CRITERION VALIDITY AND POPULATION NORMS FOR THE SHORT LIFESTYLE INDICATOR QUESTIONNAIRE IN THE ELDERLY

Marshall Godwin
Cheri Bethune
Allison Kirby
Lifestyle

Genetics

Clinical and Physiological Risk Factors
- Blood Pressure
- Cholesterol
- Glucose Level
- Atherosclerosis
- Vascular Inflammatory
- BMI/Waist
- Circumference
- Metabolic Syndrome

Built Environment
Behavior Counseling
Lifestyle Counseling
Socio-demographics
Economics
Cultural
Thinking
Employment

Lifestyle
- Diet
- Smoking
- Life Stress
- Activity
- Alcohol

Medications

Cardiovascular Morbidity and Mortality
BACKGROUND

- Initial Development
- Initial Reliability and Validity Testing

  - Face and Content Validity
    - Patients, staff, nutritionists, family physicians

  - Test-Retest reliability
    - 0.63-0.97

  - Scoring Template Validity
    - Nurse, Family Physician, Nutritionist
    - Overall 0.77 correlation with allocation of unhealthy, moderately healthy, healthy
DOES THE SLIQ MEASURE LIFESTYLE?... CRITERION VALIDITY

- Concurrent Validity
  - How well does the three diet questions correlate with a more extensive assessment of diet?
  - How well does the three alcohol questions correlate with a more extensive assessment of alcohol consumption?
  - How well does the three exercise questions correlate with measurement of activity using a pedometer.
  - How well does the stress question correlate with a more detailed assessment of stress?
  - Expectation ... correlation > 0.6
Convergent Validity
- What is the correlation between the SLIQ and the SF36?
  - Expectation correlation 0.25 - 0.6
WHAT IS A ‘NORMAL’ SCORE ON THE SLIQ

Development of population norms
- General population
- Patients
- Fitness sorts
- Young people
- Old people
Objective 1: AssessingCriterion Validity

- Patient Enrolment
  - Three family medicine clinics in St. John’s
  - List of 300 patients 50 years of age and older
  - 100 from each of age 50-64; 65-79; and 80+
  - A letter, on clinic letterhead and signed by their physician, describing the study
  - Telephone number to contact RA
  - RA meets with patient
    - SLIQ, DHQ, SRRS, SF36
    - Demographics (age, sex, education, income, marital status, weight and height)
  - Pedometer to wear for three days.
OBJECTIVE 2: DETERMINING POPULATION NORMS

- General population
  - Mall surveys
- Primary Care Population
  - Family Physician Clinics
- Gym Users and Trail Walkers
Simple Lifestyle Indicator Questionnaire

**Diet:** To answer these questions, think about your eating habits in the past year. Indicate how often you eat the following foods. Please include all meals, snacks and eating out

1. **Lettuce or green leafy salad, with or without other vegetables**
   - □ less than 1/week
   - □ 1/week
   - □ 2-3x/week
   - □ 4-6x/week
   - □ once/day
   - □ 2+/day

2. **Fruit: include fresh, canned or frozen, but do not include juices**
   - □ less than 1/week
   - □ 1/week
   - □ 2-3x/week
   - □ 4-6x/week
   - □ once/day
   - □ 2+/day

3. **High fiber cereals or whole grain breads: this includes cereal such as Raisin bran, Fruit and Fiber, cooked oatmeal, and breads which are whole wheat, multigrain, rye or pumpernickel**
   - □ less than 1/week
   - □ 1/week
   - □ 2-3x/week
   - □ 4-6x/week
   - □ once/day
   - □ 2+/day
Exercise: To answer the following questions please indicate how many times per week you take part in the following activities for a duration of at least 30 minutes or more at a time:

I. Light exercise, such as:
   - light gardening and light housework (dusting, sweeping, vacuuming)
   - leisurely walking (walking your dog)
   - bowling, fishing, carpentry, playing a musical instrument
   - volunteer work

   □0/week   □1-3x/week   □4-7x/week   □8 and more/week

II. Moderate exercise, for example:
   - brisk walk
   - bicycling, skating, swimming, curling
   - gardening (raking, weeding, spading)
   - dancing, Tai Chi or moderate exercise classes

