

Development of a Vietnamese version of the Revised Hasegawa's Dementia scale

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ABSTRACT

As the aging population grows worldwide, the problem of age-related health is becoming an important public health concern. Dementia is a devastating disease that places a significant physical, emotional, and financial burden on patients, their caregivers, and society. It is predicted to increase in developing countries. The Revised Hasegawa's Dementia Scale (HDS-R) has been used in many Asian countries to measure cognitive function. However, there is still no Vietnamese version of the HDS-R. Therefore, this paper describes the development of the HDS-R scale and manual in Vietnamese language. Two Vietnamese researchers translated the HDS-R from English to Vietnamese. To confirm the accuracy of the translation, two other Vietnamese researchers conducted a back-translation. Another pair of Vietnamese researchers compared the back-translated English version to the original one. All six researchers discussed the inconsistencies between English HDS-R scale and manual and derived the most suitable version for the Vietnamese context. In Questions 4 and Question 7, we changed the words from "cherry blossom" and "train" to "daisy flower" and "bicycle" for the first option, and from "plum blossom" to "rose" for the second option. We also changed the expressions in some places in the manual to fit the Vietnamese language. Future studies are needed to validate this version to be able to access cognitive function in both clinical and public healthcare settings.

Keywords: Revised Hasegawa Dementia scale, Vietnamese HDS-R, cognitive function, elderly, Vietnam

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INTRODUCTION

Global life expectancy has increased over the last 65 years. Vietnam now sees an increase in the aging population. By 2050, the number of people 60 years and over will more than double from 11.9 million to 29 million people making up almost a third of the total population. The number of people over 80 will also triple to almost 6% of the population.¹ Governments in the Asia-Pacific region are increasingly recognizing that population aging is already a challenge to achieving the United Nations 2030 Agenda on Sustainable Development because of the profound impacts this demographic phenomenon has on the well-being of all generations. It will ultimately influence the ambitions of the 2030 Agenda to reduce poverty for people of all ages and of all backgrounds and to leave no one behind.² Dementia is one of the major causes of disability and dependency among older people worldwide. It not only seriously affects patients' quality of life but also has physical, psychological, and socioeconomic impacts on caregivers, family members, and society.³

Worldwide, approximately 50 million people have dementia, and there are nearly 10 million new cases every year. Although dementia mainly affects older people, it is not a normal part of aging. Most studies worldwide recognize that the prevalence of dementia increases remarkably with increasing age.^{4,5} Chronological age is the strongest risk factor for dementia, and the prevalence of dementia increases with age.⁶ Dementia incidence increases exponentially with age between the ages of 65 and 90 years and doubles approximately every five years.⁷ However, dementia or mental health in general has not been recognized as a health priority in Vietnam.^{8,9} Few studies have examined the magnitude of occurrence of dementia in Vietnam or captured the prevalence of dementia among high-risk groups, ie, individuals older than 60 years.^{10,11} Previous studies in Vietnam used tools to measure dementia, such as the Diagnostic and Statistical Manual-5 (DSM-5) criteria, and the Mini Mental State Evaluation (MMSE). However, these two scales were self-translated into Vietnamese for their own research. According to the DSM-5 criteria, the prevalence of dementia was 24.3% among 367 inpatients aged 60 years and above (mean age, 77.5 ±9.2) in the geriatrics departments at three acute care hospitals in Ho Chi Minh City in 2019. All participants were assessed within 72 hours of admission by three geriatricians at all three hospitals.¹² Through the MMSE, the cognitive symptoms of dementia was found to be 46.4% among 3308 adults from six communes in the northern, central, and southern regions of Vietnam in 2019.¹³ Participants of the study were people meeting the inclusion criteria of being 60 years old or above; being a registered resident in the designated communes and not living with any diagnosed mental disorder that could compromise the autonomy to participate in the study.

