



Assessment of Dementia and Caregiving for Chinese American Elders

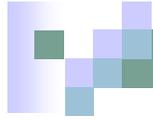
January 13, 2010

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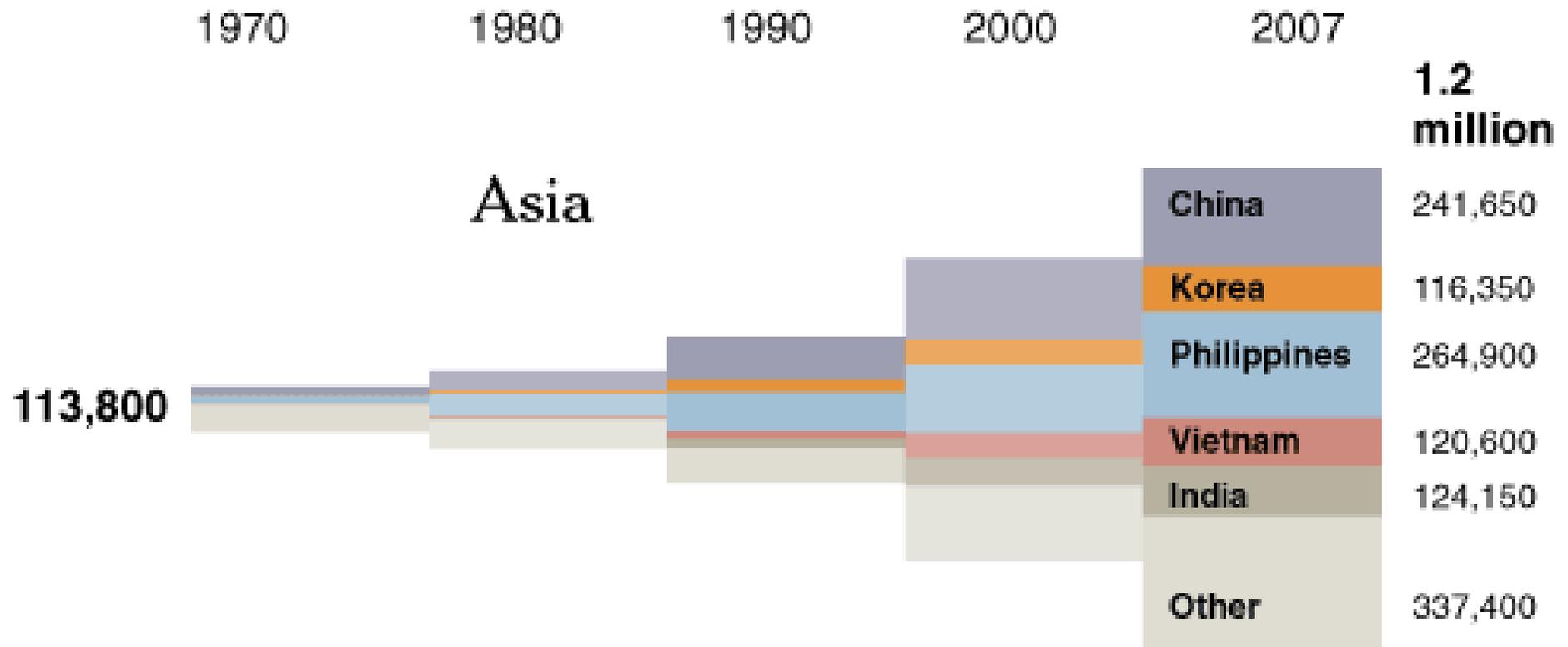
Stanford Geriatric Education Center
Alzheimer's Association N. CA and N. NV Chapter



Outline of Webinar

- Demographic Information
- Assessment Challenges for Evaluating Cognitive Impairment in Chinese and Chinese American Older Adults
- Review of Interventions in use with Chinese and Chinese American caregivers
- Discussion of Promising Interventions

