WHOLISTIC HEALTH ASSESSMENT

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

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OVERVIEW

The Wholistic Health Assessment © Version 2 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 individuals 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 facilities. 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 (e.g. Wholistic Health 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 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 research@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
- ☐ 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 childhood trauma
- ☐ I talked to my family and/or friends about my childhood trauma
- ☐ I talked to God about my childhood trauma
- ☐ I didn’t talk to anyone about my childhood 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					
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 - Seeking Acceptance	☐	☐	☐	☐	☐
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
☐ Cancer Diagnosis
☐ Diabetes Diagnosis
☐ High Blood Pressure Diagnosis
☐ Heart Disease Diagnosis
☐ Irritable Bowel Issues
☐ 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, how often were you:	5+x Week	3-4x Week	1-2x Week	1-2x Month	N/A or 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?	☐	☐	☐	☐	☐
Negative emotions (e.g. frustration, irritability)?	☐	☐	☐	☐	☐
Positive 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:

☐ Black ☐ Brown ☐ White ☐ I Choose Not to Respond

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
- ☐ South America
- ☐ United States
- ☐ I Don't Know
- ☐ 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.)

- ☐ Alaskan
- ☐ Algerian
- ☐ American
- ☐ Apache
- ☐ Argentinian
- ☐ Barbadian
- ☐ Brazilian
- ☐ Cambodian
- ☐ Canadian
- ☐ Caribbean
- ☐ Chamorros
- ☐ Cherokee
- ☐ Chinese
- ☐ Choctaw
- ☐ Columbian
- ☐ Cuban
- ☐ Dominican
- ☐ Dutch
- ☐ Ecuadorian
- ☐ Egyptian
- ☐ English
- ☐ Ethiopian
- ☐ Fijians
- ☐ Filipino
- ☐ French
- ☐ German
- ☐ Ghanian
- ☐ Guatemalan
- ☐ Haitian
- ☐ Hawaiian
- ☐ Indian
- ☐ Iranian
- ☐ Iraqi
- ☐ Irish
- ☐ Israeli
- ☐ Italian
- ☐ Jamaican
- ☐ Japanese
- ☐ Kanaka Maoli
- ☐ Korean
- ☐ Kurdish
- ☐ Lebanese
- ☐ Lumbee
- ☐ Mexican
- ☐ Moroccan
- ☐ Native
- ☐ Navajo
- ☐ Nigerian
- ☐ Norwegian
- ☐ Ojibwe
- ☐ Polish
- ☐ Pueblo Sioux
- ☐ Puerto Rican
- ☐ Rapanui
- ☐ Russian
- ☐ Salvadoran
- ☐ Samoan
- ☐ Somalian
- ☐ South African
- ☐ Spaniard
- ☐ Sun'aq
- ☐ Syrian
- ☐ Tahitians
- ☐ Taiwanese
- ☐ Tibetan
- ☐ Tokelau
- ☐ Tongan
- ☐ Vietnamese
- ☐ I 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

☐ Active ☐ Discharged ☐ Veteran ☐ Not Applicable

I Identify As:

☐ A male born as male ☐ A female born as female

☐ A male born as female ☐ A female born as male ☐ Other (please specify)

Education

☐ No Diploma ☐ HS Diploma ☐ Vocational ☐ Bachelors ☐ Masters ☐ Doctorate

Job Status

☐ Employed ☐ Unemployed ☐ Self Employed

Income

☐ $0-$20K ☐ $21K-$40K ☐ $41K-$70K ☐ $71K-100K ☐ $101K +

Housing Status

☐ Rent/Own ☐ Homeless ☐ Friend ☐ Family ☐ Shelter ☐ Prison/Jail ☐ Other

What type of home did you grow up in?

☐ 2 Guardians/Parents ☐ 1 Guardian/Parent ☐ Foster Care ☐ Varied/Unstable ☐ Other

Which religion provides you with strength and hope?

☐ Buddhism ☐ Christianity ☐ Hinduism ☐ Islam ☐ Judaism ☐ None or N/A

Christianity: ☐ Baptist ☐ Jehovah's Witness ☐ Latter Day Saints ☐ Lutheran ☐ Messianic Judaism ☐ Methodist ☐ Non-Denominational ☐ Presbyterian ☐ Roman Catholic ☐ Seventh Day Adventist ☐ Other:

Identifying Questions

Client ID: First Name: Date of Birth:

Social Security Number: Last Name: 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	1	0	0		
Score	0 or 1				

Trauma Response Question	Profess-ional	Family/ Friend	God	No-one	
Response to Trauma	0.01	0.01	0.01	4	
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					
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 – Seeking Acceptance	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 Domain 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
Negative emotions (e.g. frustration, irritability)?	4	3	2	1	0
Positive 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)