Because there has been no validated Vietnamese version of the dementia scale until now, it is necessary to use other scales to compare and to make reference for future studies. As a test to measure cognitive function, Hasegawa's Dementia Scale was developed in 1974, and in 1991 it was revised and renamed the Revised Hasegawa's Dementia Scale (HDS-R).¹⁴ The scale has been widely used for studies on the Asian population.¹⁵⁻²¹ The total score of the HDS-R is 30 points, while a score of 20 points and below indicates the presence of dementia. The English version of the HDS-R was published in 1994.²² Until now, many studies using the HDS-R have been published, including in Korea, China, Japan, Laos, and Myanmar. This paper presents the process of developing a Vietnamese language version of the HDS-R, based on the experience of developing the Myanmar and Lao language versions of the HDS-R. The version was developed for Vietnamese people to understand the questions of the HDS-R based on the cultural customs of Vietnam and the nature of the Vietnamese language. The number of people over 60 in Vietnam has hit 11.9 % of the country's population in 2019.²³ It is forecasted that by 2029, Vietnam would have about 16.5 million elderly citizens, accounting for 17.0% of the entire population.²⁴

The illiterate proportion among people of age 15 years and above was 5.0% in 2018.²⁵ Most of the illiterates were elderly people.

There are scales for dementia assessment in Vietnam, but no scales are suitable for illiterate elderly, and the HDS-R Vietnamese language version would meet this requirement.

MATERIALS AND METHODS

Revision before translation to Vietnamese language

We used the English version of the HDS-R and its manual¹⁵ (Appendix 1) as the original references to develop the Vietnamese version of the HDS-R. Furthermore, the following points were modified to fit the Vietnamese culture before translation to the Vietnamese language (Appendix 2).

Translation, back-translation, and comparison with the original

A bilingual Vietnamese researcher with experience as a faculty member in Public Health at Thaibinh University of Medicine and Pharmacy translated the English version of the HDS-R into Vietnamese. This Vietnamese version was re-examined by a second bilingual Vietnamese researcher, who was a medical doctor working at the Faculty of Public Health. After that, these two Vietnamese researchers sat together to obtain agreement for the Vietnamese version. The version was then back-translated into English by two other Vietnamese researchers. Later, this new English translated version was compared with the original English version by two other Vietnamese researchers. To propose the most appropriate Vietnamese version of the HDS-R, these six researchers then held discussions together to harmonize the inconsistencies in translation between the original and back-translated versions to reach consensus on the Vietnamese version and manual.

Confirmation

To confirm the validity of the Vietnamese version of the HDS-R scale and manual, instead of a pilot study, two Vietnamese doctors were given the HDS-R Vietnamese scale without any instructions, to read and to interview another three Vietnamese doctors. After these mock interviews, the interviewees recorded cases of misunderstandings, and difficulties in using the draft HDS-R scale by the interviewers were recorded by the researchers. Later, all the researchers participated in the discussion to re-check the HDS-R scale and manual to prepare the latest Vietnamese revision based on the consensus (Appendix 3).

Ethical issues

The researchers discussed the work thoroughly before conducting the study. Their work focused on building the validity of the HDS-R Vietnamese version; therefore, they did not collect any of the participants' personal information. The test was used to measure the cognitive function of the study participants. Any issues in terms of language difference, redundancy, and difficulty in understanding were discussed among the researchers to reach a consensus. Accordingly, the activities were not submitted to an ethics committee.

RESULTS

Back-translation of HDS-R questions

To achieve the highest efficiency in accurately assessing the ability of the elderly to recall

objects, it is necessary to use common words from everyday life. In the translation of Question 4, we replaced two words in version A: “cherry blossom” and “tram” were replaced with “daisy flower” and “bicycle”; and “plum blossom” was replaced with “rose” in version B. These terms are very familiar to the Vietnamese people, especially to the elderly.

The daisy flower is available all the year round, and most in summer and autumn. This is a very popular flower to dedicate to the ancestors’ altar as well as for decoration on the holidays of the Vietnamese people. In Question 8, the five objects to memorize were used: spoon, comb, pen, nail clipper, and toothbrush.