   □0/week   □1-3x/week   □4-7x/week   □8 and more/week

III. Vigorous exercise, for example:
   - running, bicycling, x-country skiing, lap swimming, aerobics
   - heavy yard work
   - weight training
   - soccer, basketball or other league sports

   □0/week   □1-3x/week   □4-7x/week   □8 and more/week
**Alcohol:** Please indicate how many drinks of the following types of alcohol you consume in an average week:

- Wine: ____ drinks (3-5 oz.)
- Beer: ____ drinks (10-12 oz or 1 bottle)
- Spirits: ____ drinks (1-1 ½ oz.)

**Smoking:** Please indicate your smoking habits below:

Are you a smoker?  □ Yes  □ No

If yes, how long have you been smoking?  ________ years

If no, did you ever smoke?  □ Yes  □ No

If yes, how many years ago did you quit?  ________ years
Life Stress: To answer this question please circle the number which you feel best corresponds to the level of stress in your everyday life

1  2  3  4  5  6

Not at all stressful  Very stressful
**Diet:**

1. Lettuce or green leafy salad, with or without other vegetables

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Score</th>
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<tbody>
<tr>
<td>less than 1/week</td>
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</tr>
<tr>
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<td>2-3x/week</td>
<td>2</td>
</tr>
<tr>
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</tr>
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2. Fruit: include fresh, canned or frozen, but do not include juices

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\[ \text{DietRawScore} = Q1 + Q2 + Q3 \]  
\[ \text{DietCategoryScore} = \begin{cases} 
0 & \text{If DietScore 0-5} \\
1 & \text{If DietScore 6-10} \\
2 & \text{If DietScore 11-15} 
\end{cases} \]
## Exercise:

1. **Light exercise, such as:**
   - light gardening and light housework (dusting, sweeping, vacuuming)
   - leisurely walking (walking your dog)
   - bowling, fishing, carpentry, playing a musical instrument
   - volunteer work

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2. **Moderate exercise, for example:**
   - brisk walk
   - bicycling, skating, swimming, curling
   - gardening (raking, weeding, spading)
   - dancing, Tai Chi or moderate exercise classes

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3. **Vigorous exercise, for example:**
   - running, bicycling, x-country skiing, lap swimming, aerobics
   - heavy yard work
   - weight training
   - soccer, basketball or other league sports

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<tr>
<td>0</td>
<td>6</td>
<td>9</td>
<td>12</td>
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**ActivityRawScore** = Q1+Q2+Q3

**ActivityCategoryScore**

- 0 If Light Exercise Only
- 1 If Any Moderate Activity
- 2 If Any Vigorous Activity
**Alcohol: (per week)**

- Wine: _____ drinks (3-5 oz.)
- Beer: _____ drinks (10-12 oz or 1 bottle)
- Spirits: _____ drinks (1-1 ½ oz.)

<table>
<thead>
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<th>AlcoholRawScore</th>
<th>Wine + Beer + Spirits</th>
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<td>AlcoholCategoryScore</td>
<td></td>
</tr>
<tr>
<td>0 If Alcohol Score 14 or more</td>
<td></td>
</tr>
<tr>
<td>1 If Alcohol Score 8-13</td>
<td></td>
</tr>
<tr>
<td>2 If Alcohol Score 0-7</td>
<td></td>
</tr>
</tbody>
</table>


Smoking:

Are you a smoker?

☐ Yes       ☐ No

 0

If no, did you ever smoke?

☐ Yes       ☐ No

 1              2

SmokingRawScore _____ (0, 1, or 2)

SmokingCategory Score_______
(Same as Smoking Score)
Life Stress:

Not at all stressful                               Very stressful

StressRawScore = _______
        As indicated on Line

StressCategoryScore _______
0  If Life Stress 1 or 2
1  If Life Stress 3 or 4
2  If Life Stress 5 or 6
SLIQScore = DietCategory + ActivityCategory + AlcoholCategory + SmokingCategory + StressCategory