionnaires, Section C; Questions 10 (a, c, f)

- a. "In uncertain times, I usually expect the best."
- c. "I'm always optimistic about my future."
- f. "I expect more good things to happen to me than bad."

Pessimism [BASPESSI]

Items: 3 items - Self-Administered Questionnaires, Section C; Questions 10 (b, d, e)

- b. "If something can go wrong for me, it will."
- d. "I hardly ever expect things to go my way."
- e. "I rarely count on good things happening to me."

Coding: 1 A lot agree; 2 A little agree; 3 Neither agree or disagree; 4 A little disagree; 5 A lot disagree.

Scaling: The scales are constructed by calculating the **sum** of the values of the items in each scale.

Items are reverse-coded so that high scores reflect higher standing in the scale. For an item with a missing value, the mean value of completed items is imputed.

Missing Values: Scales are computed for cases that have valid values for **at least two** items on the particular scale. Scale scores are not calculated for cases with fewer than two items on the scales, and coded as "98" for "NOT CALCULATED (Due to missing data)."

Optimism Overall [BASORIEN]

Items: 6-item scale combining the 3 "optimism" items and the 3 "pessimism" items.

Scaling: [BASORIEN] is constructed by calculating the sum of the 6 items. Items from "Optimism" were reverse-coded so that higher scores represent higher levels of optimism. For an item with a missing value, the mean value of completed items is imputed.

Missing Values: The scale is computed for cases that have valid values for **at least three** items on the scale. The scale score is not calculated for cases with fewer than three items on the scales, and coded as "98" for "NOT CALCULATED (Due to missing data)."

Psychometrics:**Optimism [BASOPTIM]:**

Sample (N)	Alpha	Mean	Std. dev
395	.56	12.22	2.35

Pessimism [BASPESSI]:

Sample (N)	Alpha	Mean	Std. dev
395	.77	8.25	3.42

Optimism Overall [BASORIEN]:

Sample (N)	Alpha	Mean	Std. dev
395	.66	21.97	4.51

Source(s):

- Scheier, M. F. & Carver, C. S. (1985). Optimism, coping and health: Assessment and implications of generalized outcome expectancies. *Health Psychology*, 4, 219-247.
- Scheier, M. F., Carver, C. S. & Bridges, M. W. (1994). Distinguishing optimism from neuroticism (and trait anxiety, self-mastery, and self-esteem): A reevaluation of the life orientation test. *Journal of Personality and Social Psychology*. 67, 6, 1063-1078.
- Schulz, R., Bookwala, J., Knapp, J. E., Scheier, M. & Williamson, Gail M Pessimism, Age, and Cancer Mortality.; Source: *Psychology and Aging*. Vol. 11 (2) June 1996, pp. 304-309.

PRIMARY AND SECONDARY CONTROL (MIDUS-I VERSION)

Scales/Items:

Primary Control (Persistence in Goal Striving) [BASPERSI]

Items: 5 items - Self-Administered Questionnaire, Section C, Question 11 (a, b, g, j, k)

- a. "When things don't go according to my plans, my motto is, 'Where there's a will, there's a way'."
- b. "When faced with a bad situation, I do what I can do to change it for the better."
- g. "Even when I feel I have too much to do, I find a way to get it all done."
- j. "When I encounter problems, I don't give up until I solve them."
- k. "I rarely give up on something I am doing, even when things get tough."

Secondary Control (Positive Reappraisals) [BASREAPP]

Items: 4 items - Self-Administered Questionnaire, Section C, Question 11 (e, h, m, n)

- e. "I find I usually learn something meaningful from a difficult situation."
- h. "When I am faced with a bad situation, it helps to find a different way of looking at things."
- m. "Even when everything seems to be going wrong, I can usually find a bright side to the situation."
- n. "I can find something positive, even in the worst situations."

Secondary Control (Lowering Aspirations) [BASCHANG]

Items: 5 items - Self-Administered Questionnaire, Section C, Question 11 (c, d, f, i, l)

- c. "When my expectations are not being met, I lower my expectations."
- d. "To avoid disappointments, I don't set my goals too high."
- f. "I feel relieved when I let go of some of my responsibilities."
- i. "I often remind myself that I can't do everything."
- l. "When I can't get what I want, I assume my goals must be unrealistic."

Coding: 1 A lot; 2 Some; 3 A little; 4 Not at all.

Scaling: The scales are constructed by calculating the **mean** across each set of items. Items were reverse-coded so that high scores reflect higher standing in each dimension.

Missing Values: The scales are computed for cases that have valid values for **at least half of** the items on the particular scale. Scale scores are not calculated for cases with fewer than half of the items on the scales, and coded as "8" for "NOT CALCULATED (Due to missing data)."

Psychometrics:

Primary Control (Persistence in Goal Striving) [BASPERSI]

Sample (N)	Alpha	Mean	Std. dev
396	.65	3.29	.50

Secondary Control (Positive Reappraisals) [BASREAPP]

Sample (N)	Alpha	Mean	Std. dev
396	.74	3.22	.60

Secondary Control (Lowering Aspirations) [BASCHANG]

Sample (N)	Alpha	Mean	Std. dev
396	.58	2.28	.60

Source(s):

Wrosch, C., Heckhausen, J., & Lachman, M. E. (2000). Primary and secondary control strategies for managing health and financial stress across adulthood. *Psychology and Aging, 15*, 3, 1-13.

