

README for MIDUS 2 (M2) Survey O*NET 2004 (7.0) Database Linkage

This README provides an overview of the linkage performed between the MIDUS 2 (M2) Survey data and the 2004 Occupational Information Network (O*NET 7.0) database. Specifically, this project linked M2 cases' survey responses (collected between 2004-2005) and their resulting 2000 Standard Occupation Classification (SOC) codes with the 2004 Occupational Information Network (O*NET 7.0) database. The resulting standalone M2 O*NET dataset uses the 'M2ID' respondent identifier variable and can be linked with any MIDUS 2 dataset at the individual case level.

A. What dataset is available?

The M2 O*NET dataset is a rectangular dataset comprised of 432 occupational and SOC variables for 3,362 cases that were currently employed as of the M2 Survey and had provided adequate responses to code their occupations into Census Occupation and SOC codes. Active military cases were not linked to O*NET.

The new dataset: *M2_ONET2004_N3362_20220222.sav*

B. What information from O*NET database is included in this dataset?

O*NET is the nation's primary occupational information source. It contains specific data on hundreds of standardized occupation-specific descriptors on over 1,000 Standard Occupational Classification (SOC) occupations. These descriptions include generalized work activities, features of the work organization, and other physical and social features shaping the nature of the work. These descriptions are organized and coded as variables in eight different O*NET dimensions that are outlined below.

- 1) **Abilities:** Enduring attributes of the individual that influence performance.
- 2) **Occupational Interests:** Preferences for work environments. Occupational Interest Profiles (OIPs) are compatible with Holland's model of personality types and work environments¹.

¹ Holland JL. Making vocational choices: A theory of vocational personalities and work environments, 3rd ed. Making vocational choices: A theory of vocational personalities and work environments, 3rd ed. Odessa, FL, US: Psychological Assessment Resources; 1997. xiv, 303–xiv, 303.

- 3) **Work Values:** Global aspects of work composed of specific needs that are important to a person's satisfaction. Occupational Reinforcer Patterns (ORPs) are based on the Theory of Work Adjustment².
- 4) **Skills:** Developed capacities that facilitate learning or the more rapid acquisition of knowledge and performance of activities that occur across jobs.
- 5) **Knowledge:** Organized sets of principles and facts applying in general domains.
- 6) **Work Activities:** Work activities across a number of occupations. They are performed in many job families and industries.
- 7) **Work Context:** Physical and social factors that influence the nature of work.

Please note that **Work Styles** is not available in M2 data. Due to the limited number of SOC categories available in the 2004 O*NET, Work Styles was not linked to the MIDUS 2 sample.

C. How was the O*NET database linked to the MIDUS Sample through SOC codes?

MIDUS used 2010 SOC codes for each respondent's current occupation. It was obtained using a crosswalk from 1990 Census OCC codes to 2000 Census OCC codes, and then linking the 2000 OCC codes to 2010 SOC codes. When attempting to link these 2010 codes with the 2004 O*NET database, it became apparent that the 2000 SOC codes were a better match. We converted the 2010 SOC codes to 2000 SOC codes using the following steps –

- a. If 2010 and 2000 SOC codes were the same, copy 2010 codes to 2000 codes;
- b. If a 2010 SOC code corresponded with a particular 2000 code, recode 2010 codes to 2000 codes;
- c. For 'broad' category codes that ended with '00' or '99', qualitative text response of occupation, industry, and job duty description were reviewed and 'detailed' codes were assigned when possible. This process was performed by two independent coders.
- d. During the process of assigning SOC2000 codes from broad categories to detailed categories using the qualitative text responses as outlined in (c.) above, we identified and re-coded previously incorrect codes. Therefore, some SOC2000 codes may not align with previous coding groups.

If a respondent was not currently working or did not provide adequate occupational information, the case was excluded from the MIDUS-O*NET linkage. Military occupation codes were also excluded from the linkage since they are not included in the O*NET database. The MIDUS 2 sample used SOC codes from 3,362 valid cases to link with O*NET datasets.

Complete detail of the linkage between M2 and O*NET 7.0 is available in data documentation ***M2_ONET_DocumentationOfDataLinkage_20220222.docx***. In brief, the data linkage was performed in two steps. MIDUS SOC codes that matched perfectly with the six digits O*NET SOC code were linked directly. For unmatched cases, a series of different mean value substitution adjustments were used to replace the values of the O*NET summary score variables for those of the unmatched SOC codes.

² Dawis R V., Lofquist LH. A psychological theory of work adjustment : an individual-differences model and its applications. 6th ed. Minneapolis: University of Minnesota Press; 1984.

