# **DOCUMENTATION**

of

# Psychosocial Constructs and Composite Variables

in

MIDUS 3 Project 7 (REW)

#### INTRODUCTION

This document is intended as a basic reference for psychosocial scales in the MIDUS 3 Project 7 (REW) dataset (M3\_P7\_SURVEY\_N651\_20210802.sav). The document provides comprehensive information regarding scale construction and usage of the scales.

For each scale, items used to construct the scale, coding, and methods of scale construction are described, including how missing data are dealt with for each scale. 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., [C7CDEPAF] for depressed affect). Scale name and description is followed by individual items and by a description of how the scale score is constructed.

Cronbach's alpha reliability coefficient is reported for most scales, along with means and standard deviations.

"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. In these cases, names of scholars are listed under the "source of code" in the 'Index of Scales and Constructed Scales in MIDUS'. Additional information regarding the scales has been added in the "Notes" sections. Any suggestions or comments about the scales or this documentation can be sent to <a href="midus\_help@aging.wisc.edu">midus\_help@aging.wisc.edu</a>. Moreover, if additional scales are constructed using these data, please contact us so the work can be shared.

# **TABLE OF CONTENTS**

HEALTH LOCUS OF CONTROL	3
SUBJECTIVE CANCER RISK	4
POSITIVE AND NEGATIVE AFFECT	5
ACTIVITY OF DAILY LIVING	8
DEPRESSION	
GENERALIZED ANXIETY DISORDER	. 13
PANIC ATTACK (PANIC DISORDER)	. 15
MARRIED OR COHABITATION	
HOUSEHOLD INCOME VARIABLES	. 18
MARITAL RISK	. 21
HOUSEHOLD SIZE	
CO-RESIDING ADULT CHILDREN	23
BODY INDICES	. 25
LIFE SATISFACTION (DOMAIN SPECIFIC)	
CHRONIC CONDITION	. 28
ALCOHOL SCREENING TEST	
PRESCRIPTION MEDICINE	
PERSONALITY IN INTELLECTUAL AGING CONTEXTS (PIC) SCALE	
PSYCHOLOGICAL WELL-BEING (MIDUS-I VERSION)	
PSYCHOLOGICAL WELL-BEING (MIDUS-II VERSION)	
SENSE OF CONTROL	
SELF-ESTEEM	
SELF-CONSTRUAL SCALE	
PERSONALITY TRAITS	
LIFE ORIENTATION TEST	. 49
CHRONIC JOB DISCRIMINATION	
PERCEIVED INEQUALITY IN WORK	
WORK TO FAMILY AND FAMILY TO WORK SPILLOVER	
FAMILY SUPPORT AND STRAIN	
FAMILY SUPPORT PROVIDED	
FRIEND SUPPORT AND STRAIN	
SPOUSE/PARTNER SUPPORT AND STRAIN	
RELIGIOSITY	
PERCEIVED DISCRIMINATION	. 66

#### **HEALTH LOCUS OF CONTROL**

#### Scales/Items:

# **Health Locus of Control - Self [C7CHLOCS]:**

<u>Items</u>: 4 items – CAPI Interview, Section 2, 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 [C7CHLOCO]:**

<u>Items</u>: 2 items – CAPI Interview, Section 2, 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.

<u>Scaling</u>: 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.

<u>Missing Values</u>: 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 [C7CHLOCS]

Sample (N)	Alpha	Mean	Std. dev
651	.473	6.177	.717

**Health Locus of Control – Other [C7CHLOCO]** 

Sample (N)	Alpha	Mean	Std. dev
651	.186	3.456	1.512

# Source(s):

#### Studies using the scales:

#### SUBJECTIVE CANCER RISK

#### Scales/Items:

# **Subjective Cancer Risk**

#### [C7CCACRS]:

Items: 3 items - CAPI Interview, Section 2, 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.

<u>Scaling</u>: [C7CCACRS] 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).

#### [C7CCACRS]

- = 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.

#### [C7CCACDX]:

- A dummy variable based on [C7CCACRS]
  - = 0 if [C7CCACRS] = 0 THRU 3 (NEGATIVE).
  - = 1 if [C7CCACRS] = 4 THRU 6 (POSITIVE).

#### **POSITIVE AND NEGATIVE AFFECT**

# **Scales/Items**:

# **Negative Affect [C7CNEGAF]:**

<u>Items</u>: 6 items – CAPI Interview, Section 2, 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 [C7CNEGPA]:

<u>Items</u>: 5 items – CAPI Interview, Section 2, Question As24 (h - I) (During the past 30 days, how much of the time did you feel...)

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

#### **Positive Affect [C7CPOSAF]:**

Items: 6 items - CAPI Interview, Section 2, 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 [C7CPOSPA]:

<u>Items</u>: 4 items – CAPI Interview, Section 2, Question As26 (i - I)

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

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

k. "proud?"

I. "active?"

<u>Coding</u>: 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.

<u>Scaling</u>: 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.

