

Supplementary File 1. English translations of three scales used in the submitted research

This document provides unofficial English translations of three scales used in the submitted research: the Mishel Uncertainty in Illness Scale for Adults (MUIS-A, 33-item version), the Medical Coping Modes Questionnaire (MCMQ, 20-item version), and the Social Support Rating Scale (SSRS, 10-item version). The original, validated versions of all three scales are published in Chinese. These translations are provided solely as a supplementary reference to facilitate the review of the manuscript by the editorial office and reviewers. They are intended for informational purposes only and are not validated instruments for administration. All rights and copyrights for these scales belong to their respective original authors and publishers. For any formal use of the scales or to obtain the official Chinese versions, please contact the corresponding author.

Mishel Uncertainty in Illness Scale - Adult (MUIS-A) - 33 Item

Please carefully read each statement below. First, think about the meaning of each sentence, then mark “√” in the column that best reflects how you have been feeling recently. (From “strongly disagree” to “strongly agree,” score 1–5 points. **Item 15 is not included in the total score.** The total score ranges from 32 to 160 points, categorized as low level (32–74.7 points), medium level (74.8–117.4 points), and high level (117.5–160 points). A higher total score indicates stronger illness-related uncertainty.)

1. I don't know what is wrong with me.
☐ Strongly disagree ☐ Disagree ☐ Unsure ☐ Agree ☐ Strongly agree
2. I have many unanswered questions (or doubts).
☐ Strongly disagree ☐ Disagree ☐ Unsure ☐ Agree ☐ Strongly agree
3. I am uncertain about how my illness will change.
☐ Strongly disagree ☐ Disagree ☐ Unsure ☐ Agree ☐ Strongly agree
4. I don't know how much pain (or discomfort) I will experience.
☐ Strongly disagree ☐ Disagree ☐ Unsure ☐ Agree ☐ Strongly agree
5. Healthcare professionals have not explained my condition clearly enough.
☐ Strongly disagree ☐ Disagree ☐ Unsure ☐ Agree ☐ Strongly agree
6. I understand the purpose of each treatment.
☐ Strongly disagree ☐ Disagree ☐ Unsure ☐ Agree ☐ Strongly agree
7. When I feel pain (or discomfort), I know what it means for my illness.
☐ Strongly disagree ☐ Disagree ☐ Unsure ☐ Agree ☐ Strongly agree
8. I cannot predict how my illness will change.
☐ Strongly disagree ☐ Disagree ☐ Unsure ☐ Agree ☐ Strongly agree
9. I cannot predict changes in my physical symptoms.
☐ Strongly disagree ☐ Disagree ☐ Unsure ☐ Agree ☐ Strongly agree
10. I understand everything the healthcare professionals explain to me.
☐ Strongly disagree ☐ Disagree ☐ Unsure ☐ Agree ☐ Strongly agree
11. What the doctor says could mean many different things.
☐ Strongly disagree ☐ Disagree ☐ Unsure ☐ Agree ☐ Strongly agree
12. I can predict how long I will be ill.

- ☐ Strongly disagree ☐ Disagree ☐ Unsure ☐ Agree ☐ Strongly agree
13. The treatments I receive are very complex and hard to understand.
☐ Strongly disagree ☐ Disagree ☐ Unsure ☐ Agree ☐ Strongly agree
14. I don't know whether the treatments or medications I receive are effective.
☐ Strongly disagree ☐ Disagree ☐ Unsure ☐ Agree ☐ Strongly agree
15. **There are many different staff in the hospital, and I am not sure what each of them does.**
☐ Strongly disagree ☐ Disagree ☐ Unsure ☐ Agree ☐ Strongly agree
16. Because I cannot predict my illness, I cannot plan for the future.
☐ Strongly disagree ☐ Disagree ☐ Unsure ☐ Agree ☐ Strongly agree
17. My illness is fluctuating, sometimes better, sometimes worse.
☐ Strongly disagree ☐ Disagree ☐ Unsure ☐ Agree ☐ Strongly agree
18. I am not sure how I will manage my life after being discharged.
☐ Strongly disagree ☐ Disagree ☐ Unsure ☐ Agree ☐ Strongly agree
19. I have asked many people, and there are many different opinions about my illness.
☐ Strongly disagree ☐ Disagree ☐ Unsure ☐ Agree ☐ Strongly agree
20. I don't know what else will happen to me in the future.
☐ Strongly disagree ☐ Disagree ☐ Unsure ☐ Agree ☐ Strongly agree
21. I usually know whether my physical condition is good or bad each day.
☐ Strongly disagree ☐ Disagree ☐ Unsure ☐ Agree ☐ Strongly agree
22. My test results are inconsistent.
☐ Strongly disagree ☐ Disagree ☐ Unsure ☐ Agree ☐ Strongly agree
23. It is still uncertain whether the treatments I receive are effective.
☐ Strongly disagree ☐ Disagree ☐ Unsure ☐ Agree ☐ Strongly agree
24. It is difficult to determine how long it will be before I can take care of myself.
☐ Strongly disagree ☐ Disagree ☐ Unsure ☐ Agree ☐ Strongly agree
25. I can generally predict the progression of my illness.
☐ Strongly disagree ☐ Disagree ☐ Unsure ☐ Agree ☐ Strongly agree
26. Because of the treatment, the things I can and cannot do are always changing.
☐ Strongly disagree ☐ Disagree ☐ Unsure ☐ Agree ☐ Strongly agree
27. I am certain that the doctors and nurses will not find any other problems in me.
☐ Strongly disagree ☐ Disagree ☐ Unsure ☐ Agree ☐ Strongly agree
28. The treatment I am receiving has a high success rate.
☐ Strongly disagree ☐ Disagree ☐ Unsure ☐ Agree ☐ Strongly agree
29. The doctor has not given me a clear diagnosis.
☐ Strongly disagree ☐ Disagree ☐ Unsure ☐ Agree ☐ Strongly agree
30. I can predict physical discomfort; I know what will improve or worsen.
☐ Strongly disagree ☐ Disagree ☐ Unsure ☐ Agree ☐ Strongly agree
31. When I need help, the nursing staff can provide assistance promptly.
☐ Strongly disagree ☐ Disagree ☐ Unsure ☐ Agree ☐ Strongly agree
32. The severity of my illness is already clear.
☐ Strongly disagree ☐ Disagree ☐ Unsure ☐ Agree ☐ Strongly agree
33. I can understand the explanations given by healthcare professionals about the treatment.
☐ Strongly disagree ☐ Disagree ☐ Unsure ☐ Agree ☐ Strongly agree

