WHOLISTIC HEALTH ASSESSMENT



This manual provides information on the development and scoring of the Wholistic Health Assessment ©.



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This assessment and outcomes tool is intended to assess and address areas of improvement for individuals, programs, and providers. Health decisions and actions are at the sole discretion of the individual and healthcare professional. The author does not assume any liabilities.

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OVERVIEW

The Wholistic Health Assessment © Version 4 was designed by Sheena Crawford to accompany the Wholistic Health Program ©, although the assessment can be used with any program or alone. It assesses: Trauma, Coping Mechanisms, Mental Health, Physical Health, Spiritual Health (optional), and Outlook on Life as well as demographic questions to capture a wholistic picture of an individual's health and quality of life. It is designed for the general population; adults 18 years of age and older, with acceptable administration beginning at 13 years of age. This assessment is free to download, use, and distribute for individuals and healthcare providers. Although manual administration via paper is effective, it is designed to be completed electronically.

Frequency of Administering

This assessment is administered at any point to determine individual scores. When the assessment is used to assess progress in a program, it is administered within 24 hours before beginning the program (pre score) and within 24 hours after completing the program (post score). It can be administered in the middle of the program at the administrator's discretion.

Pre vs. Post Scores

To determine the level of improvement, the post score (e.g. 6) is subtracted from the pre score (e.g. 10) for the difference (e.g. 4). A decline in score (or positive number once subtracted) of at least two (2) is an improvement. An increase in score (or negative number once subtracted) of at least negative two (-2) is deterioration. A decline or increase in score of one, zero, or negative one (1, 0, or -1) is considered no change, as the decline or increase is insignificant.

Changes to Assessment

This assessment is copyright protected, tested for reliability and validity, and should not be altered as changes can reduce the integrity of outcomes. Please submit any suggested changes to info@outcomesexcellence.org for consideration. If changes are approved, you will be notified in writing and the assessment will be updated and published as a new version. This assessment is continuously evaluated for improvement and updates in vernacular.

Evidence

This assessment is based on a formative model and was vigorously tested alongside the Wholistic Health Program ©. The Wholistic Health Program © and research article (Crawford, 2023) details the literature, research, data, pilots, theories, therapies, techniques, and conceptual framework that was utilized to develop the program and assessment.



QUESTIONS

Trauma Questions

Do you consider yourself to have experienced any of the following? Select all that apply: *Required
Frequently Called Hurtful Names and Cussed at By Parent, Guardian, or Lover (e.g. mental abuse)
Not Provided Attention, Support, or Nurturing Consistently By Parent or Guardian (e.g.
emotional abuse)
Punched, Smacked, Pushed, Tripped, etc. By a Parent, Guardian, or Lover (e.g. physical abuse)
Not Provided Food or Clothing Consistently By a Parent or Guardian (e.g. neglect)
Involved in Unwanted or Forced Sexual Activity (e.g. rape)
Adult Responsibilities as a Child Consistently (e.g. paying bills)
Witnessed Violence Consistently at Home
Witnessed Substance Abuse Consistently at Home
Witnessed Mental Illness Consistently at Home
Witnessed Parent(s) Separation/Divorce
Witnessed Parent(s) Incarcerated
Experienced Homelessness or Moving Consistently (e.g. shelter, street, foster care)
Experienced a Loss of Limb(s), Major Bodily Functions, or Extreme Sickness (e.g. cancer)
Experienced a Significant Natural Disaster (e.g. loss of home/family)
Directly Affected by Terrorism, Community, or School Violence (e.g. gangs, racism)
Indirectly Affected by Terrorism, Community, or School Violence (e.g. school shooting)
Absent, Inactive, or Death of a Close Loved One (e.g. parental figure or child)
For any experiences you chose above, do you consider them to be traumatic? (Trauma is defined as
"an event, or series of events, that causes or caused moderate to severe stress reactions")
Yes
No No
N/A (I didn't experience any of the above)
Which statements are true regarding the response to your traumatic experience(s)? Select all that
apply:
I talked to a professional or counselor about my trauma
I talked to my family and/or friends about my trauma

- I talked to my family and/or friend
- I didn't talk to anyone about my trauma
- □ N/A (I didn't experience trauma)



Coping Mechanisms

Coping Questions - Within the last four weeks, approximately how often did you use the following coping mechanisms to deal with unpleasant experiences?	5+x Week	3-4x Week	1-2x Week	1-2x Month	N/A Rare			
Substance Use	l			I				
1 - Alcohol								
2 - Drugs								
3 - Overeating								
4 - Tobacco/Smoking								
Entertainment								
5 - Excessive Gaming								
6 - Excessive Shopping								
7 - Gambling								
Sexual								
8 - Casual Sex								
9 - Pornography								
Relational								
10 - Blaming Self or Others								
11 - Hurting Self or Others								
12 - Disengagement/Detachment/Self Isolation								
Creative								
13 - Drawing/Painting/Art								
14 - Music								
15 - Poetry/Poetical Lyrics								
16 - Reading								
Dialogue								
17 - Group Discussion								
18 - Individual Counseling								
19 - Talking/Venting								
20 - Writing/Journaling								
Active								
21 - Sensory/Fidgets								
22 - Dancing								
23 - Exercising								
24 - Walking								
Thought								



25 - Change Something for Different Results			
26 - Analyze the Situation for Better Understanding			
27 - Daydream or Imagine a Better Situation			
28 - Focus on the Positives			

Mental Health Questions

Do you have any mental health diagnoses? Select all that apply: *Required

- Post-Traumatic Stress Disorder Diagnosis
- Depression Diagnosis
- Substance Use Disorder Diagnosis
- Other Serious Mental Health Diagnosis