<u>Missing Values</u>: 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 [C7CNEGAF]** 

<u></u>			
Sample (N)	Alpha	Mean	Std. dev
651	.851	1.675	.695

PANAS Negative Adjectives [C7CNEGPA]

Sample (N)	Alpha	Mean	Std. dev
651	.805	1.657	.592

Positive Affect [C7CPOSAF]

Sample (N)	Alpha	Mean	Std. dev
651	.881	3.529	.694

PANAS Positive Adjectives [C7CPOSPA]

Sample (N)	Alpha	Mean	Std. dev
651	.805	3.719	.765

#### 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 validational 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**

#### **Scales/Items:**

# Basic Activity of Daily Living (2-item version) [C7CBADL1]:

<u>Items:</u> 2 items – CAPI Interview, Section 2, 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) [C7CBADL2]:

<u>Items:</u> 3 items – CAPI Interview, Section 2, 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 [C7CMADL]:

<u>Items:</u> 7 items – CAPI Interview, Section 2, 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.

<u>Scaling</u>: The scales 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.

<u>Missing Values</u>: The scales are computed for cases that have **at least one** valid response to questions in the summary variable. The scale scores are not calculated for cases with no valid items on the scale, and coded as "8" for "NOT CALCULATED (Due to missing data)".

# **Psychometrics**:

# Basic Activity of Daily Living (2-item version) [C7CBADL1]:

Sample (N)	Alpha	Mean	Std. dev
651	.705	1.467	.797

# Basic Activity of Daily Living (3-item version) [C7CBADL2]:

Sample (N)	Alpha	Mean	Std. dev
651	.826	1.527	.814

# **Intermediate Activity of Daily Living [C7CMADL]:**

Sample (N)	Alpha	Mean	Std. dev
651	.935	2.094	.977

# References:

# Source(s):

Ware Jr, J.E., & Sherbourne, C.D. (1992). The MOS 36-Item short-form health survey (SF-36): I. Conceptual framework and item selection. *Medical Care*, 30(6), 473-483.

<u>Additional References</u>: None <u>Studies using the scales</u>: None

#### **DEPRESSION**

#### **Scales/Items:**

# **Depressed Affect**

[C7CDEPAF]: A continuous variable based on 7 items

Items: 7 items - CAPI Interview, Section 2, Question A63 to 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?"

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.

<u>Scaling</u>: [C7CDEPAF] is constructed by taking the **total number** of "Yes" responses to the items.

# [C7CDEPAD]:

A dummy variable based on A61, A62, and [C7CDEPAF]

= 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

: [C7CDEPAF] is greater than or equal to "4".

= 0, otherwise.

#### Anhedonia

[C7CANHED]: A continuous variable based on 6 items

Items: 6 items - CAPI Interview, Section 2, 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"

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.

<u>Scaling</u>: [C7CANHED] is constructed by taking the **total number** of "Yes" responses to the items.

#### [C7CANHDX]:

- A dummy variable based on A73, A74, and [C7CANHED]
  - = 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
    - : [C7CANHED] is greater than or equal to "4".
  - = 0 otherwise.

#### Depression

#### [C7CDEPRE]:

- A continuous variable based on [C7CDEPAF] and [C7CANHED]
  - : ranging from 0 to 7
  - : = 0, if a respondent was diagnosed as negative for both depressed affect and anhedonia: i.e., [C7CDEPAD] = 0 and [C7CANHDX] = 0.

#### [C7CDEPDX]:

- A dummy variable for depression
  - = 1 if [C7CDEPAD] = 1 or [C7CANHDX] = 1.
  - = 0 otherwise.

<u>Missing Values</u>: 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*, 3<sup>rd</sup> *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**

**[C7CANXIE]:** A continuous variable based on 10 items

<u>Items</u>: 10 items – CAPI Interview, Section 2, 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.

<u>Scaling</u>: [C7CANXIE] is constructed by taking the **total number** of "Most days" responses to the items.

<u>Missing Values</u>: 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.

#### [C7CANXTD]

- A dummy variable based on [C7CANXIE]
  - = 1 if [C7CANXIE] 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*, 3<sup>rd</sup> *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**

**[C7CPANIC]:** A continuous variable based on 6 items

<u>Items</u>: 6 items – CAPI Interview, Section 2, 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.

<u>Scaling</u>: [C7CPANIC] 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.

#### [C7CPANDX]

- A dummy variable based on [C7CPANIC]
  - = 1 if [C7CPANIC] 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 [C7CPARTN]:

Items: 2 items - CAPI Interview, Section 3, Question B19, B30

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: [C7CPARTN] is constructed by combines the response to questions B19 and B30 into

a dummy variable where

[C7CPARTN]

= 1 if [C7CB19] = 1 OR [C7CB30] = 1.

= 2 Otherwise.