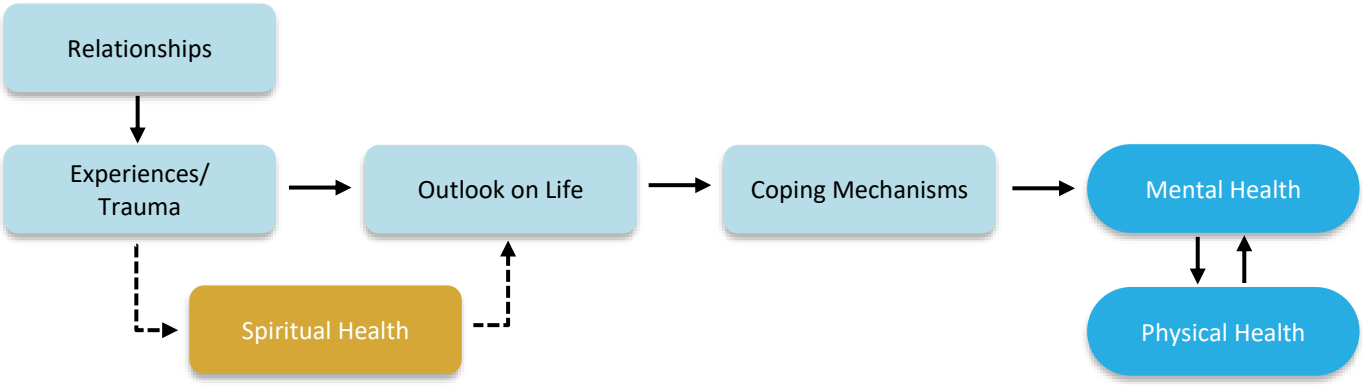
Total Score	0-241		0-42	43-87	88-241
			Ideal		Subpar

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 discussed in further detail in the Wholistic Health Program ©. The framework shows that traumatic experiences occur from or with our relationships, and these experiences shape our outlook on life. Outlook on life influences coping mechanisms which impact physical and mental health. Spiritual health can influence outlook on life, potentially avoiding coping behaviors that negatively impact physical and mental health outcomes.



Construct Definitions

- Wholistic: Characterized by the belief that the parts of something are interconnected and can be explained only by reference to the whole.
- Relationship: A continual association between two or more people.
- Trauma: An event, or series of events, that causes or caused moderate to severe stress reactions.
- 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.
- 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.
- Outlook on Life: The extent to which people feel that life is meaningful, manageable, and comprehensible.

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 - 88%; CM - 72%; OL - 86%; MH - 89%; PH - 70%; and the full instrument was 89%.

*Only assessment questions that use the same scale (Likert) *and* contribute to the domain score are included in the analysis of Cronbach alpha (e.g. positive coping questions do NOT contribute to the coping domain score and therefore is 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.

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.	✓
PROM		
2	Provide a clear description of the construct to be measured.	✓
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.	✓
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.	✓
6	Provide a clear description of existing evidence on the quality of the PROM.	✓
7	Provide a clear description of the context of use (e.g. specific settings, mode of administration, etc.).	✓
Target 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).	✓
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).	✓

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.

Design 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.	✓
2	From the perspective of professionals: use an appropriate method for assessing: (1) the relevance of each item for the construct of interest, **AND** (2) the comprehensiveness of the PROM.	✓
3	Include professionals from all relevant disciplines.	✓
4	Evaluate each item in an appropriate number of patients or professionals. (≥50 individuals – best; 30 – 49 individuals – good)	✓
5	Use skilled group moderators or interviewers.	✓
6	Base the group meetings or interviews on an appropriate topic or interview guide.	✓
7	Record and transcribe verbatim the group meetings or interviews.	✓
Analyses		
8	Use an appropriate approach to analyze the data.	✓
9	Involve at least two researchers in the analysis.	✓

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.

Design Requirements		
1	Use at least two measurements.	✓
2	Ensure that the administrations will be independent.	✓
3	Ensure that the patients will be stable in the interim period on the construct to be measured.	✓
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.	✓
5	Ensure that the test conditions will be similar for the measurements (e.g. type of administration, environment, instructions).	✓
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)	✓
7	Provide a clear description of how missing items will be handled (for statistical methods).	✓
Statistical 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.	✓
9	For dichotomous/nominal/ordinal scores: calculate the percentage (positive and negative) agreement.	N/A
Statistical 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)	✓
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.