Mental Health Questions - Within the last four weeks, how often did you experience:	5+x Week	3-4x Week	1-2x Week	1-2x Month	N/A Rare
Sleeplessness					
Alcohol Use					
Anxiety					
Depression					
Drug Use					
Grief					
Guilt					
Irritability					
Stress					
Regret					
Suicidal Thoughts					
Uncertainty					
Worry					

Physical Health Questions

Do you have any physical health diagnoses? Select all that apply: *Required

Pregnancy/Fertility Issues
 Curable STD/STI Diagnosis
 Incurable STD Diagnosis
 Incurable STD Diagnosis
 Cancer Diagnosis
 Diabetes Diagnosis
 Severe Vitamin A Deficiency
 Severe Vitamin B Deficiency



Severe Vitamin C Deficiency

- Severe Vitamin D Deficiency
- Severe Vitamin E Deficiency

- Severe Vitamin K Deficiency
- Autoimmune Disease Diagnosis
- Other Serious Physical Health Diagnosis

Nutrition Questions - Within the last four weeks, how often did you consume:	5+x Week	3-4x Week	1-2x Week	1-2x Month	N/A Rare
Vegetables and/or fruit?					
Beans and/or lentils?					
Grains and/or breads?					
Dairy?					
Meat?					
Fish/seafood?					
Sweets/desserts?					
Water?					

Physical Activity Question - Within the last four weeks,	5+x	3-4x	1-2x	N/A or
how often were you:	Week	Week	Month	Rare
Physically active?				

Spiritual Health Questions

Spiritual health is defined as "a person's faith and relationship with a higher power in finding meaning and connection with self and all creation".

Spiritual Health Impact Questions - How much do you agree with the following statements?	Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
Spirituality helps me define my goals.					
Spirituality is integrated into my whole life.					

Spiritual Health Activity Questions - Within the last four weeks, how often did you:	5+x Week	3-4x Week	1-2x Week	1-2x Month	N/A or Rare
Pray?					
Communicate with like-minded individuals?					
Read religious text?					
Consciously try to align your life with religious texts?					
Participate in formal religious gatherings?					



Outlook On Life Questions

Outlook Questions - Within the last four weeks, how often did you feel:	5+x Week	3-4x Week	1-2x Week	1-2x Month	N/A Rare
Hope for the future and sense of purpose?					
Peace of mind?					
Willingness to learn and be corrected?					
Joy even in trying times?					
Stable (e.g. housing, finances, etc.)?					
Safe and secure?					
Kindness toward others?					
Like you were able to forgive yourself and others?					
Patience with yourself and others?					
Supported in your relationships?					
Like you were able to maintain healthy boundaries?					
Unpleasant emotions (e.g. frustration, irritability)?					
Pleasant emotions (e.g. appreciation, confidence)?					
Control over your emotions?					

Emotional Communication Question - Within the last four weeks:	0-5	6-9	10-19	20-29	30+
Approximately how many emotions did you communicate regularly?					

Social Determinant of Health Questions

Current Age					
9-12	13-16	17-19	20-29	30-39	40-49
50-59	60-69	70-79	80-89	90-99	100+
I Identify As:	Brown	🗌 White	I Choose I	Not to Respond	b

What is your primary nationality/geographic region? *Select one (Nationality/geographic region is defined as place of birth or primary citizenship).

🗌 Africa	🗌 Australia	🗌 Europe
Asia	🗌 Canada	🗌 Middle East



Russia

United States

Other

What is your primary ethnicity? *Select one (Ethnicity is defined as cultural identity. This list includes larger populated ethnicities from each region and is not an exhaustive list. If you believe an ethnicity should be listed that isn't or if an ethnicity that's listed isn't applicable to you, please select "other" and state the ethnicity.)



German Ghanian Guatemalan Haitian Hawaiian Indian Iranian Iragi Irish Israeli Italian Jamaican Japanese] Kanaka Maoli Korean Kurdish Lebanese Lumbee Mexican Moroccan Native Navajo Nigerian Norwegian Ojibwe

7 Polish Pueblo Sioux Puerto Rican Rapanui **Russian** Salvadoran Samoan Somalian South African Spaniard Sun'aq Syrian Tahitians Taiwanese] Tibetan Tokelau Tongan Vietnamese l Don't Know] Other Mixed (Defined as one parent from one primary ethnicity and another parent from a different primary ethnicity).

State:

Zip Code:

Current Marital Status

Single

Married [

Divorced Widowed

Military Status	charged 🗌 Veteran 🗌 N	ot Applicable
I Identify As: A male born as ma A male born as fer		e
Education	HS Diploma 🗌 Vocational 🗌 I	Bachelors 🗌 Masters 🗌 Doctorate
Job Status	employed 🗌 Self Employed	
Income	к-\$40к 🗌 \$41к-\$70к 🔲 \$71	К-100К 🔲 \$101К +
Housing Status	neless 🗌 Friend 🗌 Family	Shelter Prison/Jail Other
What type of home di	id you grow up in? nts □ 1 Guardian/Parent □ Fost	er Care 🗌 Varied/Unstable 🗌 Other
	les you with strength and hope? ristianity 🗌 Hinduism 🗌 Islan	n 🗌 Judaism 🗌 None or N/A
Messia		tness 🗌 Latter Day Saints 🗌 Lutheran 🗌 -Denominational 🗌 Presbyterian 🗌 Roman her:
Identifying Question	15	
Client ID: Social Security Numb	First Name: er: Last Name:	Date of Birth: Date of Completion:

Is it okay to follow up with encouraging emails? Client's Email Address:



SCORING

Scoring the Trauma Domain

Trauma Experience Question			
1 point for each traumatic experience selected			
Score	0-17		