#### **HOUSEHOLD INCOME VARIABLES**

#### **Summary Variables:**

# Respondent's Income Variable [C7CRINC]:

<u>Items</u>: 4 items – CAPI Interview, Section 5, Question Gs8 (a, b, c, d)

(In the <u>last calendar year</u>, what was <u>your income</u> from...)

- a. "wages, salaries and other stipends from all your jobs, including self-employment?"
- b. "pension accounts, retirement accounts and the like?"
- c. "Social Security?"
- d. "any other source not listed above, including tips and commissions, military reserves, financial assistance, etc?"

# Spouse's Income Variable [C7CSINC]:

Items: 4 items – CAPI Interview, Section 5, Question Gs9 (a, b, c, d)

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

- a. "wages, salaries and other stipends from all your jobs, including self-employment?"
- b. "pension accounts, retirement accounts and the like?"
- c. "Social Security?"
- d. "any other source not listed above, including tips and commissions, military reserves, financial assistance, etc?"

#### Other Family Member's Income Variable [C7CHINC]:

<u>Items</u>: 4 items – CAPI Interview, Section 5, Question Gs10 (a, b, c, d)

(In the <u>last calendar year</u>, what was the <u>other family members in your household income</u> from

...)

- a. "wages, salaries and other stipends from all your jobs, including self-employment?"
- b. "pension accounts, retirement accounts and the like?"
- c. "Social Security?"
- d. "any other source not listed above, including tips and commissions, military reserves, financial assistance, etc?"

#### Household Income from Wages [C7CEARN]

Items: 3 items - CAPI Interview, Section 5, Question 8a, 9a, and 10a

#### **Household Income from Pension [C7CPNSN]**

Items: 3 items - CAPI Interview, Section 5, Question 8b, 9b, and 10b

#### **Household Income from Social Security [C7CSEC]**

Items: 3 items - CAPI Interview, Section 5, Question 8c, 9c, and 10c

# **Household Income from Other Sources [C7COTH]**

Items: 3 items - CAPI Interview, Section 5, Question 8d, 9d, and 10d

# Household Total Income from Wage, Pension, Social Security, and Other Sources [C7CTINC]

Items: 12 items –CAPI Interview, Section 5, Question 8(a - d), 9(a - d), and 10(a - d)

