Participation Assessment with Recombined Tools-Objective-17
(PART-O-17)
INTERVIEWER MANUAL
Revised 10/16/2024

PART-O was developed by the Traumatic Brain Injury Model Systems (TBIMS) Participation Special Interest Group via grants awarded by the National Institute on Disability and Rehabilitation Research of the US Department of Education (see www.tbindsc.org).

Use the following citation when referencing this document: Traumatic Brain Injury Model System Participation Special Interest Group. Participation Assessment with Recombined Tools-Objective-17 Interviewer Manual. Retrieved from www.tbindsc.org on access date. This manual provides information for interviewers ("data collectors") on how to administer the Participation Assessment with Recombined Tools-Objective-17 (PART-O-17), with a focus on its use with individuals with TBI. General guidelines are provided, as well as specific item instructions.

INTRODUCTION

Purpose of the PART-O. PART-O stands for Participation Assessment with Recombined Tools-Objective. Participation as measured by the PART-O refers to a term introduced in 2001 by the World Health Organization, "participation", which is defined as "involvement in a life situation". People with disability who have limitations on their functioning at home and in the community are said to have Participation Restrictions, defined as "problems an individual may experience in involvement in life situations". The PART-O was developed to quantify the extent to which individuals are involved In various life situations. The original intended purpose was to measure the long-term outcomes of persons participating in the TBIMS longitudinal study, however the instrument has also been used with persons with other sources of disability. In addition, the instrument shows potential for use in measuring change as the result of interventions or other events.

The Development of the PART-O. Developed by the National Institute on Disability and Rehabilitation Research's Traumatic Brain Injury Model Systems (TBIMS), the original PART-O included 24 items derived or modified from three measures commonly found in the TBI literature: Community Integration Questionnaire (Willer, Ottenbacher and Coad, 1994); Participation Objective, Participation Subjective (Brown, Dijkers, Gordon et al., 2004); and the Craig Handicap Assessment and Reporting Technique (Whiteneck, Charlifue, Gerhart et al., 1992). The PART-O is intended to sample the range of ways that people participate rather than include the entire universe of variants in participation. Whatever the questions' source, consistent categories for number of hours, number of times, and similar reports on involvement in activities that reflect participation were created. A subsequent revision, the PART-O-17, shortened the instrument to 17 items (Bogner, Whiteneck, Corrigan, et al., 2011) that can be summarized into three domain scores (Productivity, Social Relations, and Out and About). Two scoring algorithms are available for calculating a total score: the Averaged Total and the Balanced Total.

See the papers describing the development and scoring of the PART-O:

Whiteneck GG, Dijkers MP, Heinemann AW, Bogner JA, Bushnik T, Cicerone KD, Corrigan JD, Hart T, Malec JF, Millis SR. Development of the participation assessment with recombined tools-objective for use after traumatic brain injury. Arch Phys Med Rehabil. 2011 Apr;92(4):542-51.

Bogner JA, Whiteneck GG, Corrigan JD, Lai JS, Dijkers MP, Heinemann AW. Comparison of scoring methods for the participation assessment with recombined tools-objective. Arch Phys Med Rehabil. 2011 Apr;92(4):552-63.

GENERAL INSTRUCTIONS FOR INTERVIEWING

The PART-O was originally designed as a telephone interview but can also be administered in person and if necessary, by mail. Self-administration by mail is least preferred because it does not allow for the provision of interviewer clarification of questions.

The questions can be answered by the person him/herself, or by a proxy, i.e., someone else who knows his/her routines well. A proxy response can be used if the target person is not available or has major cognitive-communicative problems that would make a personal interview very difficult, if not impossible. If the proxy selected does not know the answer to one or more questions, it is acceptable for him/her to consult with others who may have a better opportunity to observe the person. The goal of PART-O is to describe the objective situation the person of interest finds him/herself in; while generally he or she has the best knowledge, others may have useful and reliable information and should be asked to contribute information. (Similarly, if the target person is being interviewed, she or he may ask others for help answering the PART-O questions.)

Providing assistance to respondents. The purpose of the PART-O-17 is to obtain an objective quantification of involvement in various life situations. The interviewer and interviewee should work together to obtain the most accurate responses. After reading each question verbatim, the interviewer should be prepared to provide clarification of questions, probes to assist with recall, and assistance with calculations of frequency.

