Аналитические рекомендации:
Разработка идентификаторов инвалидности с использованием синтаксиса SPSS Расширенного опросника Вашингтонской группы по функциональным способностям (ВГ-РО)

Введение

Как и в случае с Кратким опросником ВГ по функциональным способностям (ВГ-КО), анализ ответов расширенного набора вопросов ВГ по функциональным способностям (ВГ-РО) также позволяет получить несколько идентификаторов инвалидности путем выбора порога тяжести или отсечения. Однако синтаксис SPSS, представленный ниже, предусматривает вычисление идентификаторов инвалидности с использованием различных наборов доменов ВГ-РО и рекомендуемого порога для международных сравнений (описано ниже).

Для каждого из описанных идентификаторов инвалидности уровень включения — это наличие, по крайней мере, одного домена/вопроса с ответом ИСПЫТЫВАЮ БОЛЬШИЕ ЗАТРУДНЕНИЯ или НЕ МОГУ ЭТО ДЕЛАТЬ — или — для доменов Тревожность, Депрессия, Боль и Усталость, самый высокий уровень затруднений по четырехбалльной шкале.

Каждый из четырех идентификаторов инвалидности, описанных в этом документе, определяется путем выбора доменов функционирования, включая:

ВГ-КО: *Краткий опросник:* 6 доменов, 6 вопросов.

ВГ-РО 1: *Расширенный набор:* 11 доменов, 25 вопросов.

ВГ-РО 2: *Модифицированный расширенный набор* (ВГ-РО МИНУС Боль и Усталость): 9 доменов, 20 вопросов.

ВГ-РО 3: *Усовершенствованный короткий набор* (ВГ-КО ПЛЮС Верхняя часть тела, Тревожность и Депрессия): 9 доменов, 12 вопросов.

> **Исполнительные документы Вашингтонской группы** охватывают инструменты, разработанные Вашингтонской группой по статистике инвалидности (ВГ) для сбора данных об инвалидности, сопоставимых на международном уровне, при проведении переписей и обследований. В этих документах рассматриваются лучшие практики по применению Краткого опросника, Расширенного опросника, Краткого опросника — усовершенствованной версии, Детских функциональных модулей ВГ/ЮНИСЕФ для возрастов 2–4 и 5–17 лет, а также модуля ВГ/МО-РСИ МОТ по инвалидности и других инструментов ВГ. Тематика включает проблемы перевода, определение вопросов, аналитические рекомендации, программный код для анализа, использование инструментов для выделения подгрупп и многое другое.
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> Другие исполнительные документы ВГ и более подробная информация находятся на сайте Вашингтонской группы: http://www.washingtongroup-disability.com/.

ПРИМЕЧАНИЕ: для анализа данных используйте Ваши стандартные методы взвешивания и оценки.

Синтаксис SPSS основан на *метках переменных*, указанных в таблице ниже. Полный модуль ВГ-РО содержит больше вопросов, чем указано в этой таблице. Статус инвалидности определяется трудностями в выполнении основных универсальных действий *без* использования вспомогательных приспособлений или другой помощи. Например, есть несколько вопросов, связанных с мобильностью, которые определяют трудности при ходьбе *с* использованием помощи. Эти вопросы не включены в представленный здесь аналитический план, однако они могут быть использованы в других анализах, где более подробно изучают влияние на функционирование вспомогательных приспособлений (безбарьерной окружающей среды).

При определении идентификаторов инвалидности используются только те вопросы/переменные, которые приведены ниже. **Убедитесь, что Вы используете те же** *метки переменных* **ИЛИ измените синтаксис SPSS, чтобы отражать** *метки переменных* **в Вашей базе данных.**

ВГ-КО является частью Национального анкетирования по вопросам здоровья (NHIS) США. Данные, использованные для подготовки этих рекомендаций, взяты из NHIS за 2013 год.

Примечание для пользователей NHIS: имена переменных в файле данных и документации NHIS могут отличаться от тех, что используются в этом документе; например, переменная домена самообслуживания, упоминаемая как SC-SS в этом документе, в файле данных и документации NHIS называется UB_SS.

Вопросы/домены расширенного опросника ВГ	Метка переменной	Варианты ответов
ЗРЕНИЕ		
1. Испытываете ли Вы трудности со зрением даже при ношении очков?	VIS_SS	1
ОБЩЕНИЕ		
2. Испытываете ли Вы затруднения при устном общении (например, чтобы понимать или быть понятым)?	COM_SS	1
СЛУХ		
3. Испытываете ли Вы трудности со слухом даже при использовании слухового аппарата?	HEAR_SS	1
4. Трудно ли Вам слышать разговор с одним человеком в тихой комнате?	HEAR_3	1
5. Трудно ли Вам слышать разговор с одним человеком в шумной комнате?	HEAR_4	1
ПОЗНАНИЕ		
6. Испытываете ли Вы затруднения при запоминании или концентрации внимания?	COG_SS	1
7. Испытываете ли Вы затруднения при запоминании или концентрации, или в обоих случаях?	COG_1	2
8. Как часто Вы испытываете затруднения при запоминании?	COG_2	3

9. Какое количество предметов Вам трудно запомнить?	COG_3	4
САМООБСЛУЖИВАНИЕ/ВЕРХНЯЯ ЧАСТЬ ТЕЛА		
10. Испытываете ли Вы затруднения (с самообслуживанием, например) с умыванием или одеванием?	SC_SS	1
11. Испытываете ли Вы затруднения, чтобы поднять 2-литровую бутылку воды от талии до уровня глаз?	UB_1	1
12. Насколько Вам трудно использовать руки и пальцы?	UB_2	1
ПОДВИЖНОСТЬ		
13. Испытываете ли Вы затруднения при ходьбе или поднимаясь по ступенькам?	MOB_SS	1
14. Трудно ли Вам пройти 100 ярдов (91 м) по ровной поверхности без посторонней помощи или без вспомогательного оборудования?	MOB_4	1
15. Трудно ли Вам пройти 1/3 мили (536 м) по ровной поверхности без посторонней помощи или без вспомогательного оборудования?	MOB_5	1
16. Испытываете ли Вы затруднения, чтобы подняться или спуститься на 12 ступенек?	MOB_6	1
ЭМОЦИОНАЛЬНОЕ СОСТОЯНИЕ (ТРЕВОЖНОСТЬ)		
17. Как часто Вы чувствуете себя взволнованным, нервным или встревоженным?	ANX_1	5
18. Насколько сильно Вы чувствуете себя взволнованным, нервным или встревоженным?	ANX_3	6
ЭМОЦИОНАЛЬНОЕ СОСТОЯНИЕ (ДЕПРЕССИЯ)		
19. Как часто Вы чувствуете себя в депрессии?	DEP_1	5
20. Насколько сильно Вы чувствовали себя в депрессии последний раз?	DEP_3	6
БОЛЬ		
21. Как часто Вы чувствовали боль за последние 3 месяца?	PAIN_2	7
22. Насколько сильной была боль в последний раз, когда Вы ее испытывали?	PAIN_4	6
УСТАЛОСТЬ		
23. Как часто за последние 3 месяца Вы ощущали сильную усталость или истощение?	TIRED_1	7
24. Как долго длилось ощущение усталости или истощения в последний раз?	TIRED_2	8
25. Насколько сильным было ощущение усталости или истощения в последний раз?	TIRED_3	6

ПРИМЕЧАНИЕ: **Красным** отмечены вопросы Краткого опросника Вашингтонской группы **(ВГ-КО)**.

Все 25 вопросов включены в **ВГ-РО 1**.

Вопросы, выделенные **красным** плюс **синим** плюс **зеленым** цветом, включены в **ВГ-РО 2**. Вопросы, выделенные **красным** плюс **зеленым** цветом, включены в **ВГ-РО 3**.