PRIMARY AND SECONDARY CONTROL (MIDUS-II VERSION)

Scales/Items:

Selective Primary Control [BASSPCTR]

Items: 5 items - Self-Administered Questionnaire, Section C, Question 11 (a, b, g, j, k)

- a. "When things don't go according to my plans, my motto is, 'Where there's a will, there's a way'."
- b. "When faced with a bad situation, I do what I can do to change it for the better."
- g. "Even when I feel I have too much to do, I find a way to get it all done."
- j. "When I encounter problems, I don't give up until I solve them."
- k. "I rarely give up on something I am doing, even when things get tough."

Compensatory Primary Control [BASCPCTR]

Items: 5 items - Self-Administered Questionnaire, Section C, Question 11 (y, z, bb, ff, jj)

- y. "I don't like to ask others for help unless I have to." (R)
- z. "Asking others for help comes naturally for me."
- bb. "When I cannot solve a problem by myself, I ask others for help."
- ff. "When obstacles get in my way, I try to get help from others."
- jj. "When difficulties become too great I ask others for advice."

Selective Secondary Control [BASSSCTR]

Items: 3 items - Self-Administered Questionnaire, Section C, Question 11 (aa, ee, ii)

- aa. "When I have decided on a goal, I always keep in mind its benefits."
- ee. "When I have decided on something, I avoid anything that could distract me."
- ii. "For goals that are difficult to achieve, I keep in mind how good I will feel when I have reached them."

Compensatory Secondary Control – Disengagement [BASCSCDE]

Items: 6 items - Self-Administered Questionnaire, Section C, Question 11 (i, l, cc, gg, hh, kk)

- i. "I often remind myself that I can't do everything."
- l. "When I can't get what I want, I assume my goals must be unrealistic."
- cc. "When it turns out that I cannot attain a goal in any way, I let go of it."
- gg. "I stop thinking about a goal that has become unattainable and let it go."
- hh. "When something I wanted did not work out, I try not to think about it too much."
- kk. "If I cannot attain a goal in my life, I think about other new goals to pursue."

Compensatory Secondary Control – Self Protection [BASCSCSP]

Items: 5 items - Self-Administered Questionnaire, Section C, Question 11 (e, h, m, n, dd)

- e. “I find I usually learn something meaningful from a difficult situation.”
- h. “When I am faced with a bad situation, it helps to find a different way of looking at things.”
- m. “Even when everything seems to be going wrong, I can usually find a bright side to the situation.”
- n. “I can find something positive, even in the worst situations.”
- dd. “When I find it impossible to attain a goal, I try not to blame myself.”

Compensatory Secondary Control – Adjustment of Goals [BASCSCAG]

Items: 3 items - Self-Administered Questionnaire, Section C, Question 11 (c, d, f)

- c. “When my expectations are not being met, I lower my expectations.”
- d. “To avoid disappointments, I don’t set my goals too high.”
- f. “I feel relieved when I let go of some of my responsibilities.”

Coding: 1 A lot; 2 Some; 3 A little; 4 Not at all.

Scaling: Scales are constructed by calculating the **sum** of the values of the items in each scale. All items except ones marked with (R) were reverse-coded so that high scores reflect higher standing in each dimension.

Missing Values: The scales are computed for cases that have valid values for **at least half of** the items on the particular scale. Scale scores are not calculated for cases with fewer than half of the items on the scales, and coded as “8” for “NOT CALCULATED (Due to missing data).”

Psychometrics:

Selective Primary Control [BASSPCTR]:

Sample (N)	Alpha	Mean	Std. dev
396	.65	3.29	.50

Compensatory Primary Control [BASCPCTR]:

Sample (N)	Alpha	Mean	Std. dev
393	.67	2.33	.59

Selective Secondary Control [BASSSCTR]:

Sample (N)	Alpha	Mean	Std. dev
391	.57	3.11	.61

Compensatory Secondary Control – Disengagement [BASCSCDE]:

Sample (N)	Alpha	Mean	Std. dev
393	.57	2.47	.53

Compensatory Secondary Control – Self Protection [BASCSCSP]:

Sample (N)	Alpha	Mean	Std. dev
396	.67	3.09	.55

Compensatory Secondary Control – Adjustment of Goals [BASCSCAG]:

Sample (N)	Alpha	Mean	Std. dev
396	.54	2.20	.74

Source(s):

- Wrosch, C., Heckhausen, J., & Lachman, M. E. (2000). Primary and secondary control strategies for managing health and financial stress across adulthood. *Psychology and Aging, 15*, 3, 1-13.
- Heckhausen, J., & Schulz, R. (1993). Optimization by selection and compensation: Balancing primary and secondary control in life-span development. *International Journal of Behavioral Development, 16*, 287-303.
- Heckhausen, J., & Schulz, R. (1995). A life-span theory of control. *Psychological Review, 102*, 284-304.
- Heckhausen, J., Schulz, R., & Wrosch, C. (1998). Developmental regulation in adulthood: Optimization in primary and secondary control a multiscale questionnaire. *Technical Report*, Max Planck Institute for Human Development and Education, Berlin.

PLANNING AND MAKING SENSE OF PAST

Scales/Items

Self Directedness and Planning [BASDIREC]

Items: 3 items - Self-Administered Questionnaires, Section C; Questions 11 (o, p, r)

- o. "I like to make plans for the future."
- p. "I know what I want out of life."
- r. "I find it helpful to set goals for the near future."

Live for Today [BASTODAY]

Items: 4 items - Self-Administered Questionnaires, Section C; Questions 11 (q, s, u, x)

- q. "I live one day at a time."
- s. "I have too many things to think about today to think about tomorrow."
- u. "There is no use in thinking about the past because there is nothing you can do about it."
- x. "I believe there is no sense planning too far ahead because so many things can change."