Trauma Belief Question	Yes	No	N/A	
Trauma Belief	0.01	0.02	0	
Score	0			

Trauma Response Question	Profess- ional	Family/ Friend	God	No-one	N/A
Response to Trauma	0.01	0.02	0.03	4	0
Score	0 or 4				

Trauma Domain Score	0-21	0-1	2-4	5-21
		Ideal		Subpar

Scoring the Coping Mechanism Domain

Coping Mechanism Question	5+x Week	3-4x Week	1-2x Week	1-2x Month	N/A Rare
Substance Use					
1 - Alcohol	4	3	2	1	0
2 - Drugs	4	3	2	1	0
3 - Overeating	4	3	2	1	0
4 - Tobacco/Smoking	4	3	2	1	0
Entertainment		1			
5 - Excessive Gaming	4	3	2	1	0
6 - Excessive Shopping	4	3	2	1	0
7 - Gambling	4	3	2	1	0
Sexual					
8 - Casual Sex	4	3	2	1	0



9 - Pornography	4	3	2	1	0
Relational					
10 - Blaming Self or Others	4	3	2	1	0
11 - Hurting Self or Others	4	3	2	1	0
12 - Disengagement/Detachment/Self Isolation	4	3	2	1	0
Creative					
13 - Drawing/Painting/Art	0	0.01	0.02	0.03	0.04
14 - Music	0	0.01	0.02	0.03	0.04
15 - Poetry/Poetical Lyrics	0	0.01	0.02	0.03	0.04
16 - Reading	0	0.01	0.02	0.03	0.04
Dialogue					
17 - Group Discussion	0	0.01	0.02	0.03	0.04
18 - Individual Counseling	0	0.01	0.02	0.03	0.04
19 - Talking/Venting	0	0.01	0.02	0.03	0.04
20 - Writing/Journaling	0	0.01	0.02	0.03	0.04
Active					
21 - Sensory/Fidgets	0	0.01	0.02	0.03	0.04
22 - Dancing	0	0.01	0.02	0.03	0.04
23 - Exercising	0	0.01	0.02	0.03	0.04
24 - Walking	0	0.01	0.02	0.03	0.04
Thought					
25 - Change Something for Different Results	0	0.01	0.02	0.03	0.04
26 - Analyze the Situation for Better Understanding	0	0.01	0.02	0.03	0.04
27 - Daydream or Imagine a Better Situation	0	0.01	0.02	0.03	0.04
28 - Focus on the Positives	0	0.01	0.02	0.03	0.04
Score	0-48				

Coping Doma	ain Score 0-48	0-1	2-3	4-48
		Ideal		Subpar

Scoring the Mental Health Domain

Mental Diagnosis Question			
Mental Diagnosis selection			
Score	0 or 2		

*If any diagnoses are chosen then the score is 2. If no diagnoses are chosen then the score is 0.



Mental Health Questions	5+x Week	3-4x Week	1-2x Week	1-2x Month	N/A Rare
Sleeplessness	4	3	2	1	0
Alcohol Use	4	3	2	1	0
Anxiety	4	3	2	1	0
Depression	4	3	2	1	0
Drug Use (including prescribed)	4	3	2	1	0
Grief	4	3	2	1	0
Guilt	4	3	2	1	0
Irritability	4	3	2	1	0
Stress	4	3	2	1	0
Regret	4	3	2	1	0
Suicidal Thoughts	4	3	2	1	0
Uncertainty	4	3	2	1	0
Worry	4	3	2	1	0
Score	0-52				

Mental Health Domain Score	0-54	0-13	14-26	27-54
		Ideal		Subpar

Scoring the Physical Health Domain

Physical Diagnosis Question			
Physical Diagnosis selection			
Score	0 or 2		

*If any diagnoses are chosen then the score is 2. If no diagnoses are chosen then the score is 0.

Nutrition Questions	5+x Week	3-4x Week	1-2x Week	1-2x Month	N/A Rare
Vegetables and/or fruit?	0	1	2	3	4
Beans and/or lentils?	0	1	2	3	4
Grains and/or breads?	0	0.01	0.02	0.03	0.04
Dairy?	0	0.01	0.02	0.03	0.04
Meat?	4	0.01	0.02	0.03	0.04
Fish/seafood?	4	0.01	0.02	0.03	0.04



Sweets/desserts?	4	3	2	1	0
Water?	0	1	2	3	4
Score	0-24				

Physical Activity Question	5+x Week	3-4x Week	1-2x Week	1-2x Month	N/A or Rare
How often are you physically active?	0	1	2	3	4
Score	0-4				

Physical Health Domain Score	0-30	0-5	6-10	11-30
		Ideal		Subpar

Scoring the Spiritual Health Domain

Spiritual Health Impact Questions	Strongly Agree	Agree	Neither	Disagree	Strongly Disagree
Spirituality helps me define my goals.	0	1	2	3	4
Spirituality is integrated into my whole life.	0	1	2	3	4
Score	0-8				

Spiritual Health Activity Question	5+x Week	3-4x Week	1-2x Week	1-2x Month	N/A or Rare
How often do you pray?	0	1	2	3	4
Communicate with like-minded individuals?	0	1	2	3	4
How often do you read religious text?	0	1	2	3	4
How often do you consciously try to align your life with religious texts?	0	1	2	3	4
How often do you participate in formal religious gatherings?	0	1	2	3	4
Score	0-20				

*If the spiritual health domain is skipped, no score or explanation of scores should be provided. This domain should be omitted from results which does not impact overall score.