Варианты ответов:

	Образец 1	Образец 2	Образец 3	Образец 4
1	Не испытываю затруднений	Затруднения только при запоминании	Иногда	Немного предметов
2	Да, испытываю определенные затруднения	Затруднения только при концентрации	Часто	Много
3	Да, испытываю большие затруднения	Затруднения и с запоминанием, и с концентрацией	Постоянно	Почти все
4	Не могу это делать			
7	Отказываюсь отвечать			
8	Не установлено			
9	Не знаю			

	Образец 5	Образец 6*	Образец 7	Образец 8
1	Ежедневно	Немного	Никогда	Часть дня
2	Один раз в неделю	Много	В некоторые дни	Большую часть дня
3	Один раз в месяц	Что-то среднее между «Немного» и «Много»	Большинство дней	Весь день
4	Несколько раз в год		Каждый день	
5	Никогда			
7	Отказываюсь отвечать			
8	Не установлено			
9	Не знаю			

* ОБРАТИТЕ ВНИМАНИЕ, ЧТО В ПРЕДСТАВЛЕННОМ НИЖЕ СИНТАКСИСЕ В ПУНКТАХ С ОБРАЗЦОМ ОТВЕТОВ 6 (ANX_3, DEP_3, PAIN_4 И TIRED_3) РЕКОМЕНДУЕТСЯ УКАЗЫВАТЬ «ЧТО-ТО МЕЖДУ» ДЛЯ ЧИСЛЕННОЙ ХАРАКТЕРИСТИКИ ОТ «НЕМНОГО» ДО «МНОГО».

ВГ-КО является частью ВГ-РО. В ВГ-РО
добавлены:
- дополнительные вопросы к 6 уже существующим доменам и
- дополнительные домены (некоторые с несколькими вопросами).

Синтаксис SPSS, представленный ниже, включает в себя несколько элементов, характерных только для ВГ-РО.

Во-первых, важно было определить отдельные доменные идентификаторы для тех доменов функционирования, которые включали несколько вопросов. Например, функционирование верхней части тела включает в себя два вопроса, каждый из которых подразумевает конкретные и уникальные действия: затруднения в поднимании бутылки с водой от талии до уровня глаз (руки/плечи) и затруднения в использовании рук и пальцев. Эти два вопроса были проанализированы и объединены для получения отдельного индикатора по верхней части тела с четырьмя уровнями затруднений, начиная от 1 — низкий уровень затруднений до 4 — высокий уровень затруднений. Это мало чем отличается от категорийных ответов на отдельные вопросы ВГ-КО: «Не испытываю затруднений», «Испытываю определенные затруднения», «Испытываю большие затруднения» и «Не могу это делать». Как и для домена Верхней части тела, у доменов ВГ-РО Когнитивные функции, Тревожность, Депрессия, Боль и Усталость образцы ответов имеют разный характер и нелегко «переводятся» в обычный образец ответа ВГ. Для этих доменов функционирования была разработана и аннотирована аналогичная четырехуровневая схема ответа со шкалой 1–4, где 1 — самый низкий уровень затруднений, а 4 — самый высокий.

Во-вторых, были оценены показатели по отдельным доменам для определения соответствующих ограничений для включения в общий идентификатор инвалидности — в целях оценки распространенности и деления на подгруппы показателей статуса инвалидности.

ПРИМЕЧАНИЕ:
Для всех переменных коды (7) *Отклонено*, (8) *Не установлено* и (9) *Не знаю* перекодируются в ***Отсутствует***.

SPSS WG Extended Set Syntax Annotated with Output Tables

Actual SPSS syntax is indented and the commands are in **BOLD** text.

NOTE: For data analysis, use your standard weighting and estimation techniques.

The syntax below produces **frequency distributions** on individual domain questions – **cross-tabulations** on multiple domain questions, and calculates INDICATOR variables for domains with multiple questions – for use in the determination of disability identifiers.

VISION

Step 1. Generate frequency distribution for Vision domain.

VIS_SS is the WG-SS Vision question.
No recoding – the Short Set question is used in the determination of disability identifiers.

> **FREQUENCIES** VIS_SS

VIS_SS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No difficulty	13690	79.0	81.6	81.6
	Some difficulty	2708	15.6	16.2	97.8
	A lot of difficulty	333	1.9	2.0	99.8
	Cannot do at all	36	.2	.2	100.0
	Total	16767	96.8	100.0	
Missing		559	3.2		
Total		17326	100.0		

COMMUNICATION

Step 2. Generate frequency distribution for Communication domain.

COM_SS is the WG-SS Communication question.
No recoding – the Short Set question is used in the determination of disability identifiers.

FREQUENCIES COM_SS

COM_SS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No difficulty	15874	91.6	94.7	94.7
	Some difficulty	745	4.3	4.4	99.2
	A lot of difficulty	94	.5	.6	99.7
	Cannot do at all	43	.2	.3	100.0
	Total	16756	96.7	100.0	
Missing		570	3.3		
Total		17326	100.0		

HEARING

Step 3. Generate frequency distributions and cross-tabulations for Hearing domain questions and determine Hearing Indicator

HEAR_SS is the WG-SS Hearing question.
HEAR_3 is *Difficulty hearing conversation with one person in quiet room*.
HEAR_4 is *Difficulty hearing one person in noisier room*.

FREQUENCIES HEAR_SS HEAR_3 HEAR_4.

HEAR_SS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No difficulty	13680	79.0	81.6	81.6
	Some difficulty	2753	15.9	16.4	98.0
	A lot of difficulty	310	1.8	1.8	99.9
	Cannot do at all	23	.1	.1	100.0
	Total	16766	96.8	100.0	
Missing		560	3.2		
Total		17326	100.0		

HEAR_3: Difficulty hearing conversation with one person in quiet room

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No difficulty	15249	88.0	91.0	91.0
	Some difficulty	1316	7.6	7.9	98.9
	A lot of difficulty	162	.9	1.0	99.9
	Cannot do at all	10	.1	.1	100.0
	Total	16737	96.6	100.0	
Missing		589	3.4		
Total		17326	100.0		

HEAR_4: Difficulty hearing one person in noisier room

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No difficulty	11697	67.5	70.0	70.0
	Some difficulty	4191	24.2	25.1	95.1
	A lot of difficulty	779	4.5	4.7	99.7
	Cannot do at all	48	.3	.3	100.0
	Total	16715	96.5	100.0	
Missing		611	3.6		
Total		17326	100.0		

Step 4. For Hearing questions, recode Hear_3 and Hear_4 to value 4 (cannot do at all) if Hear_SS is 4 (Cannot do at all).

The syntax below recodes Hear_3 and Hear_4 to 4 (cannot do at all) if Hear_SS is 4 (cannot do at all).

IF HEAR_SS = 4 HEAR_3 = 4.
IF HEAR_SS = 4 HEAR_4 = 4.

FREQUENCIES HEAR_3 HEAR_4.

HEAR_3: Difficulty hearing conversation with one person in quiet room

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No difficulty	15249	88.0	91.0	91.0
	Some difficulty	1316	7.6	7.9	98.8
	A lot of difficulty	162	.9	1.0	99.8
	Cannot do at all	33	.2	.2	100.0
	Total	16760	96.7	100.0	
Missing		566	3.3		
Total		17326	100.0		

HEAR_4: Difficulty hearing one person in noisier room

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No difficulty	11697	67.5	69.9	69.9
	Some difficulty	4191	24.2	25.0	94.9
	A lot of difficulty	779	4.5	4.7	99.6
	Cannot do at all	71	.4	.4	100.0
	Total	16738	96.6	100.0	
Missing		588	3.4		
Total		17326	100.0		

Step 5. Generate a cross-tabulation of the two Hearing Extended Set questions: HEAR_3 and HEAR_4.