Design Requirements		
1	Formulate challenging hypotheses regarding expected changes before and after intervention a priori (i.e. before data collection).	✓
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)	✓
Statistical Methods		
7	Ensure that the statistical methods are adequate for the hypotheses to be tested.	✓
8	Provide a clear description of how missing items will be handled.	✓

VARIABLE CROSSWALK

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

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

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

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

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

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

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

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

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

89. Fish/Seafood	Participants self-reported frequency of eating and digesting fish or seafood	USDA Table A3-4, A3-5, 1-1, 4-1, 5-1, 6-1
90. Sweets	Participants self-reported frequency of eating and digesting desserts, candy, chocolate, or other foods high in sugar content	USDA Table A3-4, A3-5, 1-1, 4-1, 5-1, 6-1
91. Water	Participants self-reported frequency of drinking any pure or unflavored water	Constructed
92. PhysicalActivity	Participants self-reported frequency of intentional physical activity or movement	MEPS PHYEXE53
Spiritual Health		
93. SpiritualDefine	Participants self-reported agreement or disagreement with how spirituality may define personal goals	SHQ
94. SpiritualIntegrate	Participants self-reported agreement or disagreement with how spirituality may be integrated into whole life	SHQ
95. Prayer	Participants self-reported frequency of prayer	Constructed
96. SpiritualActivity	Participants self-reported frequency of participating in spiritual health activities	Constructed
97. ReadText	Participants self-reported frequency of reading religious text	SHQ
98. AlignText	Participants self-reported frequency of trying to align ones lifestyle to religious text	SHQ
99. Community	Participants self-reported frequency of prayer	SHQ
Outlook on Life		

100. Hope	Participants self-reported frequency of hope for the future and sense of purpose	MEPS ADHOPE42
101. Peace	Participants self-reported frequency of peace of mind	MEPS ADPCFL42
102. Learning	Participants self-reported frequency of willingness to learn and be corrected	WHO F5.2
103. Joy	Participants self-reported frequency of joy even in trying times	Constructed
104. Stable	Participants self-reported frequency of financial stability including but not limited to income and housing	WHO F18.2
105. Safety	Participants self-reported frequency of safety and security	WHO F16.1, F16.4
106. Kindness	Participants self-reported frequency of kindness toward others	Constructed
107. Forgiveness	Participants self-reported frequency of forgiving self and others	Constructed
108. Patience	Participants self-reported frequency of patience with themselves and others	Constructed
109. Relationships	Participants self-reported frequency of supportive relationships	WHO F13.3, F14.3, F14.4
110. Boundaries	Participants self-reported frequency of being able to set and maintain appropriate boundaries	Constructed
111. ENegative	Participants self-reported frequency of feeling negative emotions	WHO F8.1

112. EPositive	Participants self-reported frequency of feeling positive emotions	WHO F4.4
113. EControl	Participants self-reported frequency of feeling in control of emotions	Constructed
114. ENumber	Participants self-reported number of emotions communicated consistently	Constructed
Identifying		
115. ClientEmail	Email provided by participant	Constructed
116. CompletionDate	Date participant completed assessment	Constructed
117. Client ID	ID assigned by collection software	Constructed
118. SSN	Participant's self-reported SSN	Constructed
119. FirstName	Participant's self-reported first name	Constructed
120. LastName	Participant's self-reported last name	Constructed
121. DateOfBirth	Participant's self-reported date of birth	Constructed
Social Determinants of Health (SDoH)*		
122. CurrentAge	Participant's self-reported age at the time the assessment was completed	Constructed
123. Race	Participant's self-reported primary race	Constructed
124. Ethnicity	Participant's self-reported primary ethnicity	Constructed
125. State	Participant's self-reported state within the U.S. where currently residing	Constructed
126. ZipCode	Participant's self-reported zip code within the U.S. where currently residing	Constructed

127. MaritalStatus	Participant's self-reported marital status	Constructed
128. MilitaryStatus	Participant's self-reported military status	Constructed
129. GenderAtBirth	Participant's self-reported gender including self-identification	Constructed
130. Education	Participant's self-reported educational attainment	Constructed
131. JobStatus	Participant's self-reported job status at the time the assessment was completed	Constructed
132. Income	Participant's self-reported income at the time the assessment was completed	Constructed
133. HousingStatus	Participant's self-reported housing status at the time the assessment was completed	Constructed
134. HomeAsChild	Participant's self-reported family structure / parental guardianship as a child	Constructed
135. Religion	Participant's self-reported religious beliefs or affiliations at the time the assessment was completed	Constructed
136. Denomination	Participant's self-reported affiliation with a Christian denomination if applicable	Constructed

*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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