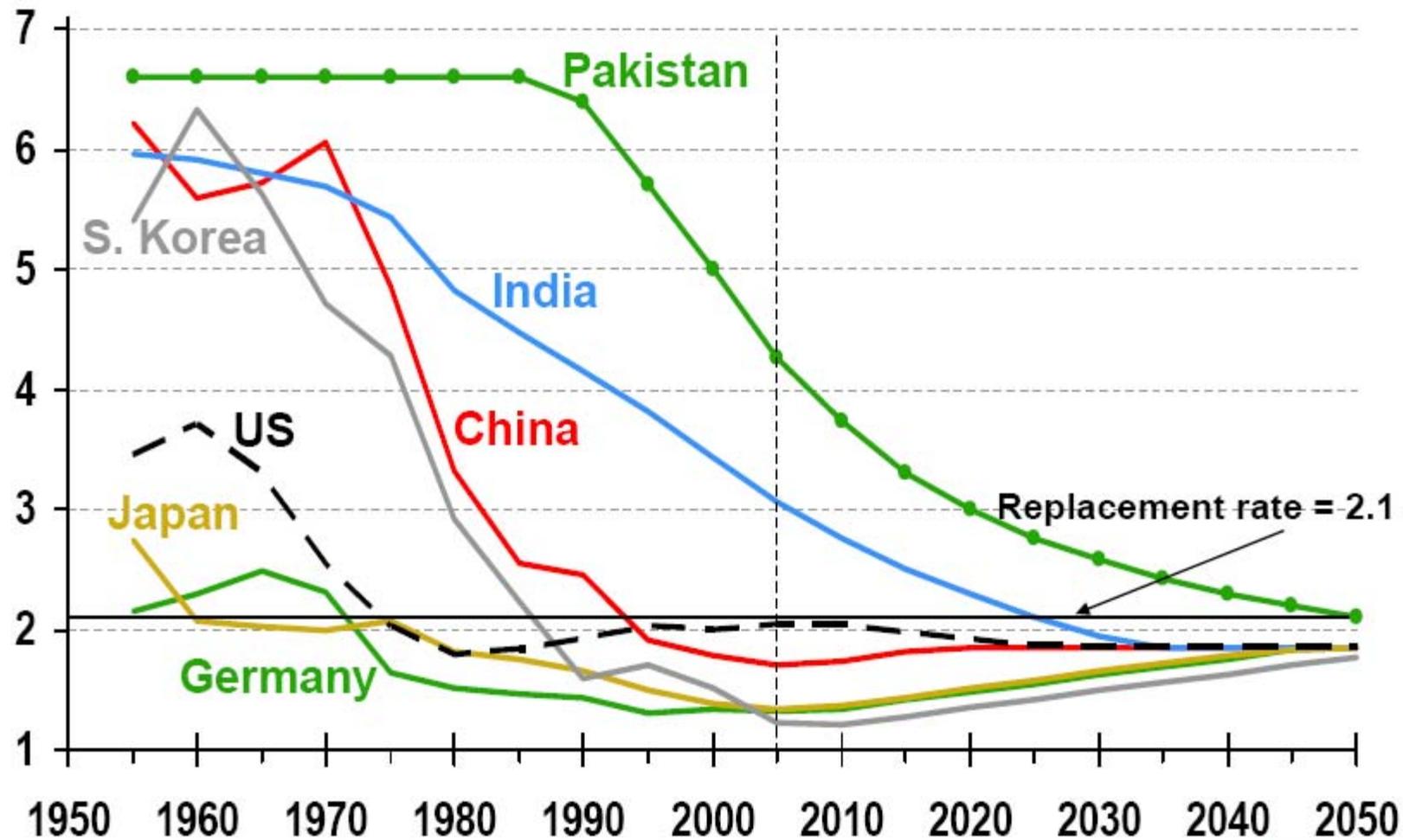
America's Older Asian Immigrant Population



Source: Analysis of census data by U.C.L.A. Center for Health Policy Research

Fertility rates have plummeted.