Back-translation of HDS-R manual

To ensure that the respondents understand the question easily and give the best answer, the question must be easy to understand, and must not cause confusion or misunderstanding. In Question 3, instead of asking the question “Is this a hospital, office, or your house?,” we divided it into three short questions: “Is this a hospital? Is this an office? Is this your house?.” In the manual of Question 4, the explanation “But, if this process ends up with a failure, delete the word with delayed recall in Question 7,” we revised the Vietnamese translation to “If the respondents could not repeat the three words, there is no need to ask the respondents to recall them in Question 7” to make it easy for Vietnamese people to understand. In the manual for Question 5, the explanation “If the answer is incorrect, discontinue this question and proceed to the next question 6” was revised as “If the respondents could not answer the first question correctly, do not ask the second question, and proceed to the next question 6.”

In addition, in the manual for Question 7, we replaced “a plant” with “one kind of flower” and we revised the guidance “Do not convey two or more hints at a time” with “Do not provide two or more words at a time” to match the Vietnamese language. In the manual for Question 9, we changed the expression “Discontinue the question if the name of the first or subsequent vegetables is not stated for 10 seconds” into “Do not continue to ask if the respondents could not speak out the name of the next vegetable 10 seconds after he/she has answered the previous one.” The final English and Vietnamese versions are shown in Appendices 2 and 3, respectively.

Confirmation

We did not carry out further revision in the process of confirmation.

DISCUSSION

Dementia poses a serious threat to the well-being of the elderly. In previous studies in Vietnam, dementia was measured using scales that showed variations in the results of dementia prevalence.^{12,13} Therefore, it is necessary to use other scales to compare and provide reference for future studies. This paper reports the translation process and development of the Vietnamese version of the HDS-R scale and manual. We used forward and backward translations to convert the original English version into a Vietnamese version during the development process. The translation and back-translation were carried out by Vietnamese medical doctors and lecturers with experience in conducting medical research in the community, and were supervised by senior Vietnamese lecturers in medicine. During the process of developing the Vietnamese version, Japanese researchers who had previous experience in developing the Lao and Myanmar versions of the HDS-R gave directions, provided guiding documents, and coordinated with the implementation. Vietnamese researchers selected proper words and expressions in the Vietnamese language to precisely convey the meaning of the scale from the original English version and to

be understandable for the Vietnamese, especially for the elderly.

In Question 4 of the Vietnamese version of the HDS-R test, we replaced some words with those that were more common and familiar to Vietnamese people. We replaced “cherry blossom” with “daisy flower,” and “tram” with “bicycle” in version A, and in version B “plum blossom” was replaced with “rose.” Daisy is a very popular flower in Vietnam. This flower blooms year-round, especially in autumn and winter. At the time of the New Year festival or on holidays, this flower is used almost all across the country. In daily life, the daisy is also used in vases and for home decorations. Daisy flowers are considered a symbol of autumn in Vietnam. Regarding transportation vehicles, bicycles are a very common item for most Vietnamese people. All people know how to use bicycles because of their compactness and convenience. In the manual of the HDS-R test, we revised the explanations for questions 3 to 7 to make them more suitable for Vietnamese people, especially for elderly people, to understand, and match the characteristics of the Vietnamese language. For example, the explanation in the manual for Question 5, “In the second question, do not repeat the correct answer from the first question, such as ‘subtraction of 7 from 93,’ after 10 seconds,” was revised as “If the respondents could not answer the first question correctly, do not ask the second question: ‘What is the answer if 7 is subtracted from 93?’” so that the explanation is clearer for Vietnamese people, especially for the elderly.