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".
```

<u>Scaling:</u> 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 "9999998" for "NOT CALCULATED (Due to missing data)".

NOTE: In the public release, all income variables are top-coded at \$300,000.

#### MARITAL RISK

# **Scales/Items**:

# Marital Risk Scale [C7CMARRS]:

Items: 2 items - CAPI Interview, Section 7, 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. "It is always difficult to predict what will happen in a relationship, but 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.

<u>Scaling</u>: 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 **at least one** item on the scale. The scale score is not calculated for cases with no valid items on the scale due to "refusal" or "does not apply (not married/in a marriage-like relationship)", and coded as "98" for "NOT CALCULATED (Due to missing data)", and "99" for "NOT CALCULATED (Due to Does not apply)".

# Psychometrics:

# Marital Risk Scale [C7CMARRS]:

	-		
Sample (N)	Alpha	Mean	Std. dev
396	.679	2.84	1.349

#### Source(s):

Rossi, A.

#### **HOUSEHOLD SIZE**

# **Summary Variables:**

# Number of Respondent's Children Living in Household [C7CKIDHH]:

- [C7CKIDHH] is a continuous variable based on the total number of children currently lives with the respondent.
- Variables used to construct [C7CKIDHH] (from CAPI Interview, Section 9)
   C7CCHHx (child number x currently lives in the respondent's household) = 1 (YES).
- <u>Scaling</u>: [C7CKIDHH] 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 [C7CHHSIZE]:

- [C7CHHSIZE] is a continuous variable based on the total number of individuals currently lives in the household.
- Variables used to construct [C7CHHSIZE] (from CAPI Interview, Section 9)

C7CHHMBR: Number of household members besides children or self.

C7CKIDHH: Number of respondent's children living in household.

<u>Scaling</u>: [C7CHHSIZE] is constructed by taking the **sum** of [C7CHHMBR] and [C7CKIDHH], then add 1 (respondent self).

#### **CO-RESIDING ADULT CHILDREN**

# **Summary Variables:**

# Number of Co-residing Adult Children (not including foster child and other child) [C7CCHM1N]:

- [C7CCHM1N] 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 [C7CCHM1N] (from CAPI Interview, Section 9)

C7CCHAx (child number x's age) = 18 or higher, AND

C7CCHRx (child number x's relationship to the respondent)

- = 3 (biological child), 4 (adopted child), 5 (step child), or 7 (child of lover/partner), AND C7CCHHx (child number x currently lives in the respondent's household) = 1 (YES).
- <u>Scaling</u>: [C7CCHM1N] is constructed by taking the **total number** of children in the household member roster who meet three conditions described above.
- Missing Values: [C7CCHM1N] is computed for cases that have mentioned at least one child in the household roster interview. For a respondent who had no child, [C7CCHM1N] is not calculated and coded as "9" for "INAPP".

# Having Co-residing Adult Children (not including foster child and other child) [C7CCHM1X]:

- A dummy variable based on [C7CCHM1N]
  - = 1 if [C7CCHM1N] is greater than or equal to "1".
  - = 0 if [C7CCHM1N] is "0".

#### Number of Co-residing Adult Children (including foster child and other child) [C7CCHM2N]:

- [C7CCHM2N] 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 [C7CCHM2N] (from CAPI Interview, Section 9)

C7CCHAx (child number x's age) = 18 or higher, AND

C7CCHRx (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

C7CCHHx (child number x currently lives in the respondent's household) = 1 (YES).

<u>Scaling</u>: [C7CCHM2N] is constructed by taking the **total number** of children in the household member roster who meet three conditions described above.

Missing Values: [C7CCHM2N] is computed for cases that have mentioned at least one child in the household roster interview. For a respondent who had no child, [C7CCHM2N] is not calculated and coded as "9" for "INAPP".

# Having Co-residing Adult Children (not including foster child and other child) [C7CCHM2X]:

- A dummy variable based on [C7CCHM2N]
  - = 1 if [C7CCHM2N] is greater than or equal to "1".
  - = 0 if [C7CCHM2N] is "0".

#### **BODY INDICES**

# **Summary Variables:**

# Waist to Hip Ratio [C7BWSTHI]:

<u>Items</u>: 2 items – CAPI Interview, Section 18, Question on waist size and hip size
<u>Scaling</u>: [C7BWSTHI] is calculated by dividing the waist size (in centimeters) by the hip size (in centimeters).

# Body Mass Index [C7BBMI]:

<u>Items</u>: 3 items – CAPI Interview, Section 18, Question on height, and weight

<u>Scaling</u>: [C7BBMI] 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 kilometers.

#### LIFE SATISFACTION (DOMAIN SPECIFIC)

<u>Note:</u> Due to missing item "Rate your work situation" in REW survey, Life Satisfaction scales here are not completely identical with Life Satisfaction scales in MIDUS survey projects.

#### **Scales/Items**:

# Life Satisfaction [C7CSATIS] (4-item version):

Items: 3 items - Self-Administered Questionnaire

Section A, Question 1; Section H, Question 1

2 items - CAPI Interview

Section 9, Question Ks1; Section 7, Question Ls1

For each item, respondents were asked to rate their life overall, health, relationship with spouse/partner, and relationship with children.

# [C7CSATIS2] (5-item version):

<u>Items</u>: 3 items – Self-Administered Questionnaire

Section A, Question 1; Section H, Question 1

3 items - CAPI Interview