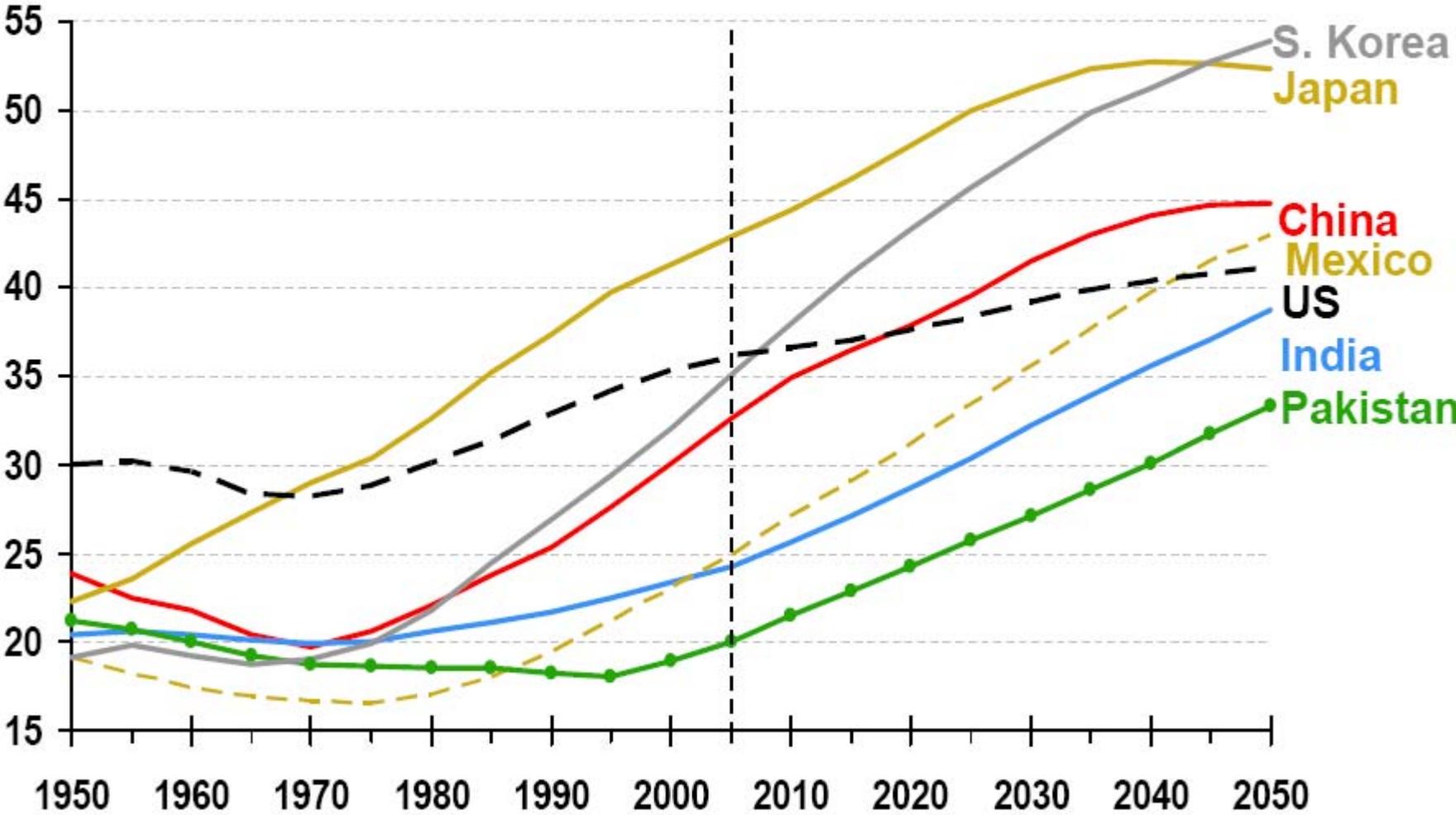
Births per Woman



Source: United Nations 2004 medium variant forecast

Due to steep fertility declines, many young countries face steep gains in median age. The U.S. and Europe will age more gradually.