Insight into Past [BASINSGH]

Items: 2 items - Self-Administered Questionnaires, Section C; Questions 11 (t, v)

- t. "Making sense of my past helps me figure out what to do in the present."
- v. "After something bad happens, I think about how I could have prevented it."

Foresight and Anticipation [BASFORSG]:

Items: 1 items - Self-Administered Questionnaires, Section C; Questions 11 (w)

- w. "I am good at figuring out how things will turn out."

Coding: 1 A lot; 2 Some; 3 A little; 4 Not at all.

Scaling: Scales are constructed by calculating the **mean** of the values of the items in each scale. Items were reverse-coded so that high scores reflect higher standing in the scale.

Missing Values: The scales are computed for cases that have valid values for **at least half of** the items on the particular scale. Scale scores are not calculated for cases with fewer than half of the items on the scales, and coded as "8" for "NOT CALCULATED (Due to missing data)."

Psychometrics:

Self Directedness and Planning [BASDIREC]:

Sample (N)	Alpha	Mean	Std. dev
397	.73	3.28	.68

Live for Today [BASTODAY]:

Sample (N)	Alpha	Mean	Std. dev
393	.62	2.66	.71

Insight into Past [BASINSGH]:

Sample (N)	Alpha	Mean	Std. dev
393	.45	3.10	.72

Source(s):

Prenda, K. M. & Lachman, M. E. (2001). Planning for the future: A life management strategy for increasing control and life satisfaction in adulthood. *Psychology and Aging*, 16, 206-216.

SEEKING SOCIAL SUPPORT

Scales/Items

Self-Sufficiency [BASSUFFI]

Items: 2 items - Self-Administered Questionnaires, Section C; Questions 11 (y, z).

y. "I don't like to ask others for help unless I have to." (R)

z. "Asking others for help comes naturally for me."

Coding: 1 A lot, 2 Some, 3 A little, 4 Not at all

Scaling: The scale is constructed by calculating the **mean** of the values of the items. Items were reverse-coded so that high scores reflect higher standing in the scale.

Missing Values: The scale is computed for cases that had valid values for **at least one** item on the scale. The scale score is not calculated for cases with no valid item on the scale, and coded as "8" for "NOT CALCULATED (Due to missing data)."

Psychometrics:

Self-Sufficiency [BASSUFFI]:

Sample (N)	Alpha	Mean	Std. dev
393	.36	3.20	.72

Source(s):

Lachman, M. E., & Weaver, S. L.

COPING

Scales/Items

Positive Reinterpretation and Growth [BASREINT]

Items: 4 items - Self-Administered Questionnaires, Section C; Questions 12 (a, h, o, u).

- a. "I try to grow as a person as a result of the experience."
- h. "I try to see it in a different light, to make it seem more positive."
- o. "I look for something good in what is happening."
- u. "I learn something from the experience."

Active Coping [BASACTIV]

Items: 4 items - Self-Administered Questionnaires, Section C; Questions 12 (b, i, p, v).

- b. "I concentrate my efforts on doing something about it."
- i. "I take additional action to try to get rid of the problem."
- p. "I take direct action to get around the problem."
- v. "I do what has to be done, one step at a time."

Planning [BASPLAN]

Items: 4 items - Self-Administered Questionnaires, Section C; Questions 12 (c, j, q, w).

- c. "I make a plan of action."
- j. "I try to come up with a strategy about what to do."
- q. "I think about how I might best handle the problem."
- w. "I think hard about what steps to take."

Focus on and Venting of Emotion [BASVENT]

Items: 4 items - Self-Administered Questionnaires, Section C; Questions 12 (d, k, r, x).

- d. "I get upset and let my emotions out."
- k. "I get upset, and am really aware of it."
- r. "I let my feelings out."
- x. "I feel a lot of emotional distress and find myself expressing those feelings a lot."

Denial [BASDENIA] (new at MIDUS-II):

Items: 4 items - Self-Administered Questionnaires, Section C; Questions 12 (e, l, s, y).

- e. "I say to myself "this isn't real"."
- l. "I refuse to believe that it has happened."
- s. "I pretend that it hasn't really happened."
- y. "I act as though it hasn't even happened."

Behavioral Disengagement [BASDISEN]

Items: 4 items - Self-Administered Questionnaires, Section C; Questions 12 (f, m, t, z).

- f. "I admit to myself that I can't deal with it, and quit trying."
- m. "I give up trying to reach my goal."
- t. "I give up the attempt to get what I want."
- z. "I reduce the amount of effort I'm putting into solving the problem."

Using Food to Cope [BASFDCOP]

Items: 2 items - Self-Administered Questionnaires, Section C; Questions 12 (g, n).

- g. "I eat more than I usually do."
- n. "I eat more of my favorite foods to make myself feel better."

Coding: 1 A lot; 2 A medium amount; 3 Only a little; 4 Not at all

Scaling: Scales are constructed by calculating the **sum** of the values of the items in each scale. Items were reverse-coded so that high scores reflect higher standing in the scale. For an item with a missing value, the mean value of completed items is imputed.

Problem Focused Coping (COPE combined scale) [BASPRCOP]

Items: 12-item scale combining "Positive Reinterpretation and Growth," "Active Coping," and "Planning."

Scaling: Scale score is constructed by calculating the **sum** of the 12 items. Items were reverse-coded so that higher scores represent higher levels of problem focused coping. For an item with a missing value, the mean value of completed items is imputed.