The syntax below produces a cross-tabulation of the two Extended Set questions: HEAR_3: *Difficulty hearing in a quiet room* and HEAR_4: *Difficulty hearing in a noisier room* to determine a single HEARING INDICATOR.

CROSSTABS HEAR_4 BY HEAR_3.

	HEAR_3: Difficulty hearing conversation with one person in quiet room				
HEAR_4 (Difficulty hearing in a Nosier room)	No difficulty	Some difficulty	A lot of difficulty	Cannot do at all	Total
No difficulty	11603	94	0	0	11697
Some difficulty	3373	809	8	0	4190
A lot of difficulty	253	388	138	0	779
Cannot do at all	8	24	16	23	71
Total	15237	1315	162	23	16737

Step 6. Create a HEARING INDICATOR (H_INDICATOR) based on the two additional hearing questions HEAR_3 and HEAR_4.

The syntax below creates a HEARING INDICATOR (H_INDICATOR) based on the cross-tabulation of the two additional hearing questions HEAR_3 and HEAR_4.

COMPUTE H_INDICATOR = 0.
IF (HEAR_3 = 1 AND HEAR_4 = 1) OR (HEAR_3 = 1 AND HEAR_4 = 2) H_INDICATOR = 1.
IF (HEAR_3 = 2 AND (HEAR_4 = 1 OR HEAR_4 = 2)) OR (HEAR_3 = 1 AND HEAR_4 = 3) H_INDICATOR = 2.
IF (HEAR_3 = 3 AND (HEAR_4 = 1 OR HEAR_4 = 2) OR (HEAR_3 = 2 AND HEAR_4 = 3) OR (HEAR_3 = 1 AND HEAR_4 = 4)) H_INDICATOR = 3.
IF ((HEAR_3 = 3 AND HEAR_4 = 3) OR HEAR_3 = 4 OR (HEAR_4 = 4 AND (HEAR_3 = 2 OR HEAR_3 = 3))) H_INDICATOR = 4.
FREQUENCIES H_INDICATOR.

H_INDICATOR

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**1.00**	14976	86.4	89.4	89.4
	2.00	1156	6.7	6.9	96.3
	3.00	404	2.3	2.4	98.7
	4.00	211	1.2	1.3	100.0
	Total	16747	96.7	100.0	
Missing		579	3.3		
Total		17326	100.0		

COGNITION: Degree of difficulty remembering or concentrating

Step 7. Generate frequency distributions and cross-tabulations for Cognition domain questions and determine a Cognition Indicator.

COG_SS is the WG-SS Cognition question.

Frequency distribution of the WG-SS cognition question: COG_SS.

FREQUENCIES COG_SS.

Degree of difficulty remembering or concentrating

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No difficulty	13719	79.2	81.9	81.9
	Some difficulty	2632	15.2	15.7	97.6
	A lot of difficulty	382	2.2	2.3	99.9
	Cannot do at all	20	.1	.1	100.0
	Total	16753	96.7	100.0	
Missing		573	3.3		
Total		17326	100.0		

If response to COG-SS is *some difficulty*, *a lot of difficulty* or *cannot do at all*, then the respondent is asked COG_1: whether they have difficulty remembering, concentrating or both.

FREQUENCIES COG_1.

COG_1: Difficulty remembering, concentrating, or both?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Difficulty remembering only	983	5.7	32.4	32.4
	Difficulty concentrating only	388	2.2	12.8	45.2
	Difficulty with both remembering and concentrating	1659	9.6	54.8	100.0
	Total	3030	17.5	100.0	
Missing		14296	82.5		
Total		17326	100.0		

Step 8. Account for those who did not answer COG_1 (COG_SS is 1 – no difficulty and they were skipped) by recoding COG_1 to 0 (No difficulty).

If response to COG-SS is 1: *no difficulty*, then the variable COG_1 is recoded into COG_1A, and the value assigned is 0: *no difficulty*.

COMPUTE COG_1A = COG_1.
IF (COG_SS = 1) COG_1A = 0.
FREQUENCIES COG_1A.

COG_1A

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No difficulty	13719	79.2	81.9	81.9
	Difficulty remembering only	983	5.7	5.9	87.8
	Difficulty concentrating only	388	2.2	2.3	90.1
	Difficulty with both remembering and concentrating	1659	9.6	9.9	100.0
	Total	16749	96.7	100.0	
Missing		577	3.3		
Total		17326	100.0		

Step 9. Generate frequency distribution for remaining cognition questions.

Frequency distribution of the Cognition extended REMEMBERING questions: COG_2 *How often have difficulty remembering*, and COG_3 *Amount of things you have difficulty remembering*.

Стр. | 10

Для получения дополнительной информации о Вашингтонской группе
по статистике инвалидности перейдите на сайт:
http://www.washingtongroup-disability.com/.

FREQUENCIES COG_2 COG_3.

COG_2: How often have difficulty remembering?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Sometimes	1916	11.1	72.4	72.4
	Often	513	3.0	19.4	91.8
	All of the time	216	1.2	8.2	100.0
	Total	2645	15.3	100.0	
Missing		14681	84.7		
Total		17326	100.0		

COG_3: Amount of things you have difficulty remembering?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	A few things	2119	12.2	80.3	80.3
	A lot of things	386	2.2	14.6	94.9
	Almost everything	134	.8	5.1	100.0
	Total	2639	15.2	100.0	
Missing		14687	84.8		
Total		17326	100.0		

Step 10. Generate cross-tabulation of the two Cognition extended set questions COG_2 by COG_3.

The syntax below produces a cross-tabulation of the two Extended Set REMEMBERING questions: COG_2: *How often you have difficulty remembering* and COG_3: *The amount of things you have difficulty remembering* to determine a single REMEMBERING INDICATOR.

CROSSTABS COG_2 BY COG_3.

COG_2: How often do you have difficulty remembering?		COG_3: Amount of things you have difficulty remembering?			
		A few things	A lot of things	Almost everything	Total
How often have difficulty remembering?	Sometimes	1788	105	20	1913
	Often	279	197	34	510
	All of the time	51	84	80	215
Total		2118	386	134	2638

Step 11. Create a Remembering Indicator based on distribution of COG_2 and COG_3.

The syntax below creates a REMEMBERING INDICATOR (R_INDICATOR) based on the two additional remembering questions (COG_2 and COG_3).

If COG_SS is 1: no difficulty, then the Remembering Indicator is coded as 1: the lowest level of difficulty.

> **COMPUTE** R_INDICATOR = 0.
> **IF** (COG_SS = 1) R_INDICATOR = 1.
> **IF** ((COG_2 = 1 AND COG_3 = 1) OR (COG_3 = 1 AND COG_2 = 2) OR (COG_3 = 2 AND COG_2 = 1)) R_INDICATOR = 2.
> **IF** (COG_3 = 2 AND COG_2 = 2) R_INDICATOR = 3.
> **IF** (COG_3 = 3 OR COG_2 = 3) R_INDICATOR = 4.
> **FREQUENCIES** R_INDICATOR.

Step 12. If COG_1A is coded as 2 (concentrating only), then the Remembering Indicator is coded as 5.

These 388 individuals are respondents who were not included in the Remembering Indicator since they had only difficulty concentrating.

> **IF** (COG_1A = 2) R_INDICATOR = 5.

Step 13. Generate frequency distribution of the Remembering Indicator.

> **FREQUENCIES** R_INDICATOR.

R_INDICATOR

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	580	3.3	3.3	3.3
	1.00	13719	79.2	79.2	82.5
	2.00	2172	12.5	12.5	95.1
	3.00	197	1.1	1.1	96.2
	4.00	270	1.6	1.6	97.8
	5.00	388	2.2	2.2	100.0
	Total	17326	100.0	100.0	

Step 14. Supplement Remembering Indicator with information on difficulty concentrating.