Section 5, Question Gs1; Section 9, Question Ks1; Section 7, Question Ls1 For each item, respondents were asked to rate their life overall, financial situation, health, relationship with spouse/partner, and relationship with children.

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

Scaling: [C7CSATIS] and [C7CSATIS2] 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 three items to calculate an **overall** mean score. Higher scores reflect higher levels of overall life satisfaction.

<u>Missing Values</u>: Both scales are computed for cases that have valid values for **at least one** item on the scale. The scale scores are 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 (4-item version) [C7CSATIS]

Sample (N)	Alpha	Mean	Std. dev
647	.585	7.929	1.321

Life Satisfaction (5-item version) [C7CSATIS2]

Sample (N)	Alpha	Mean	Std. dev
651	.610	7.457	1.382

# 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.

#### **CHRONIC CONDITION**

# **Summary Variables:**

# Number of Chronic Conditions (in past 12 month) [C7SCHRON]:

 [C7SCHRON] is a continuous variable based on the total number of chronic conditions the respondent check to have experienced in the past 12 months.

<u>Items</u>: 39 items – Self-Administered Questionnaire, Section A, Question A7 (a - mm)

Coding: 1 Yes; 2 No.

<u>Scaling</u>: [C7SCHRON] is constructed by taking the **total number** of "Yes" responses to the questions.

Missing Values: [C7SCHRON] 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, [C7SCHRON] is not calculated and coded as "98" for "NOT CALCULATED (Due to missing data)".

# **Having Chronic Condition [C7SCHROX]:**

- A dummy variable based on [C7SCHRON]
  - = 1 if [C7SCHRON] is greater than or equal to 1.
  - = 0 if [C7SCHRON] is 0.

#### **ALCOHOL SCREENING TEST**

# **Summary Variables:**

Having alcohol related problems (during the past 12 months)

[C7SALCOH] (summary variable newly created at MIDUS-II):

Items: 5 items – Self-Administered Questionnaire, Section A, Question A14 (a - 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 form 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.

<u>Scaling</u>: [C7SALCOH] is a dummy variable indicating that the respondent has at least one alcohol-related problem.

[C7SALCOH]

- = 1 if the respondent answered "Yes" to any of four questions.
- = 0 otherwise.

Missing Values: [C7SALCOH] 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, [C7SALCOH] 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-II 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-I)

#### PRESCRIPTION MEDICINE

# **Summary Variables:**

# Number of Medicine Taking (in past 30 days) [C7SRXMED]:

 [C7SRXMED] is a continuous variable based on the total number of prescription medicines the respondent has taken during the past 30 days.

<u>Items</u>: 12 items – Self-Administered Questionnaire, Section A, Question A17 (a - I)

Coding: 1 Yes; 2 No.

<u>Scaling</u>: [C7SRXMED] is constructed by taking the **total number** of "Yes" responses to the questions.

Missing Values: [C7SRXMED] 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, [C7SRXMED] is not calculated and coded as "98" for "NOT CALCULATED (Due to missing data)".

# **Having Taken Medicines [C7SRXMEX]:**

- A dummy variable based on [C7SRXMED]
  - = 1 if [C7SRXMED] is greater than or equal to 1.
  - = 0 if [C7SRXMED] equals 0.

#### PERSONALITY IN INTELLECTUAL AGING CONTEXTS (PIC) SCALE

#### **Scales/Items:**

# Personality in Intellectual Aging Contexts Scale [C7SINTAG]:

<u>Items</u>: 9 items – Self-Administered Questionnaire, Section A, Question A20 (a - i)

- a. "If I forget my friend's zip code, I'd be able to learn it again." (R)
- 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." (R)
- 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."
- <u>Coding</u>: 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.
- <u>Scaling</u>: [C7SINTAG] is constructed by calculating the **mean** of the items. Items marked with (R) were reverse-coded so that high scores reflect higher standing in the scale.
- <u>Missing Values</u>: 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 [C7SINTAG]:

Sample (N)	Alpha	Mean	Std. dev
545	.761	4.615	1.016

#### 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.

# PSYCHOLOGICAL WELL-BEING (MIDUS-I VERSION)

#### Scales/Items:

# **Autonomy [C7SPWBA1]:**

<u>Items</u>: 3 items – Self-Administered Questionnaire, Section B, 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 [C7SPWBE1]:**

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 [C7SPWBG1]:

<u>Items</u>: 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 [C7SPWBR1]:

<u>Items</u>: 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 [C7SPWBU1]:

<u>Items</u>: 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 [C7SPWBS1]:

<u>Items</u>: 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."

<u>Coding</u>: 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.

<u>Scaling</u>: 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 [C7SPWBA1]:			
Sample (N)	Alpha	Mean	Std. dev
547	.443	16.947	3.115
Environmental Mastery [C7SPW	/BE1]:		
Sample (N)	Alpha	Mean	Std. dev
548	.561	17.039	3.231
Personal Growth [C7SPWBG1]:			
Sample (N)	Alpha	Mean	Std. dev
547	.469	17.717	2.999
547 Positive Relations with Others [			2.999
-			2.999 Std. dev
Positive Relations with Others [	C7SPWBR	1]:	
Positive Relations with Others [ Sample (N)	C7SPWBR Alpha	1]: Mean	Std. dev
Positive Relations with Others [ Sample (N) 548	C7SPWBR Alpha	1]: Mean	Std. dev
Positive Relations with Others [ Sample (N) 548  Purpose in Life [C7SPWBU1]:	C7SPWBR Alpha .306	1]:   Mean   16.946	Std. dev 3.718