In some situations, the respondent's initial response may appear unlikely, and should be gently probed further. For example, if the frequency of engaging in various tasks approaches or exceeds the total number of waking hours in a week (112), then the person may have overestimated engagement in one or more tasks. The response may also be unlikely in light of earlier answers or other sources of known information about the participation.

Use of response categories. The response categories can assist the person in determining a response and should be read aloud to the participant after each question. The response "Don't know, unsure, refused" should not be read aloud.

The interviewer should ensure that the categories are being used properly. Some respondents may assume that the middle or last categories are normative and based their response on their perception of the norm. If the interviewee is consistently picking one response category (e.g. always 10-19 hours), then further probing should be conducted to ensure that the person is basing the response on personal experience rather than on social expectations.

What Is Typical? Several questions ask for the "typical" amount of participation in an activity. Many interviewees will ask what is meant by "typical"; the reply of "routine", "normal", "usual", "ordinary", or "what you usually do" might help. If people have a daily or weekly routine, what is "typical" is easily determined. As the interest of researchers is in these routines rather than in the exceptions, anything that is an exception to the rule should be disregarded – including the respondent in the current or previous week being sick or on vacation.

"It varies" is a common response interviewees give to these types of questions. A first thing to do in response is to see whether the variation is still small enough to fit clearly within one of the PART-O response categories. (For instance, if homemaking takes 15-20 hours a week [that is, 15 hours some weeks, 20 in others], it is probably safe to check the category "10-19 hours".) If the variation exceeds the boundaries of any single category, there is no "typical" for a week, but biweekly or other routines may be evident that can be used. For example, if it is possible to sum across four different weekly routines, and then divide by 4, the result will provide a useful estimate.

Sometimes people with TBI may specify as "typical" their routine before injury, even though, for example, they have not worked in several years. It is important to establish that the person's report focuses on current routines. If there has been a major change in routine lately, it is appropriate to base the response that is recorded on the most recent period, as long as there have been three-four weeks of the new pattern, and the new pattern is expected to continue. If a major change in routine is reported to be only temporary, and there is an expectation to return to the previous pattern, then use the response that is expected to occur the vast majority of the year (or time since rehab discharge if less than a year).

Assistance with estimating frequency. Note that exact hours or days are not needed, because the response categories are based on a range of hours or days. The method used to determine the frequency of participation in an activity can vary by activity. The frequency of activities engaged in rarely will likely be most easily determined by recalling actual events. For example, when asked about the frequency of movie attendance, the respondent may recall going to Movie A and B during the past month. After verification that the month was 'typical', then the response would be "twice per month".

When activities are engaged in more often, an estimation of the frequency can be derived from a calculation based on the individual's routine. For example, if the person engages in housework an hour a day, then the frequency per week could be calculated as 1*7, or 7 hours. The interviewer can assist with the calculation but should do so out loud so that the respondent can determine if the correct assumptions were made (e.g. in the above example, the person may not do housework on Sundays, therefore the calculation should be based on 1*6).

If the subject gives a range of hours/days that overlaps with two or more of the response categories, ask the respondent to choose one of the categories. For instance: "In a typical week, how many hours do you spend in homemaking activities"? Answer: "Oh, 9 to 12 hours". "Would you say it's more likely to be 5 to 9 hours a week, or 10-19 hours a week?"

Independent performance is not required. Individuals do not need to be performing an activity independently for the activity to be counted. Supervised and assisted activities should be included in the response, as well as those performed independently.

Verifying completeness and accuracy. The interviewer should be alert to answers that are unlikely, and probe accordingly to ensure the most accurate response. Some situations that may be encountered include:

- One answer or the total frequency reported for multiple items exceeds normative expectations (e.g. person claims to be working 35+ hours a week, going to school 35+ hours per week, and homemaking 35+ hours/week)
- The response is inconsistent with a response from earlier in the interview (e.g., working 40 hours on the PART-O, but not working on another employment-related item)

After the interview is complete, check again for completeness and consistency, calling the person back if necessary.

INSTRUCTIONS FOR INDIVIDUAL ITEMS

INSTRUCTIONS QUESTIONS 1 THROUGH 3: HOURS PER WEEK ENGAGED IN PRODUCTIVE ACTIVITIES

It is not important whether the person performs these activities by him/herself or together with or is supervised by someone else. A simple count of hours spent in the separate activities is all that is needed.