According to the statistics of Vietnam, the proportion of illiterate individuals among people aged 65 years and older was 17.9% in 2015.²⁵ To date, this proportion still remains high in Vietnam, as the majority of the elderly people, especially in rural areas, were military veterans, who were born and grew up in the period of the Vietnam War against America. Because the Vietnamese version of the MMSE required the participants to read the information in the paper provided and to write down the completed sentence in the paper, and the DSM-5 was used in a clinical setting, this HDS-R Vietnamese version would be more suitable than the MMSE and the DSM-5 as it can be used for illiterate people and in community settings.

Vietnam has been facing the challenge of establishing health and social care systems for people with dementia. The estimated number of 660 thousand people living with dementia in Vietnam in 2015 is predicted to increase to 1.2 million by 2030.²⁶ Therefore, dementia-related costs, including direct medical costs, social care costs, and informal care costs, would also increase. However, there are no published national dementia policies or strategies in Vietnam. With the increasing rates of care dependence in Vietnam, there is an urgent need for screening dementia in community and care facility settings.

The limitations of this study are as follows: First, we translated the HDS-R English version into Vietnamese following the expert method, we did not validate the HDS-R scale by conducting an investigation among elderly. However, the scale included simple questions for the elderly to be easy to understand. The kinds of question are also popular for Vietnamese people. Second, since the scale can be used for people regardless of education level, some parts of the HDS-R requiring calculation may influence the score of the participants. However, this is a common issue in the other language versions of HDS-R. Future studies are needed to validate this version and to compare the HDS-R with other tools measuring dementia.

CONCLUSION

Until now, there have been some tools in Vietnam to measure dementia, such as DSM-5 and MMSE, in which the MMSE was more commonly used than the others. However, there is no published translated version of the MMSE or other scales in the Vietnamese language. The Vietnamese version of the HDS-R was developed using an established process. We examined

the confirmation of the scale through the process of translation and back-translation to reduce the language barrier for both study participants and healthcare providers.

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CONFLICT OF INTEREST

Authors have declared that no conflict of interest for the present study.

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APPENDIXES

Appendix 1. Scale and manual of the original English version of the Revised Hasegawa’s Dementia Scale from Imai and Hasegawa²²

Hasegawa’s Dementia Scale - Revised (HDS-R)

Question	Answer	Score
1. “How old are you?” (+/- 2 yrs.)		0 1
2. Year, month, date, day? 1 point each	Year Month Date Day	0 1 0 1 0 1 0 1
3. What is this place? Correct answer in 5 sec.: 2 points Correct choice between “hospital? office?”		0 2 0 1
4. Repeat 3 words. 1 point each. (To use only one version per test) Version A: “a) cherry blossom b) cat c) tram” Version B: “a) plum blossom b) dog, c) car”	a) b) c)	0 1 0 1 0 1
5. 100-7=? If correct, 1 point. If not: skip to item #6. -7 again=? If correct, 1 point.		93 0 1 86 0 1
6. Repeat 6-8-2 backwards. If not: skip to item #7. Repeat 3-5-2-9 backwards.		0 1 0 1
7. Recall 3 words. For each words. 2 points for spontaneous recall. 1 point for correct after category cue	a) b) c)	0 1 2 0 1 2 0 1 2
8. Show five unrelated common objects, then take them back and ask for recall. 1 point each.		0 1 2 3 4 5
9. Name all vegetables that come to mind. No time limit. May remind once. Terminate when there is no further answer after a 10 sec. interval. For each vegetable name after the 5 th one: 1 point		
1. _____ 2. _____ 3. _____ 4. _____ 5. _____		0 1 2
6. _____ 7. _____ 8. _____ 9. _____ 10. _____		3 4 5
Total score		/30

The HDS-R as depicted in Appendix 1 was administered by a psychometrically trained examinee. A description of each question by the HDS-R is as follows:

Question 1 [Age]:

Give one point to the answer made correctly or within a deviation of 2 years.

Question 2 [Orientation in time]:

The examiner may ask about the year, month, day and the day of the week either at the same time or slowly one by one. Give one point to each correct answer.