D. How were the summary scores created, and what do they mean?

O*NET intended for some dimensions to include summary scores for some variables. Mean O*NET summary scores were constructed based on recommended O*NET constructs and checked by running explanatory factor analysis. The list below displays the MIDUS variable names for all the constructed summary score variables in the resulting dataset. Note that O*NET did not intend for all dimensions to have summary scores. Further detail regarding the measurement and construction of summary variables within each dimension can be found in the documentation *M2_ONET_DocumentationOfConstructedVariables_20220222.docx*

1. Abilities (IM & LV)

Variable Name	Variable Label
B1ABIMCOGABIL	O*NET 2004 Constructed Variable: Abilities-Important: Cognitive Abilities (Mean)
B1ABIMPSYCHABIL	O*NET 2004 Constructed Variable: Abilities-Important: Psychomotor Abilities (Mean)
B1ABIMPHYSABIL	O*NET 2004 Constructed Variable: Abilities-Important: Physical Abilities (Mean)
B1ABIMSENSABIL	O*NET 2004 Constructed Variable: Abilities-Important: Sensory Abilities (Mean)
B1ABLVCOGABIL	O*NET 2004 Constructed Variable: Abilities-Level: Cognitive Abilities (Mean)
B1ABLVPSYCHABIL	O*NET 2004 Constructed Variable: Abilities-Level: Psychomotor Abilities (Mean)
B1ABLVPHYSABIL	O*NET 2004 Constructed Variable: Abilities-Level: Physical Abilities (Mean)
B1ABLVSENSABIL	O*NET 2004 Constructed Variable: Abilities-Level: Sensory Abilities (Mean)

2. Skills (IM & LV)

Variable Name	Variable Label
B1SKIMBASICK	O*NET 2004 Constructed Variable: Skills-Important: Basic Skills (Mean)
B1SKIMMANAGESK	O*NET 2004 Constructed Variable: Skills-Important: Resource Management Skills (Mean)
B1SKIMSOCIALSK	O*NET 2004 Constructed Variable: Skills-Important: Social Skills (Mean)
B1SKIMSYSTEMSK	O*NET 2004 Constructed Variable: Skills-Important: Systems Skills (Mean)
B1SKIMTECHSK	O*NET 2004 Constructed Variable: Skills-Important: Technical Skills (Mean)
B1SKLVBASICK	O*NET 2004 Constructed Variable: Skills-Level: Basic Skills (Mean)
B1SKLVMANAGESK	O*NET 2004 Constructed Variable: Skills-Level: Resource Management Skills (Mean)
B1SKLVSOCIALSK	O*NET 2004 Constructed Variable: Skills-Level: Social Skills (Mean)
B1SKLVSYSTEMSK	O*NET 2004 Constructed Variable: Skills-Level: Systems Skills (Mean)
B1SKLVTECHSK	O*NET 2004 Constructed Variable: Skills-Level: Technical Skills (Mean)

3. Activities (IM & LV)

Variable Name	Variable Label
B1WAIMINFOINPUT	O*NET 2004 Constructed Variable: Work Activities-Important: Information Input (Mean)
B1WAIMINTERWOTH	O*NET 2004 Constructed Variable: Work Activities-Important: Interacting with Others (Mean)
B1WAIMMENTAL	O*NET 2004 Constructed Variable: Work Activities-Important: Mental Processes (Mean)
B1WAIMWKOUPUT	O*NET 2004 Constructed Variable: Work Activities-Important: Work Output (Mean)
B1WALVINFOINPUT	O*NET 2004 Constructed Variable: Work Activities-Level: Information Input (Mean)
B1WALVINTERWOTH	O*NET 2004 Constructed Variable: Work Activities-Level: Interacting with Others (Mean)
B1WALVMENTAL	O*NET 2004 Constructed Variable: Work Activities-Level: Mental Processes (Mean)
B1WALVWKOUPUT	O*NET 2004 Constructed Variable: Work Activities-Level: Work Output (Mean)

4. Context (CX & CT)

Variable Name	Variable Label
B1CXINTERPERS_1	O*NET 2004 Constructed Variable: Work Context-CX: Interpersonal Relationships (Mean), Item=8, N=3,362
B1CXINTERPERS_2	O*NET 2004 Constructed Variable: Work Context-CX: Interpersonal Relationships (Mean), Item=14, N=1,835
B1CXPHYWKCOND_1	O*NET 2004 Constructed Variable: Work Context-CX: Physical Work Conditions (Mean), Item=25, N=3,362
B1CXPHYWKCOND_2	O*NET 2004 Constructed Variable: Work Context-CX: Physical Work Conditions (Mean), Item=30, N=1,835
B1CXCTJOBCHAR_1	O*NET 2004 Constructed Variable: Work Context-CX&CT: Structural Job Characteristics (Mean), Item=5, N=3,362
B1CXCTJOBCHAR_2	O*NET 2004 Constructed Variable: Work Context-CX&CT: Structural Job Characteristics (Mean), Item=13, N=1,835