1. In a typical week, how many hours do you spend in active homemaking, including cleaning, cooking, and raising children?

In addition to cleaning, cooking, and raising children, such items as making beds, doing laundry, taking care of dependent persons other than children (as long as they reside in the home), making shopping lists and other administrative activities related to the household, can be included. Grocery shopping is counted under question 10 and should not be counted here. Gardening and home repairs are not included in this item.

If there has been a major change in routine, it is appropriate to base the response that is recorded on the most recent period, as long as there have been three-four weeks of the new pattern, and the new pattern is expected to continue. If a major change in routine is reported to be only temporary (i.e. due to broken leg), and there is an expectation to return to the previous pattern, then use the response that is expected to occur the vast majority of the year (or time since rehab discharge if less than a year).

For hours spent "raising children", only count hours spent ACTIVELY parenting and engaged with the child. If participant is up for 2 hours each night with a baby, count those hours. Sleeping hours should not be counted. The participant should be performing some type of care activity with the child. A child is defined as a person under the age of 18. Probe any answer of "24 hours a day".

2. In a typical week, how many hours do you spend in school working toward a degree or in an accredited technical training program, including hours in class and studying?

The focus of this question is time spent on formal educational activities. If the interview is administered during a school vacation, it is permissible to base the response on the routine

during the school year. However, if the person has dropped out of school (that is, is not planning to return after the vacation), the proper response is "none".

Included in this category are all activities and time spent that is a requirement of the curriculum, including class time, time in laboratory and other practice places, time in study hall and library, and time spent studying for homework and exams. Time spent in extracurricular activities (sports teams, school clubs) should not be counted. Transportation to and from school should not be counted. Continuing education and conference attendance are not included.

3. In a typical <u>week</u>, how many <u>hours</u> do you spend working for money, whether in a job or self-employed?

Included in this category is work for an employer, self-employment, and paid internship. If the interview is administered during a vacation or temporary lay-off, it is permissible to base the response on the routine during periods of employment. Time spent in work-related but unpaid activities (transportation to/from work, hanging out with coworkers, taking classes to improve skills) should not be counted.

When a person's job includes areas of participation included in the Social or Out and About subscales, hours spent working for money should be reported in the Hours working per Week item. Those work hours should <u>not</u> be reported in the Social or Out and About items. Social and Out and About items should occur during non-work hours. For example, a person whose job is to shop in a grocery store to fill customer orders for delivery or pick-up, should <u>not</u> also count those times shopping as part of their job in response to the Shopping item in the Out and About subscale. A therapist whose job is to support and help clients, should <u>not</u> count those as times they give emotional support or help others in the Social subscale.

INSTRUCTIONS FOR QUESTIONS 4 THROUGH 7: TIMES PER WEEK ENGAGED IN SOCIAL ACTIVITIES

The questions in this section ask about estimates of frequency of social activities that are components of participation. As long as there was some form of interaction, even if it requires maximum assistance and the interaction is minimal (e.g., minimally conscious participant that needs maximum assistance to socialize at family gatherings), this can be counted as socializing. The PART questions are not meant to judge the quality of the interaction, rather whether an interaction occurred.

4. In a typical week, how many times do you socialize with friends, in person or by phone? Please do not include socializing with family members.

Socializing includes any voluntary activity with its primary purpose being the enjoyment of another's company. Talking is often a major component of socializing, and therefore talking on the phone with friends should be included. Friends include close or best friends, acquaintances, work colleagues, neighbors and anyone who the person wants to call a friend. Alternative phrases for socializing include getting together with, talking with, doing things with.

Texting, using a mobile phone can be included if there is sustained social interaction, that is there is an exchange of multiple texts sent and received for social purposes (i.e., a single

exchange for informational purposes such as estimated time at arrival at destination would not count.) <u>Instant messaging and other forms of internet communication should be counted under internet communication</u>.

The number of socializing occasions reported could result from repeated contacts with a single person ("I call my best friend every day"), single contacts with multiple people, or a combination of the two. The duration of each contact is not considered; therefore, any contact that meets the definition is counted separately.

Friends exclude any relative (by blood or marriage).

5. In a typical week, how many times do you socialize with family and relatives, in person or by phone?

Socializing includes any voluntary activity with as its primary purpose enjoying one another's company and jointly engaging in pleasant activities. Talking is a major component of socializing, and therefore talking on the phone with family and relatives should be included.