The syntax below adds information on whether cognitive difficulties are compounded by difficulty concentrating in addition to difficulty remembering.
Create a COGNITION INDICATOR (COG_INDICATOR) based on R_INDICATOR (above) and the cognition question (COG_1).

The 388 individuals with 'concentrating only' were allocated as follows:
1. 357 with a little difficulty on COG_SS question were classified as **2**
2. 30 with a lot of difficulty on COG_SS question were classified as **3**
3. 1 with cannot do on COG_SS question was classified as **4**

Those with <u>both</u> remembering <u>and</u> concentrating difficulty were upgraded 36 individuals from **2** to **3**, and 125 individuals from **3** to **4.**

```
COMPUTE COG_INDICATOR = 0.
COMPUTE COG_INDICATOR = R_INDICATOR.
IF (R_INDICATOR = 5 AND COG_SS = 2) COG_INDICATOR = 2.
IF (R_INDICATOR = 5 AND COG_SS = 3) COG_INDICATOR = 3.
IF (R_INDICATOR = 5 AND COG_SS = 4) COG_INDICATOR = 4.

IF (R_INDICATOR = 2 AND COG_1 = 3 AND COG_SS = 3) COG_INDICATOR = 3.
IF (R_INDICATOR = 3 AND COG_1 = 3 AND COG_SS = 3) COG_INDICATOR = 4.
```

Step 15. Generate frequency distribution of the Cognition Indicator.

FREQUENCIES COG_INDICATOR.

COG_INDICATOR

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	580	3.3	3.3	3.3
	1.00	13719	79.2	79.2	82.5
	2.00	2449	14.1	14.1	96.7
	3.00	226	1.3	1.3	98.0
	4.00	352	2.0	2.0	100.0
	Total	17326	100.0	100.0	

UPPER BODY

Step 16. Generate frequency distributions and cross-tabulations for Self-care and Upper body domain questions and determine the Upper Body Indicator.

SC_SS is the WG-SS Self-care question.
UB_1 is *Difficulty raising 2 liter bottle of water from waist to eye level*.
UB_2 is *Difficulty using hands and fingers*

First, calculate frequency distributions on the short set and two extended set questions.

FREQUENCIES SC_SS UB_1 UB_2.

SC_SS: Degree of difficulty with self-care

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No difficulty	16029	92.5	95.7	95.7
	Some difficulty	544	3.1	3.2	98.9
	A lot of difficulty	114	.7	.7	99.6
	Cannot do at all	68	.4	.4	100.0
	Total	16755	96.7	100.0	
Missing		571	3.3		
Total		17326	100.0		

UB_1: Diff raising 2 liter bottle of water from waist to eye level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No difficulty	15677	90.5	93.6	93.6
	Some difficulty	743	4.3	4.4	98.0
	A lot of difficulty	167	1.0	1.0	99.0
	Cannot do at all	166	1.0	1.0	100.0
	Total	16753	96.7	100.0	
Missing		573	3.3		
Total		17326	100.0		

UB_2: Degree of difficulty using hands and fingers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No difficulty	15199	87.7	90.7	90.7
	Some difficulty	1229	7.1	7.3	98.1
	A lot of difficulty	255	1.5	1.5	99.6
	Cannot do at all	70	.4	.4	100.0
	Total	16753	96.7	100.0	
Missing		573	3.3		
Total		17326	100.0		

Step 17. Generate a cross-tabulation of the two Upper body Extended Set questions: UB_2 and UB_1.

The syntax below produces a cross-tabulation of the two Extended Set questions: UB_1: *Difficulty raising a 2 liter bottle of water from waste to eye level* UB_2: *Difficulty using hands and fingers* to determine a single UPPER BODY INDICATOR (UB_INDICATOR).

CROSSTABS UB_2 BY UB_1.

UB_2: Difficulty using hands and fingers		UB_1: Diff raising 2 liter bottle of water from waist to eye level				
		No difficulty	Some difficulty	A lot of difficulty	Cannot do at all	Total
Degree of difficulty using hands and fingers	No difficulty	14786	309	58	44	15197
	Some difficulty	782	355	51	40	1228
	A lot of difficulty	98	73	51	33	255
	Cannot do at all	9	5	7	49	70
Total		15675	742	167	166	16750

Step 18. Create an UPPER BODY INDICATOR (UB_INDICATOR) based on the two additional upper body questions UB_2 and UB_3.

Syntax below creates UB_INDICATOR based on the distribution in the cross-tabulation above.

COMPUTE UB_INDICATOR = 0.
IF (UB_1 = 4 OR UB_2 = 4) UB_INDICATOR = 4.
IF UB_INDICATOR NE 4 AND (UB_1 = 3 OR UB_2 = 3) UB_INDICATOR = 3.
IF UB_INDICATOR NE 4 AND UB_INDICATOR NE 3 AND (UB_1 = 2 OR UB_2 = 2)
UB_INDICATOR = 2.
IF UB_INDICATOR NE 4 AND UB_INDICATOR NE 3 AND UB_INDICATOR NE 2 AND
(UB_1 = 1 OR UB_2 = 1) UB_INDICATOR = 1.

FREQUENCIES UB_INDICATOR.

UB_INDICATOR

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**1.00**	14790	85.4	88.3	88.3
	2.00	1448	8.4	8.6	96.9
	3.00	331	1.9	2.0	98.9
	4.00	187	1.1	1.1	100.0
	Total	16756	96.7	100.0	
Missing		570	3.3		
Total		17326	100.0		

MOBILITY

Step 19. Generate frequency distributions and cross-tabulations for Mobility domain questions and determine Mobility Indicator.

MOB_SS is the WG-SS Mobility question.
MOB_4 is Difficulty walking 100 yards on level ground without aid or equipment.
MOB_5 is Difficulty walking 1/3rd mile on level ground without aid or equipment.

First, calculate frequency distributions on the short set and two extended set WALKING questions.

FREQUENCIES MOB_SS MOB_4 MOB_5.

MOB_SS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No difficulty	13424	77.5	80.1	80.1
	Some difficulty	2165	12.5	12.9	93.0
	A lot of difficulty	792	4.6	4.7	97.7
	Cannot do at all	380	2.2	2.3	100.0
	Total	16761	96.7	100.0	
Missing		565	3.3		
Total		17326	100.0		

MOB_4: Diff walking 100 yards on level ground w/o aid or equipment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No difficulty	13892	80.2	84.8	84.8
	Some difficulty	1369	7.9	8.4	93.2
	A lot of difficulty	491	2.8	3.0	96.2
	Cannot do at all	**623**	3.6	3.8	100.0
	Total	16375	94.5	100.0	
Missing		951	5.5		
Total		17326	100.0		

MOB_5: Diff walking 1/3rd mile on level ground w/o aid or equipment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No difficulty	13025	75.2	82.8	82.8
	Some difficulty	1650	9.5	10.5	93.3
	A lot of difficulty	708	4.1	4.5	97.8
	Cannot do at all	347	2.0	2.2	100.0
	Total	15730	90.8	100.0	
Missing		1596	9.2		
Total		17326	100.0		

Step 20. Generate a cross-tabulation of the walking distance questions: MOB_4 and MOB_5.

The syntax below produces a cross-tabulation of the two Extended Set WALKING questions: MOB_4: *Difficulty walking 100 yards without equipment* and MOB_5: *Difficulty walking 1/3 mile without equipment* to determine a single WALKING INDICATOR.

NOTE: **623** individuals who responded cannot do at all to MOB_4 were not asked MOB_5 and they do not appear in the table below. They are, however, accounted for in the WALKING indicator calculation.

CROSSTABS MOB_4 BY MOB_5.