Question 3 [Orientation in place]:

Give two points to a spontaneous correct answer. It is judged to be correct if the subject substantially understand where he/she is, although he/she cannot exactly say the name and address of the hospital, the office or his/her house where he/she is now. If a correct answer cannot be gotten, ask the subject 5 seconds later: "Is this a hospital, or office or your house?" Give one point to a correct answer.

Question 4 [Repeating 3 words]:

Pronounce the three words slowly one by one. After that, ask the subject to repeat them. Give one point to each correctly repeated word.

If a word cannot be correctly repeated, teach at least three times what it is and ask the subject to memorize it. But, if this process ends up with a failure, delete the word delayed recall in Question 7.

Question 5 [Serial subtractions of 7s]:

The first question is "subtract 7 from 100". If the answer is correct, give one point to it and proceed to the second question. If the answer is incorrect, discontinue this question and proceed to next question 6. In second question, do not repeat the correct answer made by the subject to the first question, such as "subtract 7 from 93". If the answer is correct, give one point to it.

Question 6 [Digits backward]:

First, pronounce 3 digits, 6-8-2, slowly at intervals of one second. After that, ask the subject to repeat them backward. If the subject can do this correctly, give one point to the success and proceed to the next. If this ends up with a failure, discontinue this question and proceed to the next Question 7. Second, pronounce 4 digits, 3-5-2-9, in the same manner as above. After that, ask the subject to repeat them backward. If the subject can do this correctly, give one point to the success.

Question 7 [Recalling of 3 words]:

Recall 3 words in Question 4. Give two points to each spontaneous answer. If the subject cannot well recall words, give him/her such hints as "a plant" for cherry blossom, "an animal" for cat and "a vehicle" for tram after a short interval time. Do not convey two or more hints at a time; instead, convey them one by one confirming the subject's response. For example, if the subject cannot remember both "cherry blossom" and "tram", say to him/her, "'one was a plant, wasn't it?'" If he/she can correctly recall "cherry blossom", give one point to the success. Shortly after, convey a hint to him/her saying, "the other was a vehicle, wasn't it?" If he/she can correctly reproduce "tram", give one point to the success.

Question 8 [Recalling 5 objects]:

Five objects must be ready for use. They are optional, but must be unrelated common objects as in a combination of a watch, a key, a cigarette, a pen and a coin. Put the five objects on the table one

by one, calling their names, then take them back and ask for recall. Give one point to each correct answer, regardless of the order recall.

Question 9 [Generating vegetables]:

Enter in the given space the names of the vegetables the subject calls and avoid double entries. Since this question is intended to observe generating fluency, discontinue the question if the name of the first or subsequent vegetable is not called for 10 seconds. Give 0 point to 0–5 vegetable (s), and for each vegetable after the 5th one, give to 1 point each.

Appendix 2: Scale and manual of the revised English version of the Revised Hasegawa's Dementia Scale corresponding to those of Vietnamese language version

Hasegawa's Dementia Scale - revised (HDS-R): Questionnaire Sheet

Question	Answer	Score
1 "How old are you?" (+/- 2 yrs.)		0 1
2 Year, month, date, day? 1 point each	Year Month Date Day	0 1 0 1 0 1 0 1
3 What is this place? Correct answer in 5 sec.: 2 points Correct choice between "hospital? office?" your house?		0 2 0 1
4 Repeat 3 words. 1 point each. (To use only one version per test) Version A: "a) daisy flower b) cat c) bicycle" Version B: "a) rose b) dog c) car"	a) b) c)	0 1 0 1 0 1
5 100-7=? If correct, 1 point. If not: skip to item #6 -7 again =? If correct, 1 point	93 86	0 1 0 1
6 Repeat 6-8-2 backwards If not: skip to item #7 Repeat 3-5-2-9 backwards		0 1 0 1
7 Recall 3 words. For each words 2 points for spontaneous recall 1 point for correct recall after category cue	a) b) c)	0 1 2 0 1 2 0 1 2
8 Show 5 unrelated common objects, then take them back & ask for recall. 1 point each		0 1 2 3 4 5
9 Name all vegetables that come to mind. No time limit. May remind once. Terminate when there is no further answer after a 10 sec. interval. For each vegetable name after the 5 th one: 1 point		
1.....2.....3.....4.....5..... 6.....7.....8.....9.....10.....		0 1 2 3 4 5
Total score		/30

Manual of HDS- R Vietnamese version

Question 1 [Age]:

Give one point to the answer made correctly or within a deviation of two years.