Emotion Focused Coping (COPE combined scale) [BASEMCOP]

Items: 12-item scale combining "Focus on and venting of emotion," "Denial," and "Behavioral disengagement."

Scaling: Scale score is constructed by calculating the **sum** of the 12 items. Items were reverse-coded so that higher scores represent higher levels of emotion focused coping. For an item with a missing value, the mean value of completed items is imputed.

Missing Values: The scales are computed for cases that have valid values for **at least half of** the items on the particular scale. Scale scores are not calculated for cases with fewer than half of the items on the scales, and coded as "98" for "NOT CALCULATED (Due to missing data)."

Psychometrics:

Positive Reinterpretation and Growth [BASREINT]:

Sample (N)	Alpha	Mean	Std. dev
396	.67	13.08	2.26

Active Coping [BASACTIV]:

Sample (N)	Alpha	Mean	Std. dev
396	.62	12.54	2.35

Planning [BASPLAN]:

Sample (N)	Alpha	Mean	Std. dev
396	.76	13.15	2.48

Focus on and Venting of Emotion [BASVENT]:

Sample (N)	Alpha	Mean	Std. dev
395	.73	9.43	2.91

Denial [BASDENIA]:

Sample (N)	Alpha	Mean	Std. dev
395	.73	7.46	2.86

Behavioral Disengagement [BASDISEN]:

Sample (N)	Alpha	Mean	Std. dev
394	.73	7.52	2.86

Using Food to Cope [BASFDCOP]:

Sample (N)	Alpha	Mean	Std. dev
396	.73	3.71	1.76

Problem Focused Coping (COPE combined scale) [BASPRCOP]:

Sample (N)	Alpha	Mean	Std. dev
396	.87	38.77	6.27

Emotion Focused Coping (COPE combined scale) [BASEMCOP]:

Sample (N)	Alpha	Mean	Std. dev
394	.85	24.41	7.08

Source(s):

- Carver, C. S., Scheier, M. F. & Weintraub, J. K. (1989). Assessing coping strategy: A theoretical based approach. *Journal of Personality and Social Psychology*, 56, 267-283.
- Kling, K. C., Seltzer, M. M. & Ryff, C. D. (1997). Distinctive later-life challenges: Implications for coping and well-being. *Psychology and Aging*, 12, 288-295.

Note:

Of the original 15 subscales of the COPE Inventory (Carver, Scheier, & Weintraub 1989), 6 subscales are included in MIDUS 2I. Other subscales were dropped because (1) they overlapped with other measures in MIDUS II (e.g., religious coping or substance use), or (2) they had low internal consistency (e.g., mental disengagement).

WORK TO FAMILY AND FAMILY TO WORK SPILLOVER

Scales/Items:

Positive Work to Family Spillover [BASPOSWF]

Items: 4 items - Self-Administered Questionnaire, Section E, Question 5 (e-h)

- e. "The things you do at work help you deal with personal and practical issues at home?"
- f. "The things you do at work make you a more interesting person at home."
- g. "Having a good day on your job makes you a better companion when you get home."
- h. "The skills you use on your job are useful for things you have to do at home."

Negative Work to Family Spillover [BASNEGWF]

Items: 4 items - Self-Administered Questionnaire, Section E, Question 5 (a-d)

- a. "Your job reduces the effort you can give to activities at home."
- b. "Stress at work makes you irritable at home."
- c. "Your job makes you feel too tired to do the things that need attention at home."
- d. "Job worries or problems distract you when you are at home."

Positive Family to Work Spillover [BASPOFW]

Items: 4 items - Self-Administered Questionnaire, Section E, Question 5 (m-p)

- m. "Talking with someone at home helps you deal with problems at work."
- n. "Providing for what is needed at home makes you work harder at your job."
- o. "The love and respect you get at home makes you feel confident about yourself at work."
- p. "Your home life helps you relax and feel ready for the next day's work."

Negative Family to Work Spillover [BASNEGFW]

Items: 4 items; Self-Administered Questionnaire, Section E, Question 5 (i-l)

- i. "Responsibilities at home reduce the effort you can devote to your job."
- j. "Personal or family worries and problems distract you when you are at work."
- k. "Activities and chores at home prevent you from getting the amount of sleep you need to do your job well."
- l. "Stress at home makes you irritable at work."

Coding: 1 All of the time; 2 Most of the time; 3 Sometimes; 4 Rarely; 5 Never.

Scaling: Scales are constructed by calculating the **sum** of the values of the items in each scale. Items were reverse-coded so that high scores reflect higher standing in the scale. For an item with a

missing value, the mean value of completed items is imputed.

Missing Values: The scales are computed for cases that have valid values for **at least half of** the items on the particular scale. Scale scores are not calculated for cases with fewer than half of the items on the scales, and coded as “98” for “NOT CALCULATED (Due to missing data).”

Psychometrics:

Positive Work to Family Spillover [BASPOSWF]:

Sample (N)	Alpha	Mean	Std. dev
260	.78	11.08	3.94

Negative Work to Family Spillover [BASNEGWF]:

Sample (N)	Alpha	Mean	Std. dev
260	.82	9.08	3.45

Positive Family to Work Spillover [BASPOFW]:

Sample (N)	Alpha	Mean	Std. dev
260	.80	13.17	4.12

Negative Family to Work Spillover [BASNEGFW]:

Sample (N)	Alpha	Mean	Std. dev
260	.80	7.96	3.21

Source(s):

Studies using the scales:

Grzywacz, J. G. (2000). Work-family spillover and health during midlife: Is managing conflict everything? *American Journal of Health Promotion*, 14, 236-243.