MOB_4: Diff walking 100 yards on level ground w/o aid or equipment	MOB_5: Diff walking 1/3rd mile on level ground w/o aid or equipment				
	No difficulty	Some difficulty	A lot of difficulty	Cannot do at all	Total
No difficulty	**12950**	**819**	**63**	**39**	13871
Some difficulty	**72**	**810**	**343**	**142**	1367
A lot of difficulty	**3**	**21**	**301**	**166**	491
Cannot do at all **(623)**	**0**	**0**	**0**	**0**	
Total	13025	1650	707	347	15729

Step 21. Create a WALKING INDICATOR (WALK_INDICATOR) based on the two additional walking questions MOB_4 and MOB_5.

Syntax below creates WALKING_INDICATOR based on the distribution in the cross-tabulation above.

COMPUTE WALK_INDICATOR = 0.
IF (MOB_4 = 1 AND (MOB_5 = 1 OR MOB_5 = 2)) WALK_INDICATOR = 1.
IF (MOB_4 = 1 AND MOB_5 = 3) OR (MOB_4 = 2 AND (MOB_5 = 1 OR MOB_5 = 2 OR MOB_5 = 3)) WALK_INDICATOR = 2.
IF (MOB_4 = 1 AND MOB_5 = 4) OR (MOB_4 = 3 AND (MOB_5 = 1 OR MOB_5 = 2 OR MOB_5 = 3) WALK_INDICATOR = 3.
IF ((MOB_4 = 2 AND MOB_5 = 4) OR (MOB_4 = 3 AND MOB_5 = 4)) WALK_INDICATOR = 4.

Syntax below includes the **623** who responded cannot do at all to MOB_4 into the WALKING INDICATOR.

IF (WALK_INDICATOR = 0 AND MOB_4 = 4) WALK_INDICATOR = 4.
RECODE WALK_INDICATOR (0 = SYSMIS).

FREQUENCIES WALK_INDICATOR.

WALK_INDICATOR

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**1.00**	13769	79.5	84.2	84.2
	2.00	1288	7.4	7.9	92.1
	3.00	364	2.1	2.2	94.3
	4.00	931	5.4	5.7	100.0
	Total	16352	94.4	100.0	
Missing		974	5.6		
Total		17326	100.0		

Step 22. Supplement Walking Indicator with information on difficulty Climbing steps (MOB_6).

Syntax below adds information from MOB_6 on *difficulty climbing up or down 12 steps* to create a combined Mobility Indicator (MOB_INDICATOR).

CROSSTABS WALK_INDICATOR BY MOB_6.

WALK_INDICATOR		No difficulty	Some difficulty	A lot of difficulty	Cannot do at all	Total
walk_INDICATOR2	1.00	13048	645	55	17	13765
	2.00	370	767	135	16	1288
	3.00	43	106	200	14	363
	4.00	79	242	226	384	931
Total		13540	1760	616	431	16347

According to the table above, the syntax below reclassifies:
1. 55 individuals with level **1** on the WALKING INDICATOR as level **2** on the MOBILITY INDICATOR
2. 17 individuals with level **1** on the WALKING INDICATOR and 135 individuals with level **2** on the WALKING INDICATOR as level **3** on the MOBILITY INDICATOR, and
3. 16 individuals with level **2** on the WALKING INDICATOR as level **4** on the MOBILITY INDICATOR.

Step 23. Create a mobility indication (MOB_INDICATOR) with information garnered from cross-tabulation above.

COMPUTE MOB_INDICATOR = WALK_INDICATOR.
IF (WALK_INDICATOR = 2 AND MOB_6 = 3) MOB_INDICATOR = 3.
IF (WALK_INDICATOR = 1 AND MOB_6 = 3) MOB_INDICATOR = 2.
IF (WALK_INDICATOR = 2 AND MOB_6 = 4) MOB_INDICATOR = 4.
IF (WALK_INDICATOR = 1 AND MOB_6 = 4) MOB_INDICATOR = 3.
FREQUENCIES MOB_INDICATOR.

MOB_INDICATOR

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	13697	79.1	83.8	83.8
	2.00	1192	6.9	7.3	91.1
	3.00	516	3.0	3.2	94.2
	4.00	947	5.5	5.8	100.0
	Total	16352	94.4	100.0	
Missing		974	5.6		
Total		17326	100.0		

ANXIETY

Step 24.Generate frequency distribution on ANX_1.

First, calculate frequency distributions on ANX_1: *How often do you feel worried, nervous or anxious*?

FREQUENCIES ANX_1.

ANX_1: How often feel worried, nervous, or anxious?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Daily	1632	9.4	9.8	9.8
	Weekly	1872	10.8	11.2	21.0
	Monthly	1558	9.0	9.3	30.4
	A few times a year	4898	28.3	29.4	59.7
	Never	6714	38.8	40.3	100.0
	Total	16674	96.2	100.0	
Missing		652	3.8		
Total		17326	100.0		

Step 25. The syntax below recodes ANX_3 into ANX_3Y
1) to create a NOT ASKED category based on those who responded NEVER to ANX_1 and
2) to place "SOMEWHERE BETWEEN" numerically in-between "A LITTLE" and "A LOT".

    IF (ANX_1 = 5) ANX_3Y = 0.
    RECODE ANX_3 (SYSMIS=SYSMIS) (1=1) (2=3) (3=2) (ELSE=9) INTO ANX_3Y.
    FREQUENCIES ANX_3Y.

ANX_3Y: Level of feelings last time felt worried/nervous/anxious

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not asked	6714	38.8	40.3	40.3
	A little	5700	32.9	34.2	74.5
	In between a little and a lot	3076	17.8	18.5	92.9
	A lot	1176	6.8	7.1	100.0
	Total	16666	96.2	100.0	
Missing		660	3.8		
Total		17326	100.0		

Step 26. Generate a cross-tabulation of the anxiety Extended Set questions: ANX_1 and ANX_3Y.

The syntax below produces a cross-tabulation of ANX_1: *How often you felt worried, nervous or anxious* (a measure of frequency) and ANX_3Y: *The level of those feeling the last time you felt worried, nervous or anxious* (a measure of intensity) – used to determine a single ANXIETY INDICATOR (ANX_INDICATOR).

CROSSTABS ANX_3Y BY ANX_1.

ANX_3Y: Level of feelings last time felt worried, nervous or anxious	ANX_1: How often feel worried, nervous or anxious?					
	Daily	Weekly	Monthly	A Few Times A Year	Never	Total
Not asked	0	0	0	0	6714	6714
A little	489	887	897	3417	0	5690
In between a little and a lot	589	725	535	1221	0	3070
A lot	548	256	123	248	0	1175
Total	1626	1868	1555	4886	6714	16649

Step 27. Create an ANXIETY INDICATOR (ANX_INDICATOR) based on the two anxiety questions ANX_1 and ANX_3Y.

Syntax below creates ANX_INDICATOR based on the distribution in the cross-tabulation above.

COMPUTE ANX_INDICATOR = 0.
IF (ANX_3Y LE 4 AND (ANX_1 = 4 OR ANX_1 = 5)) ANX_INDICATOR=1.
IF ((ANX_1 = 3) OR (ANX_1 LT 3 AND ANX_3Y=1) OR (ANX_1 = 2 AND ANX_3Y = 2)) ANX_INDICATOR = 2.
IF ((ANX_1 = 1 AND ANX_3Y = 2) OR (ANX_1 = 2 AND ANX_3Y = 3)) ANX_INDICATOR = 3.
IF (ANX_1 = 1 AND ANX_3Y = 3) ANX_INDICATOR = 4.
IF (ANX_1 = 9 OR ANX_3Y = 9) ANX_INDICATOR=9.
VALUE LABELS ANX_INDICATOR 0 'N/A' 9 "DON'T KNOW".
FREQUENCIES ANX_INDICATOR.