Texting, using a mobile phone can be included if there is sustained social interaction, that is there is an exchange of multiple texts sent and received for social purposes (i.e., a single exchange for informational purposes such as estimated time at arrival at destination would not count.) Instant messaging and other forms of internet communication should be counted under internet communication.

Socializing with family members sharing the same household can be counted, but only when this clearly is an organized activity and/or one that involves active engagement and interaction, aka "quality time" ("once a week my wife and I go on a date"). Two people sitting in front of a TV and exchanging comments would not be considered socializing.

The number of socializing occasions reported could result from repeated contacts with a single person ("I call my mother every day"), single contacts with multiple family members, or a combination of the two. The duration of each contact is not considered; therefore, any contact that meets the definition is counted separately.

6. In a typical week, how many times do you give emotional support to other people, that is listen to their problems or help them with their troubles?

The focus of this question is on providing (rather than receiving) emotional support. Providing emotional support is defined as helping others who have emotional or other problems, by listening to them, giving advice, or otherwise help them deal with life. It is more than just giving information ("My kids have all kinds of questions, and I answer them). Alternative terms include giving advice, counseling, "being there for them", assisting/helping with emotional issues, etc.

The people receiving the emotional support can be family and relatives, friends, colleagues, neighbors, schoolmates and any other person. There is no minimum duration to an event defined as emotional support.

The count provided here may overlap with the counts of socializing – that is, instances of socializing with friends or family already reported may be singled out here and reported as

instances of giving emotional support. It is not necessary to "split hairs", here, to avoid the relatively minor "double counting" that may occur.

If emotional support is given as part of the participant's job (e.g. professional counselor or nurse), then do not count those interactions under PRTEmotSupF. Only count emotional support given socially.

7. In a typical week, how many times do you use the Internet for communication with others? For example, text, email, virtual meetings, social media.

Texting is counted under items 4 and 5 and should not be counted under Item 7. Item 7 relates to other uses of the internet for communication. Simply surfing the web is not included; sending and receiving messages is the activity of interest. The person must either initiate a message or respond to another's message. It is permissible to provide specific contemporary examples such as (as of 2021) Facebook Messenger, Instagram, Twitter, Zoom get-togethers, text, etc.

- Interactive video gaming can be considered a form of internet communication as long as the communication is 2-way. Data collectors should clarify if in doubt.
- Sessions of sending messages should be counted.
- Tweeting and other instances of super-short messages should be counted.
- Instances of commercial messages (spam, etc.) received should not be counted.
- Emails sent as part of work or school activities should not be counted as the purpose of this item is to measure social activities.

INSTRUCTIONS FOR QUESTION 8: LEAVING THE HOUSE

8. In a typical week, how many days do you get out of your house and go somewhere? It could be anywhere – it doesn't have to be anyplace "special".

The number of days is to be counted, not the number of times the house is left to go someplace. Going into the garden or some other part of the property ("out on the porch") should not be counted; the idea is to count days there is an opportunity to interact with others who might be met on the street, on public transportation, etc. In other words, the person must at least "hit the sidewalk" to be counted as "leaving the house".

As noted above, the participant must leave the residential property to be considered out of the house. If a participant lives on a rural farm with extensive acreage and their family also lives on the same property in different houses, visiting each other does not count as leaving. If however, the participant lives and works on one farm property, but also farms non-contiguous acreage, then going to other farm properties could be counted as leaving the house.

The answer should be consistent with answers from the other items in the interview regarding level of activity. If answers from other questions suggest the person does not live an active life outside of the home, but the answer to this question is of a higher frequency, probe further.

INSTRUCTIONS FOR QUESTIONS 9 THROUGH 14: TIMES PER MONTH OUT AND ABOUT

The questions in this section ask about estimates of monthly frequency of activities that require being out and about in the community. Different response options are used for items 9-11 and 12-14. Refer to the interview for the response option.

9. In a typical month, how many times do you eat in a restaurant?

"Eating in a restaurant" is to be taken literally – ordering take out, home delivery of pizza, picking up food to eat at work are not to be counted. The meal needs to be ordered (not necessarily by the respondent) and eaten in the restaurant. Fast food restaurants can be counted, as well as more formal establishments.

10. In a typical month, how many times do you go shopping? Include grocery shopping, as well as shopping for household necessities, or just for fun.