Positive Relations with Others [ Sample (N) 548  Purpose in Life [C7SPWBU1]: Sample (N)	C7SPWBR Alpha .306	1]: Mean 16.946 Mean	Std. dev 3.718 Std. dev
Positive Relations with Others [ Sample (N) 548  Purpose in Life [C7SPWBU1]: Sample (N) 547	C7SPWBR Alpha .306	1]: Mean 16.946 Mean	Std. dev 3.718 Std. dev

# 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)**

<u>Scales/Items</u>: (bold items – new items added to at MIDUS-II)

## **Autonomy [C7SPWBA2]:**

<u>Items</u>: 7 items – Self-Administered Questionnaire, Section B, 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)
- \* In MIDUS-I, the wording of this item is slightly different
- "I have confidence in my *own* opinions, even if they are *different from the way most* other people think."

# **Environmental Mastery [C7SPWBE2]:**

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

- 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."
- II. "I have been able to build a living environment and a lifestyle for myself that is much to my liking." (R)

## Personal Growth [C7SPWBG2]:

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 [C7SPWBR2]:

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 [C7SPWBU2]:

<u>Items</u>: 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."

#### Self-Acceptance [C7SPWBS2]:

Items: 7 items – Self-Administered Questionnaire, Section C, Question 1 (f, I, 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)
- I. "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)

<u>Coding</u>: 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.

<u>Scaling</u>: 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 [C7SPWBA2]:			
Sample (N)	Alpha	Mean	Std. dev
546	.706	38.538	6.966
Environmental Mastery [C7SPW	BE2]:		
Sample (N)	Alpha	Mean	Std. dev
546	.763	38.451	7.316
Personal Growth [C7SPWBG2]:			T
Sample (N)	Alpha	Mean	Std. dev
546	.711	39.195	6.582
Positive Relations with Others [	C7SPWBR	2]:	
Sample (N)	Alpha	Mean	Std. dev
546	.780	40.725	7.038
Purpose in Life [C7SPWBU2]:			
Sample (N)	Alpha	Mean	Std. dev
545	.742	38.581	7.290
Self-Acceptance [C7SPWBS2]:			
Sample (N)	Alpha	Mean	Std. dev
546	.814	38.170	8.006

#### SENSE OF CONTROL

## **Scales/Items**:

## Personal Mastery [C7SMASTE]:

<u>Items</u>: 4 items – Self-Administered Questionnaire, Section B, Question 2 (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."
- I. "What happens to me in the future mostly depends on me."

## **Perceived Constraints [C7SCONST]:**

<u>Items</u>: 8 items – Self-Administered Questionnaire, Section B, Question 2 (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.

<u>Scaling</u>: 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 [C7SCTRL]:

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

<u>Scaling</u>: [C7SCTRL] 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.

<u>Missing Values</u>: 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 [C7SMASTE]:

Sample (N)	Alpha	Mean	Std. dev
544	.680	5.817	0.977

Perceived Constraints [C7SCONST]:

Sample (N)	Alpha	Mean	Std. dev
544	.872	2.558	1.242

Perceived Control (combined scale) [C7SCTRL]:

	<u> </u>		
Sample (N)	Alpha	Mean	Std. dev
544	.863	5.568	1.014

## Source(s):

Lachman, M. E., & Weaver, S. L. (1998a). The sense of control as a moderato 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*, *I*, 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 I) 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 indicate 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 [C7SESTEE]:

<u>Items</u>: 7 items – Self-Administered Questionnaire, Section B, Question 2 (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.
- <u>Scaling</u>: [C7SESTEE] 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 [C7SESTEE]:

Sample (N)	Alpha	Mean	Std. dev
546	.749	37.592	7.295

## Source(s):

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

#### **SELF-CONSTRUAL SCALE**

#### Scales/Items:

### Interdependence [C7SINTER]:

<u>Items</u>: 3 items – Self-Administered Questionnaire, Section B, Question 2 (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 [C7SINDEP]:

Items: 3 items - Self-Administered Questionnaire, Section B, Question 2 (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.

<u>Scaling</u>: 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.

<u>Missing Values</u>: 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 [C7SINTER]:

Sample (N)	Alpha	Mean	Std. dev
545	.393	4.345	1.184

Independence [C7SINDEP]:

Sample (N)	Alpha	Mean	Std. dev
546	.315	5.443	1.087

## 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 B, Question 3, a - ee). The adjectives measure six personality traits as follows:

# **Neuroticism [C7SNEURO]:**

4 items – Self-Administered Questionnaire, Section B, Question 3 (c, h, m, s) Adjectives: Moody, Worrying, Nervous, Calm (R)

## Extraversion [C7SEXTRA]:

5 items – Self-Administered Questionnaire, Section B, Question 3 (a, f, k, w, aa) Adjectives: Outgoing, Friendly, Lively, Active, Talkative

## **Openness to Experience [C7SOPEN]:**

7 items – Self-Administered Questionnaire, Section B, Question 3 (n, q, u, v, y, bb, cc)
Adjectives: Creative, Imaginative, Intelligent, Curious, Broad-minded, Sophisticated,
Adventurous

## Conscientiousness [C7SCONS1]:

4 items – Self-Administered Questionnaire, Section B, Question 3 (d, i, p, x) Adjectives: Organized, Responsible, Hardworking, Careless (R)

#### Conscientiousness [C7SCONS2]:

5 items – Self-Administered Questionnaire, Section B, Question 3 (d, i, p, x, ee) Adjectives: Organized, Responsible, Hardworking, Careless (R), Thorough