ANX_INDICATOR

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	11600	67.0	69.7	69.7
	2.00	3656	21.1	22.0	91.6
	3.00	845	4.9	5.1	96.7
	4.00	548	3.2	3.3	100.0
	Total	16649	96.1	100.0	
Missing		677	3.9		
Total		17326	100.0		

DEPRESSION

Step 28.Generate frequency distribution on DEP_1.

First, calculate frequency distributions on DEP_1: *How often do you feel depressed*?

FREQUENCIES DEP_1.

DEP_1: How often do you feel depressed?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Daily	756	4.4	4.5	4.5
	Weekly	926	5.3	5.6	10.1
	Monthly	1038	6.0	6.2	16.3
	A few times a year	4012	23.2	24.1	40.4
	Never	9929	57.3	59.6	100.0
	Total	16661	96.2	100.0	
Missing		665	3.8		
Total		17326	100.0		

Step 29. The syntax below recodes DEP_3 into DEP_3Y
1) to create a NOT ASKED category based on those who responded NEVER to DEP_1 and
2) to place "SOMEWHERE BETWEEN" numerically in-between "A LITTLE" and "A LOT".

> **IF** (DEP_1 = 5) DEP_3Y = 0.
> **RECODE** DEP_3 (SYSMIS=SYSMIS) (1=1) (2=3) (3=2) (ELSE=9) INTO DEP_3Y.
> **FREQUENCIES** DEP_3Y.

DEP_3Y: Level of feelings last time felt depressed

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not asked	9929	57.3	59.6	59.6
	A little	3775	21.8	22.7	82.3
	In between a little and a lot	2016	11.6	12.1	94.4
	A lot	935	5.4	5.6	100.0
	Total	16655	96.1	100.0	
Missing		671	3.9		
Total		17326	100.0		

Step 30. Generate a cross-tabulation of the depression Extended Set questions: DEP_1 and DEP_3Y.

The syntax below produces a cross-tabulation of DEP_1: *How often do you feel depressed* (a measure of frequency) and DEP_3Y: *The level of those feeling the last time you felt depressed* (a measure of intensity) – used to determine a single DEPRESSION INDICATOR (DEP_INDICATOR).

CROSSTABS DEP_3Y BY DEP_1.

DEP_3Y: Level of feelings last time felt depressed	DEP_1: How often do you feel depressed?					
	Daily	Weekly	Monthly	A Few Times A Year	Never	Total
Not asked	0	0	0	0	9929	9929
A little	161	346	548	2708	0	3763
In between a little and a lot	209	384	378	1042	0	2013
A lot	381	191	112	248	0	932
Total	751	921	1038	3998	9929	16637

Step 31. Create a DEPRESSION INDICATOR (DEP_INDICATOR) based on the two depression questions DEP_1 and DEP_3Y.

Syntax below creates DEP_INDICATOR based on the distribution in the cross-tabulation above.

COMPUTE DEP_INDICATOR = 0.
IF (DEP_3Y LE 4 AND (DEP_1 = 4 OR DEP_1 = 5)) DEP_INDICATOR=1.
IF ((DEP_1 = 3) OR (DEP_1 LT 3 AND DEP_3Y=1) OR (DEP_1 = 2 AND DEP_3Y = 2)) DEP_INDICATOR = 2.
IF ((DEP_1 = 1 AND DEP_3Y = 2) OR (DEP_1 = 2 AND DEP_3Y = 3)) DEP_INDICATOR = 3.
IF (DEP_1 = 1 AND DEP_3Y = 3) DEP_INDICATOR = 4.
IF (DEP_1 = 9 OR DEP_3Y = 9) DEP_INDICATOR = 9.
VALUE LABELS DEP_INDICATOR 0 'N/A' 9 "DON'T KNOW".

FREQUENCIES DEP_INDICATOR.

DEP_INDICATOR

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	13927	80.4	83.7	83.7
	2.00	1929	11.1	11.6	95.3
	3.00	400	2.3	2.4	97.7
	4.00	381	2.2	2.3	100.0
	Total	16637	96.0	100.0	
Missing		689	4.0		
Total		17326	100.0		

PAIN

Step 32.Generate frequency distribution on PAIN_2.

First, calculate frequency distributions on PAIN_2: *Frequency of pain in the past 3 months*.

FREQUENCIES PAIN_2.

PAIN_2: Frequency of pain in past 3 months

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	6636	38.3	39.8	39.8
	Some days	6556	37.8	39.3	79.2
	Most days	1227	7.1	7.4	86.5
	Every day	2245	13.0	13.5	100.0
	Total	16664	96.2	100.0	
Missing		662	3.8		
Total		17326	100.0		

Step 33. The syntax below recodes PAIN_4 into PAIN_4Y to place "SOMEWHERE BETWEEN" numerically in-between "A LITTLE" and "A LOT". It also creates the category NOT ASKED, if PAIN_2 is NEVER (1).

COMPUTE PAIN_4Y = PAIN_4.
IF (PAIN_2 = 1) PAIN_4Y=0.
RECODE PAIN_4Y (1=1) (2=3) (3=2).

FREQUENCIES PAIN_4Y.

PAIN_4Y: How much pain you had last time you had pain?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not asked	6636	38.3	39.8	39.8
	A little	4865	28.1	29.2	69.0
	In between a little and a lot	3296	19.0	19.8	88.8
	A lot	1869	10.8	11.2	100.0
	Total	16666	96.2	100.0	
Missing		660	3.8		
Total		17326	100.0		

Step 34. Generate a cross-tabulation of the PAIN Extended Set questions: PAIN_2 and PAIN_4Y.

The syntax below produces a cross-tabulation of PAIN_2: *Frequency of pain in the past 3 months* and PAIN_4Y: *How much pain you has the last time you had pain* (a measure of intensity) – used to determine a single PAIN INDICATOR (P_INDICATOR).

CROSSTABS PAIN_4Y BY PAIN_2.

PAIN_4Y: How much pain you had last time you had pain		**PAIN_2: Frequency of pain in past 3 months**				
		Never	Some days	Most days	Every day	Total
	Not asked	**6636**	0	0	0	6636
	A little	0	**4136**	**323**	**401**	4860
	In between a little and a lot	0	**1772**	**624**	**896**	3296
	A lot	0	**645**	**278**	**944**	1867
Total		6636	6553	1225	2241	16655

Step 35. Create a PAIN INDICATOR (P_INDICATOR) based on the two PAIN questions PAIN_2 and PAIN_4Y.

Syntax below creates P_INDICATOR based on the distribution in the cross-tabulation above.

COMPUTE P_INDICATOR = 0.
IF (PAIN_2 = 1) OR (PAIN_4Y = 1 AND (PAIN_2 = 2 OR PAIN_2 = 3)) P_INDICATOR = 1.
IF ((PAIN_2 = 2 AND (PAIN_4Y = 2 OR PAIN_4Y = 3)) OR (PAIN_2 = 3 AND PAIN_4Y = 2) OR (PAIN_2 = 4 AND PAIN_4Y = 1)) P_INDICATOR = 2.
IF (PAIN_2 = 3 AND PAIN_4Y = 3) OR (PAIN_2 = 4 AND PAIN_4Y = 2) P_INDICATOR = 3.
IF (PAIN_2 = 4 AND PAIN_4Y = 3) P_INDICATOR = 4.

RECODE P_INDICATOR (0=SYSMIS).
FREQUENCIES P_INDICATOR.

P_INDICATOR

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**1.00**	11095	64.0	66.6	66.6
	2.00	3442	19.9	20.7	87.3
	3.00	1174	6.8	7.0	94.3
	4.00	944	5.4	5.7	100.0
	Total	16655	96.1	100.0	
Missing		671	3.9		
Total		17326	100.0		

FATIGUE (Tired)

Step 36.Generate frequency distribution on FATIGUE Extended Set questions Tired_1, Tired_2 and Tired_3.

First, calculate frequency distributions on TIRED_1: *How often you felt tired in the past 3 months*.