Question 2 [Orientation in time]:

The examiner may ask about the year, month, date and the day of the work either at the same time or slowly one by one. Give one point to each correct answer.

Question 3 [Orientation in place]:

Give two points to a spontaneous correct answer. It is judged to be correct if the subjects substantially understand where he/she is, although he/she cannot exactly say the name address of the hospital, the office or his/her house where he/she is now. If a correct answer cannot be gotten, ask the subject five seconds later: "Is this a hospital?, or "Is this an office?" or "Is this your house? "Give one point to a correct answer.

Question 4 [Repeating 3 words]:

Pronounce the three words slowly one by one. After that, ask the subject to repeat them. Give one point to each correctly repeated word.

If a word cannot be correctly repeated, teach at least three times what it is and ask the subject to memorize it. If the respondents could not repeat the three words recall, there is no need to require the respondents to recall them in Question 7.

Question 5 [Serial subtractions of 7s]:

The first question is "Subtract 7 from 100". If the answer is correct, give one point to it and proceed to the second question. If the respondents could not calculate the first question correctly, do not ask the second question and proceed to the next question 6. In second question, do not repeat the correct form made by the subject to the first question, such as "subtract 7 from 93". If the answer is correct, give one point to it.

Question 6 [Digits backward]:

First, pronounce 3 digits, 6-8-2, slowly at intervals of one second. After that, ask the subject to repeat them backward. If the subject can do this correctly, give one point to the success and proceed to the next. If this ends up with a failure, discontinue this question and proceed to the next question 7. Second, pronounce 4 digits, 3-5-2-9, in the same manner as above. After that, ask the subject to repeat the backward. If the subject can do this correctly, give one point to the success.

Question 7: [Recalling of 3 words]:

Recall 3 words in Question 4. Give two points to each spontaneous answer. If the subject cannot well recall words, give him/her such hints as "one kind of flower" for "daisy flower", "an animal" for cat and "a vehicle" for bicycle after a short interval time. Do not provide two or more words at a time; instead, convey them one by one confirming the subject's response. For example, if the subject cannot remember both "daisy flower" and "bicycle", say to him/her, "one was one kind of flower, wasn't it?". If he/she can correctly recall "daisy flower", give one point to the success. Shortly after, convey a hint to his/her saying, "the other was a vehicle, wasn't it?". If he/she correctly reproduce "bicycle", give one point to the success.

Question 8: [Recalling 5 objects]:

Five objects must be ready for use. They are optional, but must be unrelated common objects as in a combination of a watch, a key, a cigarette, a pen, and a coin. Put the five objects on the table one by one, calling their names, then take them back and ask for recall. Give one point to each correct answer, regardless of the order recall.

Question 9: [Generating vegetables]:

Enter in the given space the names of the vegetables the subject calls and avoid double entries. Since this question is intended to observe generating fluency, do not continue to ask if the respondents could not speak out the name of the next vegetable 10 seconds after he/she answered the previous one. Give 0 point to 0–5 vegetable (s), and for each vegetable after the 5th one, five to 1 point each.