## Agreeableness (communion) [C7SAGREE]:

5 items – Self-Administered Questionnaire, Section B, Question 3 (b, g, l, r, z) Adjectives: Helpful, Warm, Caring, Softhearted, Sympathetic

#### Agency [C7SAGENC]:

5 items – Self-Administered Questionnaire, Section B, Question 3 (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.

<u>Scaling</u>: 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.

<u>Missing Values</u>: 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 [C7SNEURO]:					
Sample (N)	Alpha	Mean	Std. dev		
546	.680	2.152	.607		
Extraversion [C7SEXTRA]:					
Sample (N)	Alpha	Mean	Std. dev		
546	.767	3.159	.593		
Openness to Experience [C7SO	_				
Sample (N)	Alpha	Mean	Std. dev		
542	.789	2.993	.551		
	Conscientiousness [C7SCONS1]:				
Sample (N)	Alpha	Mean	Std. dev		
546	.553	3.436	.475		
Conscientiousness [C7SCONS2	]:				
Sample (N)	Alpha	Mean	Std. dev		
542	.646	3.383	.478		
Agreeableness [C7SAGREE]:					
Sample (N)	Alpha	Mean	Std. dev		
542	.762	3.537	.461		
Agency [C7SAGENC]:					
Sample (N)	Alpha	Mean	Std. dev		
541	.771	2.700	.656		

## 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; Trapness & 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.

### LIFE ORIENTATION TEST

### Scales/Items:

## **Optimism [C7SOPTIM]:**

<u>Items</u>: 3 items – Self-Administered Questionnaire, Section B, Question 6 (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 [C7SPESSI]:

<u>Items</u>: 3 items – Self-Administered Questionnaire, Section B, Question 6 (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.

<u>Scaling</u>: 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.

<u>Missing Values</u>: 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 [C7SORIEN]:**

<u>Items</u>: 6-item scale combining the 3 "optimism" items and the 3 "pessimism" items.

<u>Scaling</u>: [C7SORIEN] 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.

<u>Missing Values</u>: 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 [C7SOPTIM]:**

Sample (N)	Alpha	Mean	Std. dev
543	.699	11.857	2.480

## Pessimism [C7SPESSI]:

Sample (N)	Alpha	Mean	Std. dev
543	.806	7.019	3.213

## **Optimism Overall [C7SORIEN]:**

Sample (N)	Alpha	Mean	Std. dev
543	.791	22.836	4.838

# 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.

#### **CHRONIC JOB DISCRIMINATION**

## Scales/Items

## **Chronic Job Discrimination [C7SJOBDI]:**

<u>Items</u>: 6 items – Self-Administered Questionnaire, Section C, Question 3 (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.

<u>Scaling</u>: 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 [C7SJOBDI]:** 

Sample (N)	Alpha	Mean	Std. dev
283	.746	10.187	4.299

## Source(s):

D. Williams.

https://scholar.harvard.edu/files/davidrwilliams/files/discrimination resource july 2020.pdf

#### Studies using the scales:

#### PERCEIVED INEQUALITY IN WORK

#### **Scales/Items**

## Perceived Inequality in Work [C7SPIWOR]:

<u>Items</u>: 6 items – Self-Administered Questionnaire, Section C, Question 4 (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 that I do." (R)

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

<u>Scaling:</u> 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 [C7SPIWOR]

Sample (N)	Alpha	Mean	Std. dev
284	.682	1.507	.478

## Source(s):

Items newly created for MIDUS.

#### 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.

### **WORK TO FAMILY AND FAMILY TO WORK SPILLOVER**

#### Scales/Items:

## Positive Work to Family Spillover [C7SPOSWF]:

<u>Items</u>: 4 items – Self-Administered Questionnaire, Section C, 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 [C7SNEGWF]:**

Items: 4 items – Self-Administered Questionnaire, Section C, 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 [C7SPOSFW]:

<u>Items</u>: 4 items – Self-Administered Questionnaire, Section C, 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 [C7SNEGFW]:**

<u>Items</u>: 4 items – Self-Administered Questionnaire, Section C, Question 5 (i - I)

- 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."
- I. "Stress at home makes you irritable at work."

Coding: 1 All of the time; 2 Most of the time; 3 Some of the time; 4 Rarely; 5 Never.

<u>Scaling</u>: 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.

<u>Missing Values</u>: 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 [C7SPOSWF]:

Sample (N)	Alpha	Mean	Std. dev
284	.737	11.962	3.213

Negative Work to Family Spillover [C7SNEGWF]:

Sample (N)	Alpha	Mean	Std. dev
284	.829	9.585	3.127

Positive Family to Work Spillover [C7SPOSFW]:

Sample (N)	Alpha	Mean	Std. dev
284	.597	13.603	2.935

Negative Family to Work Spillover [C7SNEGFW]:

Sample (N)	Alpha	Mean	Std. dev
284	.763	7.852	2.334

## Source(s):

Items newly created for MIDUS.

## 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*, *6*2, 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.

#### **FAMILY SUPPORT AND STRAIN**

#### Scales/Items:

### Family Support [C7SKINPO]:

Items: 4 items - Self-Administered Questionnaire, Section D, Question 4 (a - d)

(Thinking about the members of your family, not including your spouse/partner, how much)

- a. "do they care about you?"
- b. "do they understand the way you feel about things?"
- c. "can you rely on them for help if you have a serious problem?"
- d. "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 [C7SKINNE]:

Items: 4 items – Self-Administered Questionnaire, Section D, Question 4 (g - j)

(Thinking about the members of your family, not including your spouse/partner, how often)