> **FREQUENCIES** TIRED_1.

How often felt very tired or exhausted in past 3 months

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	5619	32.4	33.7	33.7
	Some days	8391	48.4	50.4	84.1
	Most days	1632	9.4	9.8	93.9
	Every day	1019	5.9	6.1	100.0
	Total	16661	96.2	100.0	
Missing		665	3.8		
Total		17326	100.0		

Step 37. Recode Tired_2 to 0 (not asked) if Tired_1 is 1 (Never).

If response to TIRED_1 is 1: Never, then TIRED_2 (*How long most recent tired or exhausted feelings lasted*) is not asked. This variable is recoded so these individuals are included in the syntax below.

> **IF** (TIRED_1 = 1) TIRED_2=0.
> **VALUE LABELS** TIRED_2 0 'NOT ASKED'.
> **FREQUENCIES** TIRED_2.

TIRED_2: How long most recent tired or exhausted feelings lasted?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not asked	5619	32.4	33.8	33.8
	Some of the day	8036	46.4	48.3	82.0
	Most of the day	1955	11.3	11.7	93.8
	All of the day	1036	6.0	6.2	100.0
	Total	16646	96.1	100.0	
Missing		680	3.9		
Total		17326	100.0		

Step 38. The syntax below recodes TIRED_3 into TIRED_3Y to place "SOMEWHERE BETWEEN" numerically in-between "A LITTLE" and "A LOT".

Also, if response to TIRED_1 is 1: Never, then TIRED_3 (*Level of tiredness*) is not asked. This variable is recoded so these individuals are included in the syntax below.

>   **COMPUTE** TIRED_3Y = TIRED_3.
>
>   **IF** (TIRED_1 = 1) TIRED_3Y=0.
>   **RECODE** TIRED_3Y (1=1) (2=3) (3=2).
>   **VALUE LABELS** TIRED_3Y 0 'NOT ASKED' 1 'A LITTLE' 2 'IN BETWEEN' 3 'A LOT'.
>   **VARIABLE LABELS** TIRED_3Y 'LEVEL OF TIREDNESS'.
>
>   **FREQUENCIES** TIRED_3Y.

TIRED_3Y: Level of tiredness

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not asked	5619	32.4	33.8	33.8
	A little	4912	28.4	29.5	63.3
	In between a little and a lot	4030	23.3	24.2	87.5
	A lot	2087	12.0	12.5	100.0
	Total	16648	96.1	100.0	
Missing		678	3.9		
Total		17326	100.0		

Step 39. Generate a cross-tabulation of the FATIGUE Extended Set questions: TIRED_1, TIRED_2 and TIRED_3Y.

The syntax below produces a cross-tabulation of TIRED_1: *How often you felt tired or exhausted in the past 3 months* (a measure of frequency) and TIRED_2: *How long those feelings lasted* (a measure of duration) and TIRED_3Y: *The level of tiredness* (a measure of intensity) – used to determine a single TIRED INDICATOR (T_INDICATOR).

>   **CROSSTABS** TIRED_2 BY TIRED_1 BY TIRED_3Y.

TIRED_3Y: Level of tiredness: *Intensity*	TIRED_2: How long feelings lasted: *Duration*	TIRED_1: How often felt very tired or exhausted in past 3 months: *Frequency*				
		Never	Some days	Most days	Every day	Total
Not asked	Not asked	5619				5619
A little	Some of the day		4066	264	124	4454
	Most of the day		252	73	27	352
	All of the day		68	15	18	101
In between	Some of the day		2224	400	166	2791
	Most of the day		497	266	123	887
	All of the day		194	71	84	349
A lot	Some of the day		536	165	84	785
	Most of the day		297	255	160	713
	All of the day		237	118	230	585
TOTAL		5619	8371	1627	1016	16633

Step 40. Create a FATIGUE INDICATOR (T_INDICATOR) based on the three FATIGUE questions TIRED_1, TIRED_2 and TIRED_3Y.

Syntax below creates T_INDICATOR based on the distribution in the cross-tabulation above.

```
COMPUTE T_INDICATOR = 0.
IF (TIRED_1 = 1) T_INDICATOR=1.
IF (TIRED_1 = 2 AND TIRED_2 = 1 AND TIRED_3Y = 1) T_INDICATOR = 1.
IF (TIRED_1 = 3 AND TIRED_2 = 1 AND TIRED_3Y = 1) T_INDICATOR = 1.

IF (T_INDICATOR NE 1 AND TIRED_3Y LT 3) T_INDICATOR = 2.
IF (T_INDICATOR NE 1 AND (TIRED_3Y = 3 AND TIRED_2 = 1)) T_INDICATOR = 2.
IF (T_INDICATOR NE 1 AND (TIRED_3Y = 3 AND TIRED_2 = 2 AND TIRED_1 = 2))
T_INDICATOR = 2.

IF ((T_INDICATOR NE 1 AND T_INDICATOR3 NE 2) AND TIRED_1 = 2) T_INDICATOR
= 3.
IF (TIRED_1 GE 3 AND TIRED_2 = 2 AND TIRED_3Y = 3) OR (TIRED_1 GE 3 AND
TIRED_2 = 3 AND TIRED_3Y = 3) OR (TIRED_1 GE 3 AND TIRED_2 = 1 AND TIRED_3Y
= 5) OR (TIRED_1 = 3 AND TIRED_2 = 2 AND TIRED_3Y = 5) T_INDICATOR = 3.
IF (TIRED_1 GE 3 AND TIRED_2 = 2 AND TIRED_3Y = 3) T_INDICATOR = 3.

IF (T_INDICATOR NE 1 AND T_INDICATOR3 NE 2 AND T_INDICATOR3 NE 3 AND
(TIRED_1 = 3 OR TIRED_1 = 4)) T_INDICATOR = 4.
```

IF (TIRED_1 GE 7 OR TIRED_2 GE 7 OR TIRED_3Y =9) T_INDICATOR = 9.

VALUE LABELS T_INDICATOR 0 'N/A' 9 "DON'T KNOW".
FREQUENCIES T_INDICATOR.

T_Indicator

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**1.00**	9949	57.4	59.8	59.8
	2.00	3864	22.3	23.2	83.0
	3.00	2312	13.3	13.9	96.9
	4.00	508	2.9	3.1	100.0
	Total	16633	96.0	100.0	
Missing		693	4.0		
Total		17326	100.0		

Creating Disability Status Indicators

Type of Disability Indicator		Number of Questions
SS_1	**Short Set (SS)**	**6**
Extended Set		
ES_1	**SS** + Hearing-indicator, Mobility-indicator, Cognition-indicator, Upper Body-indicator + PFAD (4)*	**25**
ES_2	**SS** + Hearing-indicator, Mobility-indicator, Cognition-indicator, Upper Body-indicator + AD (4)[†]	**20**
Short Set Enhanced		
ES_3	**SS** + Upper Body-indicator + AD (4)[†]	**12**

* PFAD (4): Pain, Fatigue, Anxiety and Depression Indicators at level 4
† AD (4): Anxiety and Depression Indicators at level 4

SS_1: WG Short Set Disability Indicator based on the 6 short set questions.

The syntax below calculates the WG Short Set Disability Indicator based on the six short set questions **SS_1** at the recommended cut-off. The level of inclusion is: at least 1 domain/question is coded A LOT OF DIFFICULTY or CANNOT DO AT ALL.

FREQUENCIES VIS_SS HEAR_SS MOB_SS COM_SS SC_SS COG_SS.

COMPUTE SS_1 = 0.
IF (MISSING(VIS_SS) AND MISSING(HEAR_SS) AND MISSING(MOB_SS) AND MISSING(COM_SS) AND MISSING(SC_SS) AND MISSING(COG_SS)) SS_1 = 9.