Spiritual Health Domain Score	0-28	0-7	8-14	15-28
		Ideal		Subpar



Scoring the Outlook on Life Domain

Outlook on Life Questions	5+x Week	3-4x Week	1-2x Week	1-2x Month	N/A or Rare
Hope for the future and sense of purpose?	0	1	2	3	4
Peace of mind?	0	1	2	3	4
Willingness to learn and be corrected?	0	1	2	3	4
Joy even in trying times?	0	1	2	3	4
Stable (e.g. housing, finances, etc.)?	0	1	2	3	4
Safe and secure?	0	1	2	3	4
Kindness toward others?	0	1	2	3	4
Like you were able to forgive yourself and others?	0	1	2	3	4
Patience with yourself and others?	0	1	2	3	4
Supported in your relationships?	0	1	2	3	4
Like you were able to maintain healthy boundaries?	0	1	2	3	4
Unpleasant emotions (e.g. frustration, irritability)?	4	3	2	1	0
Pleasant emotions (e.g. appreciation, confidence)?	0	1	2	3	4
Control over your emotions?	0	1	2	3	4
Score	0-56				

Emotional Communication Question	0-5	6-9	10-19	20-29	30+
Approximately how many emotions do you communicate consistently?	4	3	2	1	0
Score	0-4				

Outlook on Life Domain Score	0-60	0-15	16-30	31-60
		Ideal		Subpar

Scoring (Overall)

Total Score	0-241	0-42	43-87	88-241
		Ideal		Subpar



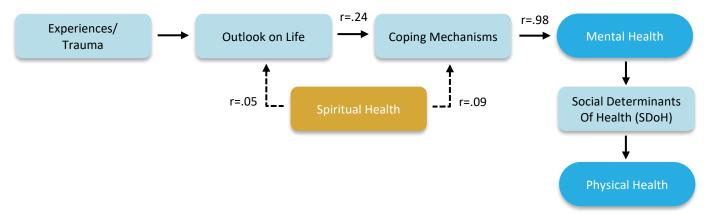
Missing Items

When the assessment is administered electronically, it is recommended that all items be required by the system to ensure accurate scores (with the exception of demographic and spiritual health questions which are at the discretion of the administrator and individual). Not completing all items in the five domains can give a lower score and therefore an ideal score, which may not be accurate. If the assessment is administered manually via paper or if all items are not required by the system, individuals should be notified that skipping questions can impact the accuracy of their scores, prior to starting the assessment. Individuals that choose not to complete the spiritual health domain do not have an impact on their overall score.



CONCEPTUAL FRAMEWORK

The conceptual framework is derived from extent literature and data analysis from the Wholistic Health Assessment ©. The framework shows that when traumatic experiences occur they shape our outlook on life. Outlook on life influences coping mechanisms which impact mental health. Mental health impacts social determinants of health such as education, job status, income, housing status, and marital status. Social determinants of health impact physical health. Spiritual health can influence outlook on life and coping mechanisms.



Construct Definitions

- Wholistic: Characterized by the belief that the parts of something are interconnected and can be explained only by reference to the whole.
- Trauma: An event, or series of events, that causes or caused moderate to severe stress reactions.
- Outlook on Life: The extent to which people feel that life is meaningful, manageable, and comprehensible
- Coping Mechanism: Actions that people use to deal with the internal and/or external demands of stressful encounters.
- Mental Health: The capacity to feel, think, and act in ways that enable people to value and engage in life.
- Social Determinants of Health: Non-medical factors that influence health outcomes.
- Physical Health: The well-being of the physical body and proper functioning of the human organism.
- Spiritual Health: A person's faith and relationship with a higher power in finding meaning and connection with self and all creation.



RELIABILITY AND VALIDITY

Hall and Powell (2021) state that there is a need to invest in the development of spiritual care outcome instruments across varying settings, demographics, and diagnostic groups. Previous studies needed to utilize several different instruments to conduct research, such as Akbari and Hossaini (2018) which used five instruments, Chen et al. (2022) which used three, Bożek et al. (2020) which combined three instruments for a total of 86 questions for four variables, and Felitti et al. (1998) which utilized seven instruments to develop the original Adverse Childhood Experiences (ACEs) survey.

For these reasons, the Wholistic Health Assessment © was developed. TR questions were developed utilizing the Centers for Disease Control and Kaiser Permanente ACE questionnaire (n.d.) which has a cronbach alpha of 0.78 (Ford et al., 2014); MH, PH, and OL questions were developed utilizing the World Health Organization Quality of Life survey (n.d.) which has a cronbach alpha ranging from 0.71 to 0.86 and the Agency for Healthcare Research and Quality (AHRQ, 2019) Medical Expenditure Panel Survey (MEPS) which has a cronbach alpha of 0.80 (Cheak-Zamora et al., 2009); SH questions were developed utilizing a Spiritual Health questionnaire which has a cronbach alpha of 0.94 (Parsian and Dunning, 2009); and CM questions were developed utilizing the Ways of Coping questionnaire (Folkman and Lazarus, 1985) which has a cronbach alpha of 0.88. Each domain also includes author developed questions and standardized scales for uniformity and consistency.

Cronbach Alpha Scores

Due to the combination and removal of questions from multiple instruments and restructured scales the reliability and validity of the original instruments can decrease. Therefore, the Wholistic Health Program was piloted in conjunction with the Wholistic Health Assessment to ensure effectiveness and statistical soundness. Participants included the general population and varying clinical professionals who provided feedback regarding the relevancy, flow, options, scoring, and word choices of questions. Once the final draft of the assessment was complete, data was collected to determine alpha scores which were as follows: TR - 81%; SH - 92%; CM - 70%; OL - 91%; MH - 90%; PH - 87%; and the full instrument was 93%.

*Only assessment questions that contribute to the domain score and are nonbinary are included in the analysis of Cronbach alpha. Positive coping questions and dietary questions for grains/breads, dairy, meat, and fish/seafood do NOT contribute to the domain score and therefore are not included in Cronbach alpha analysis.



COSMIN STUDY DESIGN CHECKLIST

The COSMIN Study Design Checklist (Mokkink et al., 2019) was used to further evaluate the reliability and validity of the Wholistic Health Assessment ©.