- g. "do they make too many demands on you?"
- h. "do they criticize you?"
- i. "do they let you down when you are counting on them?"
- j. "do they get on your nerves?"

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

<u>Scaling</u>: 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.

<u>Missing Values</u>: 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 [C7SFAMSO]:

<u>Items</u>: 8 item scale combining the four "family support" items and four "family strain" items.

<u>Scaling</u>: The scale is constructed by calculating the **mean** of the values of the items. Items for the "family support "scale (F4a to F4d) 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 [C7SKINPO]:

Sample (N)	Alpha	Mean	Std. dev
548	.818	3.372	.651

## Family Strain [C7SKINNE]:

Sample (N)	Alpha	Mean	Std. dev
548	.808	1.994	.681

## Family Affectual Solidarity [C7SFAMSO]:

Sample (N)	Alpha	Mean	Std. dev
548	.797	3.190	.537

# 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 [C7SPKINS]:**

<u>Items</u>: 2 items – Self-Administered Questionnaire, Section D, Question 4 (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.

<u>Scaling</u>: 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 [C7SPKINS]:**

Sample (N)	Alpha	Mean	Std. dev
547	.557	3.530	.539

## Source(s):

H. Markus.

#### FRIEND SUPPORT AND STRAIN

#### Scales/Items:

### Friend Support [C7SFDSPO]:

<u>Items</u>: 4 items – Self-Administered Questionnaire, Section D, Question 8 (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 [C7SFDSNE]:

Items: 4 items – Self-Administered Questionnaire, Section D, Question 8 (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.

<u>Scaling</u>: 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 [C7SFDSOL]:

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

<u>Scaling</u>: The scale is constructed by calculating the **mean** of the values of the items. Items for the "friend support "scale (F8a to F8d) 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 [C7SFDSPO]:

Sample (N)	Alpha	Mean	Std. dev
541	.874	3.233	.684

## Friend Strain [C7SFDSNE]:

Sample (N)	Alpha	Mean	Std. dev
542	.764	1.720	.536

# Friend Affectual Solidarity [C7SFDSOL]:

Sample (N)	Alpha	Mean	Std. dev
542	.769	3.257	.468

# 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.

### SPOUSE/PARTNER SUPPORT AND STRAIN

### Scales/Items:

## Spouse/ Partner Support (Marital Empathy Scale) [C7SSPEMP]:

<u>Items</u>: 6 items – Self-Administrated Questionnaire, Section D, Question 9 (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 [C7SSPCRI]:**

Items: 6 items – Self-Administrated Questionnaire, Section D, Question 9 (g - I)

- 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?"
- I. "How often does he or she get on your nerves?"

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

<u>Scaling</u>: 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. The scale score is not calculated for cases with no valid items on the scale due to "refusal" or "does not apply (not married/in a marriage-like relationship)", and coded as "8" for "NOT CALCULATED (Due to missing data)", and "9" for "NOT CALCULATED (Due to Does not apply)".

## **Spouse/Partner Affectual Solidarity [C7SSPSOL]:**

<u>Items</u>: 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 scales are computed for cases that have valid values for **at least one** item on the particular scale. The scale score is not calculated for cases with no valid items on the scale due to "refusal" or "does not apply (not married/in a marriage-like relationship)", and coded as "8" for "NOT CALCULATED (Due to missing data)", and "9" for "NOT CALCULATED (Due to Does not apply)".

## **Psychometrics**:

### Spouse/Partner Support (Marital Empathy Scale) [C7SSPEMP]:

Sample (N)	Alpha	Mean	Std. dev
386	.936	3.615	.620

# **Spouse/Partner Strain [C7SSPCRI]:**

Sample (N)	Alpha	Mean	Std. dev
386	.874	2.101	6653

## Spouse/Partner Affectual Solidarity [C7SSPSOL]:

Sample (N)	Alpha	Mean	Std. dev
386	.893	3.257	.529

#### 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.

#### RELIGIOSITY

## Scales/Items:

## **Religious Support [C7SRELSU]:**

Items: 4 items – Self-Administered Questionnaire, Section E, Question 2 (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 [C7SRELCA]:

<u>Items</u>: 2 items – Self-Administered Questionnaire, Section E, Question 3 (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 [C7SRELCB]:

<u>Items</u>: 6 items – Self-Administered Questionnaire, Section E, Question 3 (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.

<u>Scaling</u>: 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.

<u>Missing Values</u>: 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:

**Religious Support [C7SRELSU]** 

Sample (N)	Alpha	Mean	Std. dev
248	.625	13.706	10989

Religious/Spiritual Coping-A [C7SRELCA]

Sample (N)	Alpha	Mean	Std. dev
543	.877	5.529	2.212

Religious/Spiritual Coping-B [C7SRELCB]

Sample (N)	Alpha	Mean	Std. dev
542	.707	18.640	3.861

## 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.

#### PERCEIVED DISCRIMINATION

### **Scales/Items**:

## **Daily Discrimination [C7CDAYDI]:**

<u>Items</u>: 9 items – Self-Administrated Questionnaire, Section F, Question 2 (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.

<u>Scaling</u>: 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.

<u>Missing Values</u>: 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 [C7CDAYDI]:**

	4		
Sample (N)	Alpha	Mean	Std. dev
544	.903	13.770	4.867

#### 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.