Appendix 3: Scale and manual of the Vietnamese language version of the Revised Hasegawa’s Dementia Scale

Hasegawa’s Dementia Scale – Vietnamese version

Câu hỏi	Trả lời	Điểm
1 “Ông/bà bao nhiêu tuổi?” (+/- 2 tuổi.)		0 1
2 Năm, tháng, ngày, thứ? Mỗi câu trả lời đúng được 1 điểm	Năm Tháng Ngày Thứ	0 1 0 1 0 1 0 1
3 Đây là nơi nào? Trả lời đúng trong 5 giây: 2 điểm Lựa chọn đúng giữa: “bệnh viện “cơ quan” “nhà của ông/bà”: 1 điểm		0 2 0 1
4 Nhắc lại 3 từ: mỗi từ đúng: 1 điểm. (dùng 1 trong 2 phương án dưới đây) Phương án A: “a) hoa cúc b) con mèo c) xe đạp” Phương án B: “a) hoa hồng b) con chó c) ô tô”	a) b) c)	0 1 0 1 0 1
5 100– 7 bằng bao nhiêu? Nếu trả lời đúng: cho 1 điểm. Nếu trả lời không đúng: chuyển sang câu hỏi số 6 Trừ tiếp đi 7 bằng bao nhiêu? Nếu trả lời đúng: cho 1 điểm.	93 86	0 1 0 1
6 Nhắc lại các số 6-8-2 theo thứ tự ngược lại Nếu nhắc lại không được: chuyển sang câu hỏi số 7 Nhắc lại các số 3-5-2-9 theo thứ tự ngược lại		0 1 0 1
7 Nhắc lại 3 từ bên trên Với mỗi từ tự nhắc lại được thì được tính 2 điểm Nếu từ nào cần gợi ý mới nhắc lại được thì được tính 1 điểm	a) b) c)	0 1 2 0 1 2 0 1 2
8 Đưa ra 5 đồ vật thông dụng, 5 đồ này không có liên quan đến nhau Sau đó cất đi và đề nghị nhắc lại tên, mỗi đồ vật nhắc lại đúng: 1 điểm		0 1 2 3 4 5
9 Gọi tên các loại rau có thể nghĩ ra trong đầu. Không giới hạn thời gian. Dừng hỏi nếu sau 10 giây không đưa ra được loại rau tiếp theo. Với mỗi loại rau được gọi tên sau rau thứ 5 được cho 1 điểm		
1.....2.....3.....4.....5..... 6.....7.....8.....9.....10.....		0 1 2 3 4 5
Tổng điểm		/30

HƯỚNG DẪN SỬ DỤNG THANG ĐO

Câu hỏi 1 [Tuổi]:

Cho 1 điểm nếu câu trả lời chính xác hoặc trả lời sai lệch trong phạm vi 2 tuổi.

Câu hỏi 2 [Định hướng thời gian]:

Người kiểm tra có thể hỏi về năm, tháng, ngày và thứ trong tuần cùng một lúc hoặc từ từ từng câu một. Mỗi câu trả lời đúng được cho 1 điểm.

Câu hỏi 3 [Định hướng không gian]:

Cho hai điểm nếu tự trả lời chính xác trong vòng 5 giây không cần gợi ý. Trả lời được coi là chính xác nếu đối tượng thực sự hiểu ông/bà ấy đang ở đâu, mặc dù ông/bà ấy không thể nói chính xác tên và địa chỉ của bệnh viện, văn phòng hoặc nhà của ông/bà ấy hiện đang ở. Nếu không trả lời đúng trong 5 giây, hỏi thêm: Đây có phải là bệnh viện, cơ quan, hay nhà của ông/bà? Nếu trả lời đúng được 1 điểm.

Câu hỏi 4 [Nhắc lại 3 từ]:

Phát âm ba từ chậm rãi từng từ một. Sau đó, yêu cầu đối tượng nghiên cứu nhắc lại chúng. Với mỗi từ lặp lại chính xác được 1 điểm. Nếu đối tượng nghiên cứu không thể nhắc lại chính xác, hãy nhắc lại mỗi từ ít nhất 3 lần và đề nghị đối tượng nghiên cứu ghi nhớ chúng. Nếu thất bại trong việc hướng dẫn ghi nhớ các từ, hãy bỏ qua câu hỏi 7.