General Validity

General recommendations for the design of a study on measurement properties.

Res	Research Aim			
1	Provide a clear research aim, including (1) the name and version of the PROM, (2) the target population, and (3) the measurement properties of interest.	\checkmark		
PR	OM			
2	Provide a clear description of the construct to be measured.	\checkmark		
3	Provide a clear description of the development process of the PROM, including a description of the target population for which the PROM was developed.	>		
4	The origin of the construct should be clear: provide a theory, conceptual framework (i.e. reflective or formative model) or disease model used or clear rationale to define the construct to be measured.	\checkmark		
5	Provide a clear description of the structure of the PROM (i.e. the number of items and subscales included in the PROM, instructions given and response options) and its scoring algorithm.	\checkmark		
6	Provide a clear description of existing evidence on the quality of the PROM.	\checkmark		
7	Provide a clear description of the context of use (e.g. specific settings, mode of administration, etc.).	>		
Tar	get Population			
8	Provide a clear description of in- and exclusion criteria to select patients, e.g. in terms of disease condition and characteristics like age, gender, language or country, and setting (e.g. general population, primary care or hospital/rehabilitation care).	~		
9	Provide a clear description of the method used to select the patients for the study (e.g. convenience, consecutive, or random).	\checkmark		
10	Describe whether the selected sample is representing the target population in which the PROM will be used in terms of age, gender, important disease characteristics (e.g. severity, status, duration).	\checkmark		



Content Validity

Content validity of existing PROMs can be assessed by asking patients and professionals about the relevance, comprehensiveness and comprehensibility of the items, response options, and instructions.

De	sign Requirements	
1	 From the perspective of the patients: use an appropriate method for assessing: (1) the relevance of each item for the patients' experience with the condition, AND (2) the comprehensiveness of the PROM, AND (3) the comprehensibility of the PROM instructions, items, response options, and recall period. 	V
2	From the perspective of <u>professionals</u> : use an appropriate method for assessing: (1) the relevance of each item for the construct of interest, AND (2) the comprehensiveness of the PROM.	\checkmark
3	Include professionals from all relevant disciplines.	\checkmark
4	Evaluate each item in an appropriate number of patients or professionals. (≥50 individuals - best; 30 - 49 individuals - good)	\checkmark
5	Use skilled group moderators or interviewers.	\checkmark
6	Base the group meetings or interviews on an appropriate topic or interview guide.	\checkmark
7	Record and transcribe verbatim the group meetings or interviews.	\checkmark
An	alyses	
8	Use an appropriate approach to analyze the data.	\checkmark
9	Involve at least two researchers in the analysis.	\checkmark



Measurement Error and Reliability

Measurement error and reliability can be calculated based on the same study design and data collection. Basically, two measurements are needed in a group of people who are all assumed to be stable on the construct to be measured.

De	Design Requirements			
1	Use at least two measurements.	\checkmark		
2	Ensure that the administrations will be independent.	\checkmark		
3	Ensure that the patients will be stable in the interim period on the construct to be measured.	\checkmark		
4	Use an appropriate time interval between the two measurements, which is long enough to prevent recall, and short enough to ensure that patients remain stable.	\checkmark		
5	Ensure that the test conditions will be similar for the measurements (e.g. type of administration, environment, instructions).	\checkmark		
6	Perform the analysis in a sample with an appropriate number of patients, taking into account expected number of missing values. (≥100 individuals - best; 50-99 individuals - good)	\checkmark		
7	Provide a clear description of how missing items will be handled (for statistical methods).	\checkmark		
Sta	tistical Methods for Measurement Error			
8	For continuous scores: calculate the Standard Error of Measurement (SEM), Smallest Detectable Change (SDC) or Limits of Agreement (LoA) and clearly describe model or formula.	\checkmark		
9	For dichotomous/nominal/ordinal scores: calculate the percentage (positive and negative) agreement.	N/A		
Sta	tistical Methods for Reliability			
10	For continuous scores: calculate an intraclass correlation coefficient (ICC) and clearly describe model or formula. (Pearson or Spearman correlation coefficient acceptable but not ideal)	\checkmark		
11	For dichotomous/nominal/ordinal scores: calculate kappa.	N/A		
12	For ordinal scores: calculate a weighted kappa.	N/A		



Responsiveness

Responsiveness is considered to indicate longitudinal validity. The hypotheses of expected change scores of the PROM before and after intervention was tested.

De	Design Requirements		
1	Formulate challenging hypotheses regarding expected changes before and after intervention a priori (i.e. before data collection).	\checkmark	
2	Provide an adequate description of the intervention to allow replication, including how and when they will be administered.	<	
3	Use an appropriate time interval between first and second administration.	<	
4	Describe anything likely to occur in the interim period (e.g. intervention, progressive disease, other relevant events) is adequately.	<	
5	Ensure that a proportion of the patients is likely to change (i.e. improvement or deterioration) on the construct to be measured.	<	
6	Perform the analysis in a sample with an appropriate number of patients, taking into account expected number of missing values. (≥100 individuals - best; 50-99 individuals good)	 	
Sta	atistical Methods		
7	Ensure that the statistical methods are adequate for the hypotheses to be tested.	\checkmark	
8	Provide a clear description of how missing items will be handled.	\checkmark	