IF ((VIS_SS = 1 OR VIS_SS = 2) OR (HEAR_SS= 1 OR HEAR_SS = 2) OR (MOB_SS= 1 OR MOB_SS = 2) OR (COM_SS = 1 OR COM_SS = 2) OR (SC_SS = 1 OR SC_SS = 2) OR (COG_SS = 1 OR COG_SS = 2)) SS_1 = 0.

IF ((VIS_SS = 3 OR VIS_SS = 4) OR (HEAR_SS= 3 OR HEAR_SS = 4) OR (MOB_SS= 3 OR MOB_SS = 4) OR (COM_SS= 3 OR COM_SS = 4) OR (SC_SS = 3 OR SC_SS = 4) OR (COG_SS = 3 OR COG_SS = 4)) SS_1 = 1.

FREQUENCIES SS_1.

SS_1: WG Short Set Disability Identifier

		Frequency	Percent	Valid Percent	Weighted Estimate*
Valid	WITHOUT DISABILITY	14905	86.0	88.8	90.5
	WITH DISABILITY	1872	10.8	11.2	9.5
	Total	16777	96.8	100.0	
Missing		549	3.2		
Total		17326	100.0		

*Weighted estimate provided – but is not part of the SPSS syntax.

ES_1: SS_1 + Hearing-indicator, Mobility-indicator, Cognition-indicator + Upper Body-indicator + PFAD (4).

The syntax below calculates an Extended Set Disability Indicator (**ES_1**) based on 25 questions at the recommended cut-off. The level of inclusion is: at least 1 domain/question is coded A LOT OF DIFFICULTY or CANNOT DO AT ALL for the six short set question; severity levels 3 or 4 for the Hearing-, Mobility-, Cognition- and Upper body-Indicators; and severity level 4 for Pain-, Fatigue-, Anxiety- and Depression-Indicators.

COMPUTE ES_1 = 0.
IF (MISSING(SS_1) AND MISSING(H_INDICATOR) AND MISSING(MOB_INDICATORX) AND MISSING(COM_SS) AND MISSING(SC_SS) AND MISSING(RC_INDICATOR2) AND MISSING(UB_INDICATOR) AND MISSING(P_INDICATOR2) AND MISSING(T_INDICATOR3) AND MISSING(ANX_INDICATOR) AND MISSING(DEP_INDICATOR)) ES_1 = 9.

IF (SS_1 = 1 OR (H_INDICATOR = 3 OR H_INDICATOR = 4) OR (MOB_INDICATORX = 3 OR MOB_INDICATORX = 4) OR (RC_INDICATOR2 = 3 OR RC_INDICATOR2 = 4) OR (UB_INDICATOR = 3 OR UB_INDICATOR = 4) OR P_INDICATOR2 = 4 OR T_INDICATOR3 = 4 OR ANX_INDICATOR = 4 OR DEP_INDICATOR = 4) ES_1 = 1.

FREQUENCIES ES_1.

ES_1: WG-ES Disability Indicator based on 11 domains and 25 questions

		Frequency	Percent	Valid Percent	Weighted Estimate
Valid	WITHOUT DISABILITY	13823	79.8	79.8	82.3
	WITH DISABILITY	3503	20.2	20.2	17.7
	Total	17326	100.0	100.0	

*Weighted estimate provided – but is not part of the SPSS syntax.

ES_2: SS_1 + Hearing-indicator, Mobility-indicator, Cognition-indicator + Upper Body-indicator + AD (4)

The syntax below calculates an Extended Set Disability Indicator (ES_2) based on 20 questions at the recommended cut-off. The level of inclusion is: at least 1 domain/question is coded A LOT OF DIFFICULTY or CANNOT DO AT ALL for the six short set question; severity levels 3 or 4 for the Hearing-, Mobility-, Cognition- and Upper body-Indicators; and severity level 4 for Anxiety- and Depression-Indicators.

COMPUTE ES_2 = 0.
IF (MISSING(SS_1) AND MISSING(H_INDICATOR) AND MISSING(MOB_INDICATORX) AND MISSING(COM_SS) AND MISSING(SC_SS) AND MISSING(RC_INDICATOR2) AND MISSING(UB_INDICATOR) AND MISSING(ANX_INDICATOR) AND MISSING(DEP_INDICATOR)) ES_2 = 9.

IF (SS_1 = 1 OR (H_INDICATOR = 3 OR H_INDICATOR = 4) OR (MOB_INDICATORX = 3 OR MOB_INDICATORX = 4) OR (RC_INDICATOR2 = 3 OR RC_INDICATOR2 = 4) OR (UB_INDICATOR = 3 OR UB_INDICATOR = 4) OR ANX_INDICATOR = 4 OR DEP_INDICATOR = 4) ES_2 = 1.

FREQUENCIES ES_2.

ES_2: WG-ES Disability Indicator based on 9 domains and 20 questions

		Frequency	Percent	Valid Percent	Weighted Estimate*
Valid	WITHOUT DISABILITY	14222	82.1	82.1	84.6
	WITH DISABILITY	3104	17.9	17.9	15.4
	Total	17326	100.0	100.0	

*Weighted estimate provided – but is not part of the SPSS syntax.

ES_3: SS_1 + Upper Body-indicator + AD (4)

The syntax below calculates the WG Short Set ENHANCED Disability Indicator (ES_3) based on the 12 questions at the recommended cut-off. The level of inclusion is: at least 1 domain/question is coded

A LOT OF DIFFICULTY or CANNOT DO AT ALL for the six short set question; severity levels 3 or 4 for the Upper body-Indicators; and severity level 4 for Anxiety- and Depression-Indicators.

COMPUTE ES_3 = 0.
IF (MISSING(VIS_SS) AND MISSING(HEAR_SS) AND MISSING(MOB_SS) AND MISSING(COM_SS) AND MISSING(SC_SS) AND MISSING(COG_SS) AND MISSING(UB_INDICATOR) AND MISSING(ANX_INDICATOR) AND MISSING(DEP_INDICATOR)) ES_3 = 9.

IF ((VIS_SS = 3 OR VIS_SS = 4) OR (HEAR_SS= 3 OR HEAR_SS = 4) OR (MOB_SS= 3 OR MOB_SS = 4) OR (COM_SS= 3 OR COM_SS = 4) OR (SC_SS = 3 OR SC_SS = 4) OR (COG_SS = 3 OR COG_SS = 4) OR (UB_INDICATOR = 3 OR UB_INDICATOR = 4) OR ANX_INDICATOR = 4 OR DEP_INDICATOR = 4) ES_3 = 1.
RECODE ES_3 (9=SYSMIS).

FREQUENCIES ES_3.

ES_3: WG-SS Enhanced Disability Indicator based on 9 domains and 12 questions

		Frequency	Percent	Valid Percent	Weighted Estimate*
Valid	WITHOUT DISABILITY	14393	83.1	85.8	87.7
	WITH DISABILITY	2384	13.8	14.2	12.3
	Total	16777	96.9	100.0	
Missing		549	3.2		
Total		17326	100.1		

*Weighted estimate provided – but is not part of the SPSS syntax.

ПОСТКРИПТУМ: почему исключены домены Боль и Усталость?

Следует отметить исключение доменов Боли и Усталости из нескольких идентификаторов инвалидности, указанных выше. В ВГ состоялась серьезная дискуссия по этим доменам. Строго говоря, они не являются доменами функционирования, и наш анализ показал, что они оба сильно коррелируют с другими доменами, и что показатели инвалидности при включении этих доменов в опросник могут стать очень высокими.
Наконец, с точки зрения международной сопоставимости, эти домены менее универсальны; то есть они более восприимчивы к местному социокультурному влиянию, чем другие сферы деятельности.

По этим причинам мы решили исключить их из нескольких таких анализов, хотя их можно включать в дополнительные опросы, проводимые НСУ в конкретной стране.