Grzywacz, J. G., & Marks, N. F. (2001). Social inequalities and exercise during adulthood: Toward an ecological perspective. *Journal of Health and Social Behavior*, 42, 202-220.

Grzywacz, J. G., & Marks, N. F. (2000). Family, work, work-family spillover, and problem drinking during midlife. *Journal of Marriage and Family*, 62, 336-348.

Grzywacz, J. G., & Marks, N. F. (2000). Reconceptualizing the work-family interface: An Ecological perspective on the correlates of positive and negative spillover between work and family. *Journal of Occupational Health Psychology*, 5, 111-126.

JOB CHARACTERISTICS

Scales/Items:

Skill Discretion [BASJCSD]

Items: 3 items - Self-Administered Questionnaire, Section E, Question 6 (b, c, i).

- b. "How often do you learn new things at work?"
- c. "How often does your work demand a high level of skill or expertise?"
- i. "How often does your job provide you with a variety of things that interest you?"

Decision Authority [BASJCDA]

Items: 6 items - Self-Administered Questionnaire, Section E, Question 6 (d, e, f, g, h) and Question 7 (b).

- d. "On your job, how often do you have to initiate things -- such as coming up with your own ideas, or figuring out on your own what needs to be done?"
- e. "How often do you have a choice in deciding how you do your tasks at work?"
- f. "How often do you have a choice in deciding what tasks you do at work?"
- g. "How often do you have a say in decisions about your work?"
- h. "How often do you have a say in planning your work environment -- that is, how your workplace is arranged or how things are organized?"
- E7b. "(How often) you control the amount of time you spend on tasks."

Demands Scale [BASJCDS]

Items: 5 items - Self-Administered Questionnaire, Section E, Question 6 (a, j) and Question 7 (a, c, d).

- 6a. "How often do you have to work very intensively -- that is, you are very busy trying to get things done?"
- 6j. "How often do different people or groups at work demand things from you that you think are hard to combine?"
- 7a. "(How often) you have too many demands made on you."
- 7c. "(How often) you have enough time to get everything done." (R)
- 7d. "(How often) you have a lot of interruption."

Coworker Support [BASJCCS]

Items: 2 items - Self-Administered Questionnaire, Section E, Question 8 (a, b).

- a. "How often do you get help and support from your coworkers?"
- b. "How often are your coworkers willing to listen to your work-related problems?"

Supervisor Support [BASJCSS]

Items: 3 items - Self-Administered Questionnaire, Section E, Question 8 (c, d, e).

- c. "How often do you get the information you need from your supervisor or superiors?"
- d. "How often do you get help and support from your immediate supervisor?"
- e. "How often is your immediate supervisor willing to listen to your work-related problems?"

Coding: 1 All of the time; 2 Most of the time; 3 Sometimes; 4 Rarely; 5 Never.

Scaling: The scales are constructed by calculating the **sum** of the reverse-coded values of the items in each scale. All items except those marked with (R) were recoded so that high scores reflect higher standing in each scale. For an item with a missing value, the mean value of completed items is imputed.

Missing Values: The scales are computed for cases that have valid values for **at least half of** the items on the particular scale. Scale scores are not calculated for cases with fewer than half of the items on the scales, and coded as "98" for "NOT CALCULATED (Due to missing data)."

Psychometrics:

Skill Discretion [BASJCSD]:

Sample (N)	Alpha	Mean	Std. dev
263	.76	9.92	2.95

Decision Authority [BASJCDA]:

Sample (N)	Alpha	Mean	Std. dev
263	.89	19.78	6.05

Demands Scale [BASJCDS]:

Sample (N)	Alpha	Mean	Std. dev
272	.61	13.52	3.57

Coworker Support [BASJCCS]:

Sample (N)	Alpha	Mean	Std. dev
225	.68	6.88	1.73

Supervisor Support [BASJCSS]:

Sample (N)	Alpha	Mean	Std. dev
226	.87	10.93	2.90

Source(s):

- Bosma, H. & Marmot, M. G. (1997). Low job control and risk of coronary heart disease in Whitehall ii (prospective cohort) study. *British Medical Journal*, 314,:7080,
- Karasek, R. A., & Theorell, T. (1990). *Healthy work: Stress, productivity, and the reconstruction of working life*. New York: Basic Books.
- Karasek, R. A., Baker, D., Marxer, F., Ahlbom, A., & Theorell, T. (1981). Job decision latitude, job demands and cardiovascular disease: a prospective study of Swedish men. *American Journal of Public Health* ,71: 694-705.
- Schwartz, J., Pieper, C., & Karasek, R. A. (1988). A procedure for linking job characteristics to health surveys. *American Journal of Public Health*. 78, 904-909.