VARIABLE CROSSWALK

HHA Variable	Description	Source
Trauma		1
1. HurtfulNames	Participants self-reported	ACE Q1
	experience with being called	
	hurtful names or spoken to	
	harshly consistently by a parent,	
	guardian, or lover	
2. NoNurturing	Participants self-reported	ACE Q4
	experience with not being	
	provided attention, support, or	
	nurturing consistently by parent	
	or guardian	
3. Hit	Participants self-reported	ACE Q2
	experience with being punched,	
	smacked, pushed, tripped, etc.	
	by a parent, guardian, or lover	
4. NeedsNotMet	Participants self-reported	ACE Q5
	experience with not being	
	provided food or clothing	
	consistently by a parent or	
	guardian	
5. ForcedSex	Participants self-reported	ACE Q3
	experience with being involved	
	in unwanted or forced sexual	
	activity	
6. Responsible	Participants self-reported	Constructed
	experience with having adult	
	responsibilities as a child	
	consistently	
7. Violence	Participants self-reported	ACE Q7
	experience with witnessing	
	violence consistently at home	
8. SubstanceAbuse	Participants self-reported	ACE Q8
	experience with witnessing	



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	substance abuse consistently at	
	home	
9. MentallIness	Derticipente celfrenerte d	ACE Q9
9. Mentalllness	Participants self-reported	ACE U9
	experience with witnessing	
	mental illness consistently at	
	home	
10. ParentDivorce	Participants self-reported	ACE Q6
	experience with witnessing	
	parent(s) separation/divorce	
11. ParentIncarcerated	Participants self-reported	ACE Q10
	experience with witnessing	
	parent(s) incarceration	
12. Homelessness	Participants self-reported	Constructed
	experience with homelessness or	
	moving consistently	
13. BodyFunction	Participants self-reported	Constructed
	experience with losing a limb(s),	
	major bodily functions, or	
	extreme sickness	
14. NaturalDisaster	Participants self-reported	Constructed
	experience with a significant	
	natural disaster(s)	
15. DirectTerrorism	Participants self-reported	Constructed
	experience with being directly	
	affected by terrorism,	
	community, or school violence	
16. IndirectTerrorism	Participants self-reported	Constructed
ro. indirectremonsin		Constructed
	experience with being indirectly	
	affected by terrorism,	
	community, or school violence	
17. LovedOne	Participants self-reported	Constructed
	experience with an absent,	
	inactive, or death of a close loved	
	one	
18. TRBelief	Participants self-reported belief	Constructed
	of whether experiences were	
	traumatic.	



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19. TraumaResponseProfessional	Participants self-reported	WOC Q22
	experience with a parent or	
	guardian calling them hurtful	
	names or speaking harshly	
	toward them consistently	
20. TraumaResponseFamilyFriend	Participants self-reported	WOC Q31, 42, 45
	experience with a parent or	
	guardian calling them hurtful	
	names or speaking harshly	
	toward them consistently	
21. TraumaResponseGod	Participants self-reported	WOC Q60
	experience with a parent or	
	guardian calling them hurtful	
	names or speaking harshly	
	toward them consistently	
22. TraumaResponseNoOne	Participants self-reported	Constructed
	experience with a parent or	
	guardian calling them hurtful	
	names or speaking harshly	
	toward them consistently	
Coping		
23. Alcohol	Participants self-reported	WOC Q33
	frequency of utilizing alcohol to	
	cope with negative or unpleasant	
	experiences	
24. Drugs	Participants self-reported	WOC Q33
	frequency of utilizing illegal or	
	legal drugs to cope with negative	
	or unpleasant experiences	
25. Overeating	Participants self-reported	WOC Q33
	frequency of utilizing food to	
	cope with negative or unpleasant	
	experiences	
26. Smoking	Participants self-reported	WOC Q33
	frequency of utilizing tobacco	
	products to cope with negative	
	or unpleasant experiences	



27. Gaming	Participants self-reported	Constructed
27. Gaming		Constructed
	frequency of utilizing video	
	games excessively to cope with	
	negative or unpleasant	
	experiences	
28. Shopping	Participants self-reported	Constructed
	frequency of utilizing shopping	
	excessively to cope with negative	
	or unpleasant experiences	
29. Gambling	Participants self-reported	Constructed
	frequency of utilizing monetary	
	games of chance to cope with	
	negative or unpleasant	
	experiences	
30. Sex	Participants self-reported	Constructed
	frequency of utilizing premarital	
	or marital sexual relations to	
	cope with negative or unpleasant	
	experiences	
31. Porn	Participants self-reported	Constructed
	frequency of utilizing	
	pornography to cope with	
	negative or unpleasant	
	experiences	
32. Blaming	Participants self-reported	WOC Q47
	frequency of blaming others to	
	cope with negative or unpleasant	
	experiences without any self	
	accountability	
33. Acceptance	Participants self-reported	WOC Q18
	frequency of seeking acceptance	100 210
	or agreement from others to	
	cope with negative or unpleasant	
	experiences	
31 Disongago		WOC Q44
34. Disengage	Participants self-reported	
	frequency of disengaging,	
	detaching, or self-isolating to	



	cope with negative or unpleasant	
	experiences	
35. Art	Participants self-reported	Constructed
	frequency of utilizing drawing,	
	painting, calligraphy or other	
	forms of decorative art to cope	
	with negative or unpleasant	
	experiences	
36. Music	Participants self-reported	Constructed
	frequency of utilizing music,	
	whether listening or singing, to	
	cope with negative or unpleasant	
	experiences	
37. Poetry	Participants self-reported	Constructed
	frequency of utilizing poetry, or	
	poetical wordsmithing, to cope	
	with negative or unpleasant	
	experiences	
38. Reading	Participants self-reported	Constructed
	frequency of utilizing reading to	
	cope with negative or unpleasant	
	experiences	
39. Groups	Participants self-reported	Constructed
	frequency of utilizing support,	
	therapeutic, or counseling	
	groups to cope with negative or	
	unpleasant experiences	
40. Counseling	Participants self-reported	WOC Q22
	frequency of utilizing individual	
	counseling to cope with negative	
	or unpleasant experiences	
41. Venting	Participants self-reported	WOC Q45
-	frequency of talking with or	
	venting to other people to cope	
	with negative or unpleasant	
	experiences	