In addition to shopping for groceries and other household necessities, such forms of shopping as hanging out at the mall, trips to the hardware store, to a corner store, and any other visit to a commercial establishment (other than a restaurant) should be included.

11. In a typical month, how many times do you engage in sports or exercise outside your home? Include activities like running, bowling, going to the gym, swimming, walking for exercise and the like.

Any sport and any type of exercise can be counted as long as it is outside of the home. Walking for exercise can be a separate trip (e.g., power-walking in the park), or combined with other activities (e.g., walking to one's cousins house rather than driving, to get the benefit of the exercise).

In-home activity, however energetic, is not to be counted. The focus of the PART-O is on leaving one's house and interacting with others, rather than the cardiovascular benefit of exercise.

Do not count traditional physical therapy. However, If the physical therapy is more like an exercise coach, this would be counted. The rationale for not counting traditional therapy is that it does not really involve exercising with the community – it is confined to interaction within the hospital or outpatient clinical setting. For the same reason, talking to one's speech therapist would not count as social interaction.

12. In a typical month, how many times do you go to the movies?

Showings of movies in commercial movie-houses are to be included, as well as any other showing of movies, whether or not an entry fee is paid. Watching movies at home, whether on TV or otherwise, is not included.

13. In a typical month, how many times do you attend sports events in person, as a spectator?

Clarification can include: going to a ballgame or other sports event, going to watch sports, etc. The individuals engaging in the sport need not be professionals; amateur and professional sports at all levels are included, including one's own kids' games. The respondent must leave his/her residence to attend the sporting event, indoors or outdoors.

In order to code sporadic attendance of sporting events, determine the portion of the year spent in the activity. Multiply the number of times they typically attend the activity during the season by the portion of the year (e.g., if they attend baseball 4 times a month for three months, then the answer would be $4 \times .25=1$).

14. In a typical month, how many times do you attend religious or spiritual services? Include places like churches, temples and mosques.

Clarification can include: going to mass, going to services, attending a church service, etc.

Only included are formal services in a church, mosque or temple, or the equivalent in religious and spiritual organizations. Bible study can be included if the participant considers the activity to be a formal service. Other religion-based activities, such as church choir practice, can be included under social activities (question 4).

Televised or online virtual services should not be counted.

QUESTIONS ON RELATIONSHIP STATUS

Questions 15-17 involve relationships that provide the basis for participation.

15. Switching, now, to a somewhat different kind of question . . . Do you live with your spouse or significant other?

The purpose of the question is to determine whether the person lives with his/her spouse, partner or someone else who can be equated with a spouse. The crucial element here is that the person needs to be living with the spouse/partner. People who are separated or divorced should be coded no, unless they are living with a partner who is not their (ex-)wife or husband.

16. Are you currently involved in an ongoing intimate, that is, romantic or sexual, relationship?

If question 15 was answered YES, then question 16 is automatically coded YES (receiving 5 points) and can be skipped. If question 15 is NO, then ask question 16.

No clear demarcation exists between "dating someone" and being in an intimate relationship; let the respondent make the decision whether the relationship he/she has rises to the level of an intimate relationship. Sexual intimacy can be part of such an intimate relationship, but does not need to be.

17. [Not including your spouse or significant other], do you have a close friend in whom you confide?

A close friend can be of the same or opposite sex, but the relationship is not romantic or sexual, as are those captured in questions 15 and 16. The goal of question 17 is to determine whether the respondent has any strong bonds in addition to marriage, partnership or another intimate relationship. To make that clear, for those who are married/have a significant other, the question should be phrased: "Not including your spouse or significant other, do you have a close friend in whom you confide?" For those who are involved in a romantic relationship (23), the question should be phrased: "Not including your fiancée/significant other, do you have a close friend in whom you confide?"

Clarification for close friend includes best friend, someone you share your deepest thoughts with, etc. Friends can only be defined as other human beings (dogs and "god" do not count). "Confide" can be clarified as "sharing your deepest thoughts." A close friend cannot just be any colleague or buddy, unless this is a person "in whom you confide". A person can have multiple close friends; however, if the answer to the question: "Do you have a close friend in whom you confide?" is "lots", it probably is appropriate to probe what exactly is meant by "close".