Studies using the scales:

- Earle, A., & Heymann, S. J. (2004). Work, family, and social class. In O. G. Brim, C. D. Ryff & R. C. Kessler (Eds.), *How healthy are we?: A national study of well-being at midlife*. (pp. 485 - 513). Chicago: Univ. of Chicago Press.
- Ettner, S. L. (2000). The relationship between labor market outcomes and physical and mental health; Exogenous human capital or endogenous health production? *Research in Human Capital and Development*, 13. 1-31.
- Ettner, S. L., & Gryzywacz, J. S. (2001). Worker's perception of how jobs affect health: A Social ecological perspective. *Journal of Occupational Health Psychology*, 6. 101-113.
- Grzywacz, J. G., & Marks, N. F. (2000). Reconceptualizing the work-family interface: An Ecological perspective on the correlates of positive and negative spillover between work and family. *Journal of Occupational Health Psychology*, 5, 111-126.
- Grzywacz, J. G., & Marks, N. F. (2000). Family, work, work-family spillover, and problem drinking during midlife. *Journal of Marriage and Family*, 62, 336-348.
- Lachman, M. E., & Prenda Firth, K. M. (2004). The adaptive value of feeling in control during midlife. In O. G. Brim, C. D. Ryff & R. C. Kessler (Eds.), *How healthy are we?: A national study of well-being at midlife*. (pp. 320 - 349). Chicago: Univ. of Chicago Press.
- Lachman, M. E., & Weaver, S. L. (1998). Sociodemographic variations in the sense of control by domain: Findings from the MacArthur Studies of Midlife. *Psychology and Aging*, 13, 4, 553-562.
- Rossi, A. S. (2004). The menopausal transition and aging processes. In O. G. Brim, C. D. Ryff & R. C. Kessler (Eds.), *How healthy are we?: A national study of well-being at midlife*. (pp. 153 - 201). Chicago: Univ. of Chicago Press.

CHRONIC JOB DISCRIMINATION

Scales/Items

Chronic job discrimination [BASJOBDI]

Items: 6 items - Self-Administered Questionnaires, Section E; Questions 9 (a – f).

- a. “How often do you think you are unfairly given the jobs that no one else wanted to do?”
- b. “How often are you watched more closely than other workers?”
- c. “How often does your supervisor or boss use ethnic, racial, or sexual slurs or jokes?”
- d. “How often do your coworkers use ethnic, racial, or sexual slurs or jokes?”
- e. “How often do you feel that you are ignored or not taken seriously by your boss?”
- f. “How often has a co-worker with less experience and qualifications gotten promoted before you?”

Coding: 1 Once a week or more; 2 A few times a month; 3 A few times a year;
4 Less than once a year; 5 Never.

Scaling: The scale is constructed by calculating the **sum** of the values of the items. Items were reverse-coded so that high scores reflect higher standing in the scale. For an item with a missing value, the mean value of completed items is imputed.

Missing Values: The scale is computed for cases that had valid values for **at least three** items on the scale. The scale score is not calculated for cases with fewer than three valid items on the scales, and coded as “98” for “NOT CALCULATED (Due to missing data).”

Psychometrics:

Chronic job discrimination [BASJOBDI]:

Sample (N)	Alpha	Mean	Std. dev
274	.83	11.55	5.55

Source(s):

D. Williams.

https://scholar.harvard.edu/files/davidrwilliams/files/discrimination_resource_july_2020.pdf

PERCEIVED INEQUALITY IN WORK

Scales/Items

Perceived inequality in work [BASPIWOR]

Items: 6 items - Self-Administered Questionnaires, Section E; Questions 10 (a – f).

- a. "I feel cheated about the chances I have had to work at good jobs." (R)
- b. "When I think about the work I do on my job, I feel a good deal of pride."
- c. "I feel that others respect the work I do on my job."
- d. "Most people have more rewarding jobs than I do." (R)
- e. "When it comes to my work life, I've had opportunities that are as good as most people's."
- f. "It makes me discouraged that other people have much better jobs than I do." (R)

Coding: 1 A lot; 2 Some; 3 A little; 4 Not at all

Scaling: The scale is constructed by calculating the **mean** of six items. Items marked with (R) were reverse-coded so that high scores reflect higher standing in the scale.

Missing Values: The scale is computed for cases that had valid values for **at least one** item on the scale. The scale score is not calculated for cases with no valid items on the scale, and coded as "8" for "NOT CALCULATED (Due to missing data)."

Psychometrics:

Perceived inequality in work [BASPIWOR]

Sample (N)	Alpha	Mean	Std. dev
271	.64	1.95	.60

Source(s):

Corey L. M. Keyes.

Studies using the scales:

Ryff, C. D., Magee, W. J., Kling, K. C., & Wing, E. H. (1999). Forging macro-micro linkages in the study of psychological well-being. In C.D. Ryff & V.W. Marshall (Eds.), *The self and society in aging processes* (pp.247-278). New York: Springer Publishing.

SOCIAL WELL-BEING

Scales/Items

Meaningfulness of Society (Social Coherence) [BASSWBMS]

Items: 2 items - Self-Administered Questionnaires, Section F; Questions 1 (a, h)

- a. "The world is too complex for me."
- h. "I cannot make sense of what's going on in the world."

Social Integration [BASSWBSI]

Items: 3 items - Self-Administered Questionnaires, Section F; Questions 1 (b, f, k)

- b. "I don't feel I belong to anything I'd call a community."
- f. "I feel close to other people in my community." (R)
- k. "My community is a source of comfort." (R)

Acceptance of Others (Social Acceptance) [BASSWBAO]

Items: 3 items - Self-Administered Questionnaires, Section F; Questions 1 (c, j, n)

- c. "People who do a favor expect nothing in return." (R)
- j. "People do not care about other people's problems."
- n. "I believe that people are kind." (R)

Social Contribution [BASSWBSC]

Items: 3 items - Self-Administered Questionnaires, Section F; Questions 1 (d, g, o)

- d. "I have something valuable to give to the world." (R)
- g. "My daily activities do not create anything worthwhile for my community."
- o. "I have nothing important to contribute to society."

Social Actualization [BASSWBSA]

Items: 3 items - Self-Administered Questionnaires, Section F; Questions 1 (e, i, m)

- e. "The world is becoming a better place for everyone." (R)
- i. "Society has stopped making progress."
- m. "society isn't improving for people like me."