Medical Coping Modes Questionnaire (MCMQ) - 20 Items

The following questions are designed to understand certain thoughts, feelings, and behaviors related to your current illness. Please read each item and select the one answer that most closely matches your actual situation by marking "√". (This questionnaire consists of 20 items, covering three dimensions: Confrontation, Avoidance, and Resignation/Acceptance. Each item is scored on a scale of 1 to 4, with higher scores indicating stronger tendencies. Total scores range from 20 to 80. Subscale scores are calculated by summing specific items. The dimension with the highest average item score represents the primary coping style used by the patient.)

Confrontation Subscale Score: Sum of items 1, 2, 5, 10, 12, 15, 16, 19.

Avoidance Subscale Score: Sum of items 3, 7, 8, 9, 11, 14, 17.

Resignation/Acceptance Subscale Score: Sum of items 4, 6, 13, 18, 20.

Note: Items 1, 10, 12, 19, 9, 11, 4, 13, 18 are reverse-scored.

1. To what extent do you wish to participate in making various treatment decisions?
(1) Very much hope (2) Moderately hope (3) Somewhat hope (4) Do not hope
2. Do you often think about discussing your illness with relatives or friends?
(1) Do not want to (2) Sometimes want to (3) Often want to (4) Always want to
3. When discussing your illness, do you often find yourself thinking about other things?
(1) Never (2) Sometimes (3) Often (4) Always
4. Do you often feel that a full recovery is hopeless?
(1) Always (2) Often (3) Sometimes (4) Never
5. Over the past few months, how much knowledge about your illness have you obtained from knowledgeable people such as doctors and nurses?
(1) Very little (2) Some (3) A fair amount (4) A lot
6. Do you often feel that you are unconcerned about various future matters because of your illness?
(1) Never (2) Sometimes (3) Often (4) Always
7. To what extent are you willing to talk to relatives and friends about other things because you don't need to constantly think about your illness?
(1) Very low extent (2) Some extent (3) Considerable extent (4) Great extent
8. To what extent has your illness led you to consider certain things in life more positively?
(1) Very low extent (2) Some extent (3) Considerable extent (4) Great extent
9. When thinking about your illness, do you do other things to distract yourself?
(1) Always (2) Often (3) Sometimes (4) Never
10. Do you often ask doctors what you should do regarding your illness?
(1) Always (2) Often (3) Sometimes (4) Never
11. When relatives or friends talk to you about your illness, do you often try to change the subject?
(1) Always (2) Often (3) Sometimes (4) Never
12. Over the past few months, how much information about your illness have you learned from books, magazines, or newspapers?
(1) A lot (2) A fair amount (3) Some (4) Very little
13. Do you often feel you have to resign yourself to your illness?
(1) Always (2) Often (3) Sometimes (4) Never

14. To what extent do you want to forget your illness?
(1) Very low extent (2) Some extent (3) Considerable extent (4) Great extent
15. How many questions have you asked your doctor about the illness?
(1) None (2) Some (3) A fair amount (4) A lot
16. When meeting someone with the same illness, how much detail about the illness do you typically discuss with them?
(1) Very little (2) Some (3) A fair amount (4) A lot
17. Do you often distract yourself from your illness by watching movies, TV, etc.?
(1) Never (2) Sometimes (3) Often (4) Always
18. Do you often feel helpless about your illness?
(1) Always (2) Often (3) Sometimes (4) Never
19. When relatives and friends ask about your condition, do you often discuss many details of the illness with them?
(1) Always (2) Often (3) Sometimes (4) Never
20. Regarding your illness, do you often feel you can only resign yourself to fate?
(1) Never (2) Sometimes (3) Often (4) Always

Social Support Rating Scale (SSRS) - 10 Items

Please read each statement below and mark "√" in the column that best matches your actual situation.