Appendix A: PART-O, 17-Item Version

#	Item	Bogner et al 2011 Subscales	Data Dictionary Headings
1	In a typical week, how many hours do you spend in active homemaking, including cleaning, cooking, and raising children?	Productivity	Activities
2	In a typical week, how many hours do you spend in school working toward a degree or in an accredited technical training program, including hours in class and studying?	Productivity	Activities
3	In a typical week, how many hours do you spend working for money, whether in a job or self-employed?	Productivity	Activities
4	In a typical week, how many times do you socialize with friends, in person or by telephone? Please do not include socializing with family members.	Social Relations	Social
5	In a typical week, how many times do you socialize with family and relatives, in person or by telephone?	Social Relations	Social
6	In a typical week, how many times do you give emotional support to other people, that is, listen to their problems or help them with their troubles?	Social Relations	Social
7	Bogner 2011 wording: In a typical week, how many times do you use the Internet for communication, such as for e-mail, visiting chat rooms, or instant messaging? TBIMS Wording: In a typical week, how many times do you use the Internet for communication with others? For example, text, email, virtual meetings, social media.	Social Relations	Social
8	In a typical week, how many days do you get out of your house and go somewhere? It could be anywhere; it does not have to be anyplace "special."	Out and About	Mobility
9	In a typical month, how many times do you eat in a restaurant?	Out and About	Community
10	In a typical month, how many times do you go shopping? Include grocery shopping, as well as shopping for household necessities or just for fun.	Out and About	Community
11	In a typical month, how many times do you engage in sports or exercise outside your home? Include activities like running, bowling, going to the gym, swimming, walking for exercise, and the like.	Out and About	Community
n/a	In a typical month, how many times do you do volunteer work? (Part of TBIMS but not included in scoring)	Unassigned	Community
12	In a typical month, how many times do you go to the movies?	Out and About	Community

13	In a typical month, how many times do you attend	Out and About	Community
	sports events in person, as a spectator?		
14	In a typical month, how many times do you attend	Out and About	Community
	religious or spiritual services? Include places like		
	churches, temples, and mosques.		
15	Switching now to a somewhat different kind of	Social Relations	Relationship
	question Do you live with your spouse or		
	significant other?		
16	Are you currently involved in an ongoing intimate,	Social Relations	Relationship
	that is, romantic or sexual relationship?		
17	Not including your spouse or significant other, do you	Social Relations	Relationship
	have a close friend in whom you confide?		

Appendix B: PART-O, 17 Item version, Scoring

#	Item	Во	gner et al 2011 Response Scale
1	In a typical week, how many hours do you spend	0	None
	working for money, whether in a job or self-employed?	1	1 to 4 hours
		2	5 to 9 hours
		3	10 to 19 hours
		4	20 to 34 hours
		5	35 or more hours
2	In a typical week, how many hours do you spend in	0	None
	school working toward a degree or in an accredited	1	1 to 4 hours
	technical training program, including hours in class and	2	5 to 9 hours
	studying?	3	10 to 19 hours
		4	20 to 34 hours
		5	35 or more hours
3	In a typical week, how many hours do you spend in	0	None
	active homemaking, including cleaning, cooking, and	1	1 to 4 hours
	raising children?	2	5 to 9 hours
		3	10 to 19 hours
		4	20 to 34 hours
		5	35 or more hours
4	In a typical week, how many times do you socialize with	0	None
	friends, in person or by telephone? Please do not	1	1 to 4 times
	include socializing with family members.	2	5 to 9 times
		3	10 to 19 times
		4	20 to 34 times
		5	35 or more times
5	In a typical week, how many times do you socialize with	0	None
	family and relatives, in person or by telephone?	1	1 to 4 times
		2	5 to 9 times
		3	10 to 19 times
		4	20 to 34 times
		5	35 or more times
6	In a typical week, how many times do you give	0	None
	emotional support to other people, that is, listen to	1	1 to 4 times
	their problems or help them with their troubles?	2	5 to 9 times
		3	10 to 19 times
		4	20 to 34 times
		5	35 or more times
7	Bogner 2011 wording:	0	None
	In a typical week, how many times do you use the	1	1 to 4 times
	Internet for communication, such as for e-mail, visiting	2	5 to 9 times
	chat rooms, or instant messaging?	3	10 to 19 times
	TBIMS wording:	4	20 to 34 times
	In a typical week, how many times do you use the	5	35 or more times
	Internet for communication with others? For example,		
	text, email, virtual meetings, social media.	L	