Coding: 1 Strongly agree; 2 Somewhat agree; 3 A little agree; 4 Neither agree or disagree;
5 A little disagree; 6 Somewhat disagree; 7 Strongly disagree.

Scaling: Scales are constructed by calculating the **sum** of the values of the items. All items marked with (R) were reverse-coded so that high scores reflect higher standing in each scale. For an item with a missing value, the mean value of completed items is imputed.

Missing Values: The scales are computed for cases that have valid values for **at least one** item on the particular scale. Scores are not calculated for cases with no valid item on the scales, and coded as “98” for “NOT CALCULATED (Due to missing data).”

Psychometrics:

Meaningfulness of Society (Social Coherence) [BASSWBMS]:

Sample (N)	Alpha	Mean	Std. dev
394	.55	8.76	3.37

Social Integration [BASSWBSI]:

Sample (N)	Alpha	Mean	Std. dev
394	.58	13.92	4.08

Acceptance of Others (Social Acceptance) [BASSWBAO]:

Sample (N)	Alpha	Mean	Std. dev
394	.14	11.96	3.40

Social Contribution [BASSWBSC]:

Sample (N)	Alpha	Mean	Std. dev
394	.52	15.43	3.91

Social Actualization [BASSWBSA]:

Sample (N)	Alpha	Mean	Std. dev
393	.37	11.69	3.96

Source(s):

Keyes, C. L. M (1995). The social side of psychological well-being. *Ph. D. Dissertation*, Department of Sociology, University of Wisconsin, Madison.

Keyes, C. L. M (1998). Social well-being. *Social Psychology Quarterly*, 61. 121-140.

Studies using the scales:

Keyes, C. L. M., & Shapiro, A. D. (2004). Social well-being in the United States: A descriptive epidemiology. In O. G. Brim, C. D. Ryff & R. C. Kessler (Eds.), *How healthy are we?: A national study of well-being at midlife*. (pp. 350 - 372). Chicago: Univ. of Chicago Press.

SYMPATHY SCALE

Scales/Items

Sympathy [BASSYMP]

Items: 4 items- Self-Administered Questionnaires, Section F; Questions 1 (q - t)

- q. "Even when things are going well for me, I can't be happy if I have a friend who is in trouble."
- r. "I am moved when I hear of another person's hardship."
- s. "I think nothing is more important than to be sympathetic to others."
- t. "My sympathy has its limit." (R)

Coding: 1 Strongly agree; 2 Somewhat agree; 3 A little agree; 4 Neither agree or disagree; 5 A little disagree; 6 Somewhat disagree; 7 Strongly disagree.

Scaling: The scale is constructed by calculating the **mean** of the values of the items. All items except one marked with (R) were reverse-coded so that high score reflects higher standing in the scale. For an item with a missing value, the mean value of completed items is imputed.

Missing Values: The scale is computed for cases that had valid values for **at least two** items on the scale. The scale score is not calculated for cases with fewer than two valid items on the scales, and coded as "8" for "NOT CALCULATED (Due to missing data)."

Psychometrics:

Sympathy [BASSYMP]:

Sample (N)	Alpha	Mean	Std. dev
388	.33	4.67	1.09

Source(s):

Uchida, Y. & Kitayama, S. (2001). Development and validation of a sympathy scale. *Japanese Journal of Psychology*, 74. 275-282.

Uchida, Y. & Kitayama, S. (2001). The Japanese self and mutually sympathetic relationship: Measurement of sympathetic tendencies. Unpublished paper.

RELIGIOSITY

Scales/Items:

Spirituality [BASSPIRI]

Items: 2 items - Self-Administered Questionnaire, Section H, Question 2 (b, d)

- b. "How spiritual are you?"
- d. "How important is spirituality in your life?"

Coding: 1 Very; 2 Somewhat; 3 Not very; 4 Not at all.

Religious Identification [BASRELID]

Items: 7 items - Self-Administered Questionnaire, Section H, Question 2 (a, c, e-i).

- a. "How religious are you?"
- c. "How important is religion in your life?"
- e. "How important is it for you -- or would it be if you had children now -- to send your children for religious or spiritual services or instruction?"
- f. "How closely do you identify with being a member of your religious group?"
- g. "How much do you prefer to be with other people who are the same religion as you?"
- h. "How important do you think it is for people of your religion to marry other people who are the same religion?"
- i. "How important is it for you to celebrate or practice on religious holidays with your family, friends, or members of your religious community?"

Coding: 1 Very; 2 Somewhat; 3 Not very; 4 Not at all.

Private Religious Practices [BASRELPR]

Items: 3 items - Self-Administered Questionnaire, Section H, Question 3 (a - c)

(How often do you)

- a. "Pray in private?"
- b. "Meditate or chant?"
- c. "Read the Bible or other religious literature?"

Coding: 1 Once a day or more; 2 A few times a week; 3 Once a week;
4 1-3 times per month; 5 Less than once per month; 6 Never

Religious Support [BASRELSU]

Items: 4 items - Self-Administered Questionnaire, Section H, Question 8 (a - d)

- a. "If you were ill, how much would people in your congregation help you out?"
- b. "If you had a problem or were faced with a difficult situation, how much comfort would people in your congregation be willing to give you?"

- c. "How often do people in your congregation or spiritual community make too many demands on you?" (R)
- d. "How often do people in your congregation or spiritual community criticize you and the things you do?" (R)

Coding: 1 A great deal; 2 Some; 3 A little; 4 None.