1. How many close friends do you have from whom you can seek support and help? (Select only one)

- ① None.
- ② 1-2.
- ③ 3-5.
- ④ 6 or more.

2. In the past year, you have: (Select only one)

- ① Lived away from family and alone.
- ② Frequently changed residences, living mostly with strangers.
- ③ Lived with classmates, colleagues, or friends.
- ④ Lived with family.

3. You and your neighbors: (Select only one)

- ① Never care about each other, just acquaintances who nod hello.
- ② Might show some concern if encountering difficulties.
- ③ Some neighbors care about you a lot.
- ④ Most neighbors care about you a lot.

4. You and your colleagues: (Select only one)

- ① Never care about each other, just acquaintances who nod hello.
- ② Might show some concern if encountering difficulties.
- ③ Some colleagues care about you a lot.
- ④ Most colleagues care about you a lot.

5. Support and care received from family members: (Mark "√" in the appropriate box) (Select one for each row)

Family Member	① None	② Very Little	③ Moderate	④ Full Support
A. Spouse/Partner				
B. Parents				
C. Children				
D. Siblings				
E. Other members (e.g., in-laws)				

6. In the past, when you encountered an emergency or crisis, from whom did you receive financial support or practical help?

- ① No source at all.
- ② Had the following source(s): (You may select multiple)
 - A. Spouse/Partner.
 - B. Other family members.
 - C. Friends.
 - D. Relatives.
 - E. Colleagues.

- F. Work unit.
- G. Official or semi-official organizations (e.g., party, league, labor union).
- H. Non-official organizations (e.g., religious, social groups).
- I. Other (please specify): _____.

7. In the past, when you encountered difficulties or crises, from whom did you receive comfort and concern?

- ① No source at all.
- ② Had the following source(s): (You may select multiple)
 - A. Spouse/Partner.
 - B. Other family members.
 - C. Friends.
 - D. Relatives.
 - E. Colleagues.
 - F. Work unit.
 - G. Official or semi-official organizations (e.g., party, league, labor union).
 - H. Non-official organizations (e.g., religious, social groups).
 - I. Other (please specify): _____.

8. When you have worries, how do you confide in others? (Select only one)

- ① Never tell anyone.
- ② Only tell 1-2 very close people.
- ③ Tell if friends ask proactively.
- ④ Proactively share worries to gain support and understanding.

9. When you have worries, how do you seek help? (Select only one)

- ① Rely only on myself, do not accept help from others.
- ② Rarely ask others for help.
- ③ Sometimes ask others for help.
- ④ Often seek help from family, relatives, or organizations when in difficulty.

10. Regarding activities organized by groups (e.g., party/league organizations, religious groups, labor unions, student unions): (Select only one)

- ① Never participate.
- ② Occasionally participate.
- ③ Frequently participate.
- ④ Participate proactively and engage actively.

Scoring Method:

Items 1-4, 8-10: Select only one option per item. Options ①, ②, ③, ④ are scored 1, 2, 3, 4 points respectively.

Item 5: Comprises parts A through E. Score each part separately: None=1, Very Little=2, Moderate=3, Full Support=4. Sum the scores of all five parts (A-E).

Items 6 & 7: If "No source at all" is selected, score 0 points. If "Had the following source(s)" is selected, count 1 point for each source chosen.

Analysis:

Total Score: Sum of scores from all ten items.

Objective Support Subscore: Sum of scores from Items 2, 6, and 7.

Subjective Support Subscore: Sum of scores from Items 1, 3, 4, and 5.

Utilization of Support Subscore: Sum of scores from Items 8, 9, and 10.

Purpose: To assess the degree of psychological support an individual receives in social life and their utilization of such support.

Administration Time: Approximately 15 minutes. Can be completed via pen-and-paper or computer.

Total Possible Score: 40 points.

General Reference: A total score ≥ 20 is common.

Interpretation Guidelines: A higher score indicates a higher level of social support. Generally, a total score < 20 suggests relatively low social support; 20-30 suggests an average level; 30-40 suggests a satisfactory level. The scale measures three dimensions: Objective Support, Subjective Support, and Utilization of Support. Results should be interpreted with the assistance of a qualified mental health professional.