8	In a typical week, how many days do you get out of your	0 None		
	house and go somewhere? It could be anywhere; it does	1.25 1 to 2 days		
	not have to be anyplace "special."	2.50 3 to 4 days		
		3.75 5 to 6 days		
		5 7 days		
9	In a typical month, how many times do you eat in a	0 None		
	restaurant?	1 1 to 4 times		
		2 5 to 9 times		
		3 10 to 19 times		
		4 20 to 34 times		
		5 35 or more times		
10	In a typical month, how many times do you go	0 None		
	shopping? Include grocery shopping, as well as shopping	1 1 to 4 times		
	for household necessities or just for fun.	2 5 to 9 times		
	,	3 10 to 19 times		
		4 20 to 34 times		
		5 35 or more times		
11	In a typical month, how many times do you engage in	0 None		
	sports or exercise outside your home? Include activities	1 1 to 4 times		
	like running, bowling, going to the gym, swimming,	2 5 to 9 times		
	walking for exercise, and the like.	3 10 to 19 times		
		4 20 to 34 times		
		5 35 or more times		
12	In a typical month, how many times do you go to the	0 None		
	movies?	11 time		
		2 2 times		
		3 3 times		
		4 4 times		
		5 5 or mor times		
13	In a typical month, how many times do you attend	0 None		
	sports events in person, as a spectator?	11 time		
		2 2 times		
		3 3 times		
		4 4 times		
		5 5 or mor times		
14	In a typical month, how many times do you attend	0 None		
	religious or spiritual services? Include places like	11 time		
	churches, temples, and mosques.	2 2 times		
		3 3 times		
		4 4 times		
		5 5 or mor times		
15	Switching now to a somewhat different kind of question	0 No		
	Do you live with your spouse or significant other?	5 Yes		
16	Are you currently involved in an ongoing intimate, that	0 No		
	is, romantic or sexual relationship?	5 Yes		
17	Not including your spouse or significant other, do you	0 No		
	have a close friend in whom you confide?	5 Yes		
	,	1		

Scoring instructions: Average Total and Domain Scores

<u>Step 1</u>: Calculate the domains scores. There are 3 domains: (1) Productivity, (2) Social Relations, and (3) Out and About.

Productivity = [Item 1 + Item 2 + Item 3] ÷ 3	Possible Range 0-5
Social Relations = [Item 4 + Item 5 + Item 6 + Item 7 + Item 15 + Item 16 + Item 7] ÷ 7	0-5
Out and About = [Item 8 + Item 9 + Item 10 + Item 11 + Item 12 + Item 13 + Item 14] ÷ 7	0-5
Step 2: Calculate the total score.	
PART-O Averaged Total Score = [Productivity + Social Relations + Out and About] ÷ 3	0-5

Scoring instructions: Balanced Average Total Score

Step 3: Calculate the Standard Deviation of each domain score, using the following formula:

Standard Deviation of Domain Scores = $V [\sum (Domain Score - Averaged Total Score)^2 \div (n-1)]$

where n = 3 (the number of domains)

SUM [(Productivity Domain Score – Averaged Total Score) 2 + (Social Relations Domain Score – Averaged Total Score) 2 + Out and About Domain Score – Averaged Total Score) 2] \div (number of domains(3) – 1) and then take the square root of the total

Then, subtract this amount from the PART-O Averaged Total Score

PART-O Balanced Total Score = PART-O Averaged Total Score – Standard Deviation of Domain Scores

Scoring instructions: Z Scores

Standardized scores can be calculated to compare a participant's score to the general population sample. Bogner et al (2011) used the means and SDs from the BRFSS no disability group to create z scores, which are available for the PART-O Averaged Score and the PART-O Balanced Total Score. The formulas for conversion to z scores are as follows:

PART-O Averaged Total Z = PART-O Averaged Total Score - 2.467 ÷ 0.523

PART-O Balanced Total Z = PART-O Balanced Total Score - 1.725 ÷ 0.623.

Scoring instructions: RASCH Scores

See Excel file that accompanies this manual which is also available in the publication: Malec JF, Whiteneck GG, Bogner JA. Another look at the PART-O using the traumatic brain injury model systems national database: scoring to optimize psychometrics. Archives of physical medicine and rehabilitation. 2016 Feb 1;97(2):211-7.