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42. Writing	Participants self-reported	Constructed
	frequency of utilizing writing to	
	cope with negative or unpleasant	
	experiences	
43. Sensory	Participants self-reported	
	frequency of utilizing sensory	
	items, fidgets, or other gadgets	
	to cope with negative or	
	unpleasant experiences	
44. Dancing	Participants self-reported	Constructed
	frequency of utilizing dance to	
	cope with negative or unpleasant	
	experiences	
45. Exercising	Participants self-reported	Constructed
	frequency of utilizing exercise,	
	including sports, to cope with	
	negative or unpleasant	
	experiences	
46. Walking	Participants self-reported	Constructed
	frequency of walking to cope	
	with negative or unpleasant	
	experiences	
47. Change	Participants self-reported	WOC Q39
	frequency of trying to change	
	variables in a situation for	
	improved results to cope with	
	negative or unpleasant	
	experiences	
48. Analyze	Participants self-reported	WOC Q2
	frequency of analyzing a situation	
	for learning or understanding to	
	cope with negative or unpleasant	
	experiences	
49. Daydream	Participants self-reported	WOC Q57
	frequency of daydreaming or	
	imagining a different situation to	
	cope with negative or unpleasant	



50. Positive	Participants self-reported	WOC Q15
	frequency of focusing on positive	
	elements in a situation to cope	
	with negative or unpleasant	
	experiences	
Mental Health		
51. PTSD	Participants self-reported	MEPS VAPTSD31
	diagnosis of PTSD	
52. DepressionDX	Participants self-reported	WHO F8.3
	diagnosis of depression	
53. SUD	Participants self-reported	MEPS VALCOH31
	diagnosis of substance use	
	disorder	
54. OtherMental	Participants self-reported	Constructed
	diagnosis of any other mental	
	health diagnoses not listed	
55. Sleeplessness	Participants self-reported	WHO F3.2
	frequency of sleeplessness	MEPS ADREST42
	during their normal sleeping	
	hours	
56. AlcoholUse	Participants self-reported	Constructed
	frequency of alcohol use	
57. Anxiety	Participants self-reported	MEPS ADNERV42
	frequency of anxiety	
58. Depression	Participants self-reported	MEPS ADDPRS42
	frequency of depression	
59. DrugUse	Participants self-reported	Constructed
	frequency of illegal or legal drug	
	use	
60. Grief	Participants self-reported	Constructed
	frequency of grief	
61. Guilt	Participants self-reported	Constructed
	frequency of guilt	
62. Irritability	Participants self-reported	Constructed
	frequency of irritability	
63. Stress	Participants self-reported	Constructed
	frequency of stress	



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64. Regret	Participants self-reported	Constructed
	frequency of regret	
65. SuicidalThoughts	Participants self-reported	Constructed
	frequency of suicidal thoughts or	
	ideation	
66. Uncertainty	Participants self-reported	Constructed
	frequency of uncertainty	
67. Worry	Participants self-reported	Constructed
	frequency of worry	
Physical Health		
68. Infertility	Participants self-reported	Constructed
	diagnosis of infertility	
69. CurableSTD	Participants self-reported	Constructed
	diagnosis of any type of curable	
	sexually transmitted disease or	
	infection	
70. IncurableSTD	Participants self-reported	Constructed
	diagnosis of any type of	
	incurable sexually transmitted	
	disease	
71. Cancer	Participants self-reported	MEPS CANCERDX
	diagnosis of any type of cancer	
72. Diabetes	Participants self-reported	MEPS DIABDX_M18
	diagnosis of any type of diabetes	
73. HighBlood	Participants self-reported	MEPS HIBPDX
	diagnosis of high blood pressure	
74. HeartDisease	Participants self-reported	MEPS CHDDX, OHRTDX
	diagnosis of heart disease	
75. IrritableBowel	Participants self-reported	Constructed
	diagnosis of irritable bowel	
	syndrome	
76. Vit A	Participants self-reported	Constructed
	diagnosis of extreme vitamin A	
	deficiency	
77. Vit B	Participants self-reported	Constructed
	diagnosis of extreme vitamin B	
	deficiency	



78. Vit C	Participants self-reported	Constructed
		Constructed
	diagnosis of extreme vitamin C	
	deficiency Derticing ante and many arts of	Construction
79. Vit D	Participants self-reported	Constructed
	diagnosis of extreme vitamin D	
	deficiency	
80. Vit E	Participants self-reported	Constructed
	diagnosis of extreme vitamin E	
	deficiency	
81. Vit K	Participants self-reported	Constructed
	diagnosis of extreme vitamin K	
	deficiency	
82. Autoimmune	Participants self-reported	Constructed
	diagnosis of any autoimmune	
	diseases	
83. OtherPhysical	Participants self-reported	Constructed
	diagnosis of any other physical	
	health diagnoses not listed	
84. Vege/Fruits	Participants self-reported	USDA Table A3-4, A3-5,
	frequency of eating and	1-1, 4-1, 5-1, 6-1
	digesting vegetables and fruits	
	either whole or juiced from fresh	
	produce	
85. Bean/Lentils	Participants self-reported	USDA Table A3-4, A3-5,
	frequency of eating and	1-1, 4-1, 5-1, 6-1
	digesting vegetables and fruits	
	either whole or juiced from fresh	
	produce	
86. Grain/Breads	Participants self-reported	USDA Table A3-4, A3-5,
	frequency of eating and	1-1, 4-1, 5-1, 6-1
	digesting grains and breads	
87. Dairy	Participants self-reported	USDA Table A3-4, A3-5,
	frequency of eating and	1-1, 4-1, 5-1, 6-1
	digesting dairy	
88. Meat	Participants self-reported	USDA Table A3-4, A3-5,
	frequency of eating and	1-1, 4-1, 5-1, 6-1
	digesting animal meat	
	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	