Câu hỏi 5 [Phép trừ đi 7 liên tiếp]:

Câu hỏi đầu tiên là 100 trừ 7 bằng bao nhiêu. Nếu câu trả lời là đúng, hãy cho 1 điểm và hỏi tiếp câu hỏi thứ hai. Khi hỏi câu hỏi thứ hai, không lặp lại câu trả lời đúng của đối tượng ở câu hỏi đầu tiên (không lặp lại đáp án của phép trừ trong câu hỏi 1), ví dụ như “trừ 7 bằng 93”. Nếu câu trả lời là đúng, hãy cho một điểm. Nếu câu trả lời không chính xác, hãy ngừng câu hỏi này và chuyển sang câu hỏi số 6 tiếp theo.

Câu hỏi 6 [Thứ tự số đảo ngược]:

Đầu tiên, phát âm 3 chữ số, 6-8-2 chậm rãi trong khoảng thời gian một giây. Sau đó, yêu cầu đối tượng nhắc lại chúng theo chiều ngược lại. Nếu đối tượng làm chính xác, hãy cho 1 điểm và chuyển sang câu tiếp theo. Nếu không nhắc lại đúng theo chiều ngược lại, hãy ngừng câu hỏi này và chuyển sang câu hỏi số 7 tiếp theo. Thứ hai, phát âm 4 chữ số, 3-5-2-9, theo cách tương tự như trên. Sau đó, yêu cầu đối tượng nhắc lại chúng theo chiều ngược lại. Nếu làm chính xác, hãy cho 1 điểm.

Câu hỏi 7 [Nhắc lại 3 từ]:

Nhắc lại 3 từ trong câu hỏi số 4 ở trên. Với mỗi từ tự nhớ lại được thì cho 2 điểm. Nếu đối tượng không thể nhắc lại các từ, hãy đưa ra gợi ý như là “một loài hoa” cho hoa cúc, “một con vật” cho con mèo và “một chiếc xe” cho xe đạp. Sau một khoảng thời gian ngắn, không gợi ý hai hoặc nhiều gợi ý cùng một lúc; mà phải truyền đạt từng gợi ý một để xác nhận phản hồi của đối tượng. Ví dụ, nếu đối tượng không thể nhớ cả hai từ “hoa cúc”, và “xe đạp”, thì hãy nói với ông/bà ấy, “đó là 1 loại hoa, phải không”? Nếu ông/bà ấy có thể nhớ lại một cách chính xác là “hoa cúc”, thì cho 1 điểm. Ngay sau đó, đưa ra gợi ý “còn cái kia là một loại xe, phải không”? Nếu ông/bà ấy có thể nhớ lại chính xác là “xe đạp”, thì cho 1 điểm.

Câu hỏi 8 [Kể tên 5 đồ vật]:

Năm đồ vật được dùng phải là những đồ vật thông dụng. Chúng không có liên quan đến nhau, ví dụ

như: đồng hồ, chìa khóa, thuốc lá, bút và đồng xu. Đặt 5 đồ vật, từng cái từng cái một trên bàn, gọi tên chúng, rồi cất chúng đi và đề nghị đối tượng nghiên cứu gọi lại tên của từng đồ vật. Với mỗi câu trả lời đúng được cho 1 điểm, bắt kê thứ tự nhớ lại các vật đúng hay sai.

Câu hỏi 9 [Kể tên loại rau]:

Điền vào chỗ trống tên của các loại rau mà đối tượng gọi được, tránh viết 2 lần cho 1 loại rau. Câu hỏi này nhằm quan sát sự trôi chảy. ngừng hỏi nếu sau 10 giây mà đối tượng nghiên cứu không gọi được tên của loại rau đầu tiên, hoặc sau 10 giây không gọi được tên của loại rau tiếp theo. Với 0–5 loại rau đầu tiên chưa được tính điểm. Đối với mỗi loại rau sau thứ 5, mỗi loại rau được tính 1 điểm.