Religious/Spiritual Coping-A [BASRELCA]

Items: 2 items - Self-Administered Questionnaire, Section H, Questions 9 (a, b).

- a. "When you have problems or difficulties in your family, work, or personal life, how often do you seek comfort through religious or spiritual means such as praying, meditating, attending a religious or spiritual service, or talking to a religious or spiritual advisor?"
- b. "When you have decisions to make in your daily life, how often do you ask yourself what your religious or spiritual beliefs suggest you should do?"

Coding: 1 Often; 2 Sometimes; 3 Rarely; 4 Never.

Religious/Spiritual Coping-B: [BASRELCB]

Items: 6 items - Self-Administered Questionnaire, Section H, Question 9 (c - h)

- c. "I try to make sense of the situation and decide what to do without relying on God" (R)
- d. "I wonder whether God has abandoned me." (R)
- e. "I feel God is punishing me for my sins or lack of spirituality." (R)
- f. "I look to God for strength, support, and guidance."
- g. "I work together with God as partners."
- h. "I think about how my life is part of a larger spiritual force."

Coding: 1 A great deal; 2 Some; 3 A little; 4 None.

Daily Spiritual Experiences [BASSPRTE]

Items: 5 items - Self-Administered Questionnaire, Section H, Question 10 (a - e)

(On a daily basis, how often do you experience the following)

- a. "A feeling of deep inner peace or harmony."
- b. "A feeling of being deeply moved by the beauty of life."
- c. "A feeling of strong connection to all of life."
- d. "A sense of deep appreciation."
- e. "A profound sense of caring for others."

Coding: 1 Often; 2 Sometimes; 3 Rarely; 4 Never.

Mindfulness [BASMNDFU]

Items: 9 items - Self-Administered Questionnaire, Section H, Question 11 (a - i)

(Because of your religion or spirituality, do you try to be..)

- a. "more engaged in the present moment."
- b. "more sensitive to the feelings of others."
- c. "more receptive to new ideas."
- d. "a better listener."
- e. "a more patient person."
- f. "more aware of small changes in my environment."
- g. "more tolerant of differences."
- h. "more aware of different ways to solve problems."
- i. "more likely to perceive things in new ways."

Coding: 1 Strongly agree; 2 Agree; 3 Neither agree nor disagree; 4 Disagree; 5 Strongly disagree.

Scaling: All scales are constructed by calculating the **sum** of the values of the items in each scale. All items except ones marked with (R) were reverse-coded so that high scores reflect higher standing in each scale. For an item with a missing value, the mean value of completed items is imputed.

Missing Values: The scales are computed for cases that have valid values for **at least half of** the items on the particular scale. Scale scores are not calculated for cases with fewer than half of the items on the scales, and coded as "98" for "NOT CALCULATED (Due to missing data)."

Psychometrics:

Spirituality [BASSPIRI]

Sample (N)	Alpha	Mean	Std. dev
394	.82	6.99	1.29

Religious Identification [BASRELID]

Sample (N)	Alpha	Mean	Std. dev
390	.82	22.28	4.47

Private Religious Practices [BASRELPR]

Sample (N)	Alpha	Mean	Std. dev
388	.70	12.79	4.04

Religious Support [BASRELSU]

Sample (N)	Alpha	Mean	Std. dev
268	.53	13.65	2.06

Religious/Spiritual Coping-A [BASRELCA]

Sample (N)	Alpha	Mean	Std. dev
389	.77	6.23	1.74

Religious/Spiritual Coping-B: [BASRELCB]

Sample (N)	Alpha	Mean	Std. dev
387	.69	19.96	3.55

Daily Spiritual Experiences [BASSPRTE]

Sample (N)	Alpha	Mean	Std. dev
388	.90	16.36	3.21

Mindfulness [BASMNDFU]

Sample (N)	Alpha	Mean	Std. dev
389	.92	36.68	5.95

Source(s):**Spirituality, Religious Identification, Religious/Spiritual Coping-A**

Garfield, A. M., Ryff, C. D., & Singer, B. (2001). Religion and health: Probing the connections. Poster presented at the 13th Annual Conference of the American Psychological Society, June 15, Toronto.

Rossi, A. S. (2001). *Caring and doing for others: Social responsibility in the domains of family, work, and community*. Chicago: University of Chicago Press.
: Ch. 7. Developmental Roots of Adult Social Responsibility.

Private Religious Practices

Koenig, H., Parkerson, G. R., Jr, & Meador, K. G. (1997). Religion index for psychiatric research. *American Journal of Psychiatry*, 154, 885-886.

Religious Support, Religious/Spiritual Coping-B, Daily Spiritual Experiences

Fetzer Institute/National Institute on Aging Working Group. (1999). *Multidimensional measurement of Religiousness/Spirituality for Use in Health Research: A Report of the Fetzer Institute/National Institute on Aging Working Group*. Kalamazoo, MI: Fetzer Institute.

Mindfulness

Langer, E. J., & Moldoveanu, M. (2000). The construct of mindfulness. *Journal of Social Issues*, 56, 1-9.

Other references:

George, L. K., Ellison C. G., & Larson, D. B. (2002). Explaining the relationships between religious involvement and health. *Psychological Inquiry*, 13, 190-200.

Studies using the scales:

Ryff, C. D., Singer, B. H., & Palmersheim, K. A. (2004). Social Inequalities in health and well-being: The role of relational and religious protective factors. In O. G. Brim, C. D. Ryff & R. C. Kessler (Eds.), *How healthy are we?: A national study of well-being at midlife*. (pp. 90 - 123). Chicago: Univ. of Chicago Press.