89. Fish/Seafood	Participants self-reported	USDA Table A3-4, A3-5,
	frequency of eating and	1-1, 4-1, 5-1, 6-1
	digesting fish or seafood	
90. Sweets	Participants self-reported	USDA Table A3-4, A3-5,
	frequency of eating and	1-1, 4-1, 5-1, 6-1
	digesting desserts, candy,	
	chocolate, or other foods high in	
	sugar content	
91. Water	Participants self-reported	Constructed
	frequency of drinking any pure	
	or unflavored water	
92. PhysicalActivity	Participants self-reported	MEPS PHYEXE53
	frequency of intentional physical	
	activity or movement	
Spiritual Health		
93. SpiritualDefine	Participants self-reported	SHQ
	agreement or disagreement with	
	how spirituality may define	
	personal goals	
94. SpiritualIntegrate	Participants self-reported	SHQ
	agreement or disagreement with	
	how spirituality may be	
	integrated into whole life	
95. Prayer	Participants self-reported	Constructed
	frequency of prayer	
96. SpiritualActivity	Participants self-reported	Constructed
	frequency of participating in	
	spiritual health activities	
97. ReadText	Participants self-reported	SHQ
	frequency of reading religious	
	text	
98. AlignText	Participants self-reported	SHQ
	frequency of trying to align ones	
	lifestyle to religious text	
99. Community	Participants self-reported	SHQ
	frequency of prayer	
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100. Норе	Participants self-reported	MEPS ADHOPE42
	frequency of hope for the future	
	and sense of purpose	
101. Peace	Participants self-reported	MEPS ADPCFL42
	frequency of peace of mind	
102. Learning	Participants self-reported	WHO F5.2
	frequency of willingness to learn	
	and be corrected	
103. Joy	Participants self-reported	Constructed
	frequency of joy even in trying	
	times	
104. Stable	Participants self-reported	WHO F18.2
	frequency of financial stability	
	including but not limited to	
	income and housing	
105. Safety	Participants self-reported	WHO F16.1, F16.4
	frequency of safety and security	
106. Kindness	Participants self-reported	Constructed
	frequency of kindness toward	
	others	
107. Forgiveness	Participants self-reported	Constructed
	frequency of forgiving self and	
	others	
108. Patience	Participants self-reported	Constructed
	frequency of patience with	
	themselves and others	
109. Relationships	Participants self-reported	WHO F13.3, F14.3,
	frequency of supportive	F14.4
	relationships	
110. Boundaries	Participants self-reported	Constructed
	frequency of being able to set	
	and maintain appropriate	
	boundaries	
111. EUnpleasant	Participants self-reported	WHO F8.1
	frequency of feeling unpleasant	
	emotions	



112. EPleasant	Participants self-reported	WHO F4.4
	frequency of feeling pleasant	
	emotions	
113. EControl	Participants self-reported	Constructed
	frequency of feeling in control of	Constructed
	emotions	
114. ENumber		Constructed
114. ENumber	Participants self-reported number of emotions	Constructed
	communicated consistently	
Identifying		· -
115. ClientEmail	Email provided by participant	Constructed
116. CompletionDate	Date participant completed	Constructed
	assessment	
117. Client ID	ID assigned by collection	Constructed
	software	
118. SSN	Participant's self-reported SSN	Constructed
119. FirstName	Participant's self-reported first	Constructed
	name	
120. LastName	Participant's self-reported last	Constructed
	name	
121. DateOfBirth	Participant's self-reported date of	Constructed
	birth	
Social Determinants of Healt	h (SDoH)*	
122. CurrentAge	Participant's self-reported age at	Constructed
	the time the assessment was	
	completed	
123. Race	Participant's self-reported	Constructed
	primary race	
124. Ethnicity	Participant's self-reported	Constructed
	primary ethnicity	
125. State	Participant's self-reported state	Constructed
	within the U.S. where currently	
	residing	
126. ZipCode	Participant's self-reported zip	Constructed
	code within the U.S. where	
	currently residing	
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127. MaritalStatus	Participant's self-reported marital	Constructed
	status	
128. MilitaryStatus	Participant's self-reported	Constructed
	military status	
129. GenderAtBirth	Participant's self-reported	Constructed
	gender including self-	
	identification	
130. Education	Participant's self-reported	Constructed
	educational attainment	
131. JobStatus	Participant's self-reported job	Constructed
	status at the time the assessment	
	was completed	
132. Income	Participant's self-reported	Constructed
	income at the time the	
	assessment was completed	
133. HousingStatus	Participant's self-reported	Constructed
	housing status at the time the	
	assessment was completed	
134. HomeAsChild	Participant's self-reported family	Constructed
	structure / parental guardianship	
	as a child	
135. Religion	Participant's self-reported	Constructed
	religious beliefs or affiliations at	
	the time the assessment was	
	completed	
136. Denomination	Participant's self-reported	Constructed
	affiliation with a Christian	
	denomination if applicable	

*There are additional SDoH's captured in this assessment outside of the SDoH section, including 103 Stable, 104 Safety, certain types of trauma (e.g. 10, 11, 12, and 15), and nutritional habits (e.g. 83-90) which could indicate food insecurity.



ACRONYMS

ACE - Adverse Childhood Experiences Questionnaire Constructed - Author Developed Questions MEPS - Medical Expenditure Panel Survey PROM - Patient Reported Outcome Measurement SHQ - Spiritual Health Questionnaire USDA - United States Department of Agriculture Dietary Guidelines for Americans WHO - World Health Organization Quality of Life Questionnaire WOC - Ways of Coping Questionnaire

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