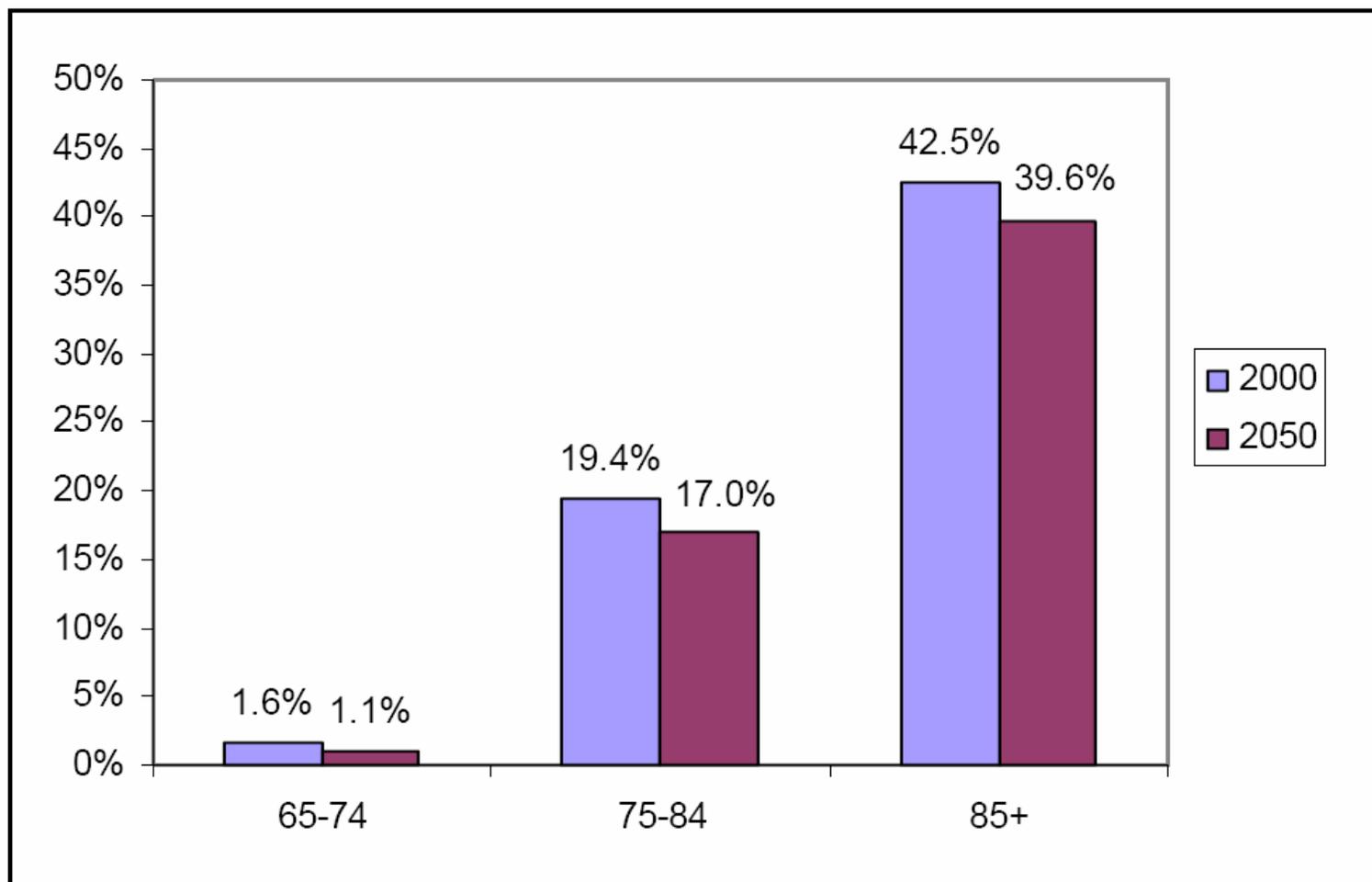
Median Age, in Years



Source: United Nations 2004 medium variant forecast



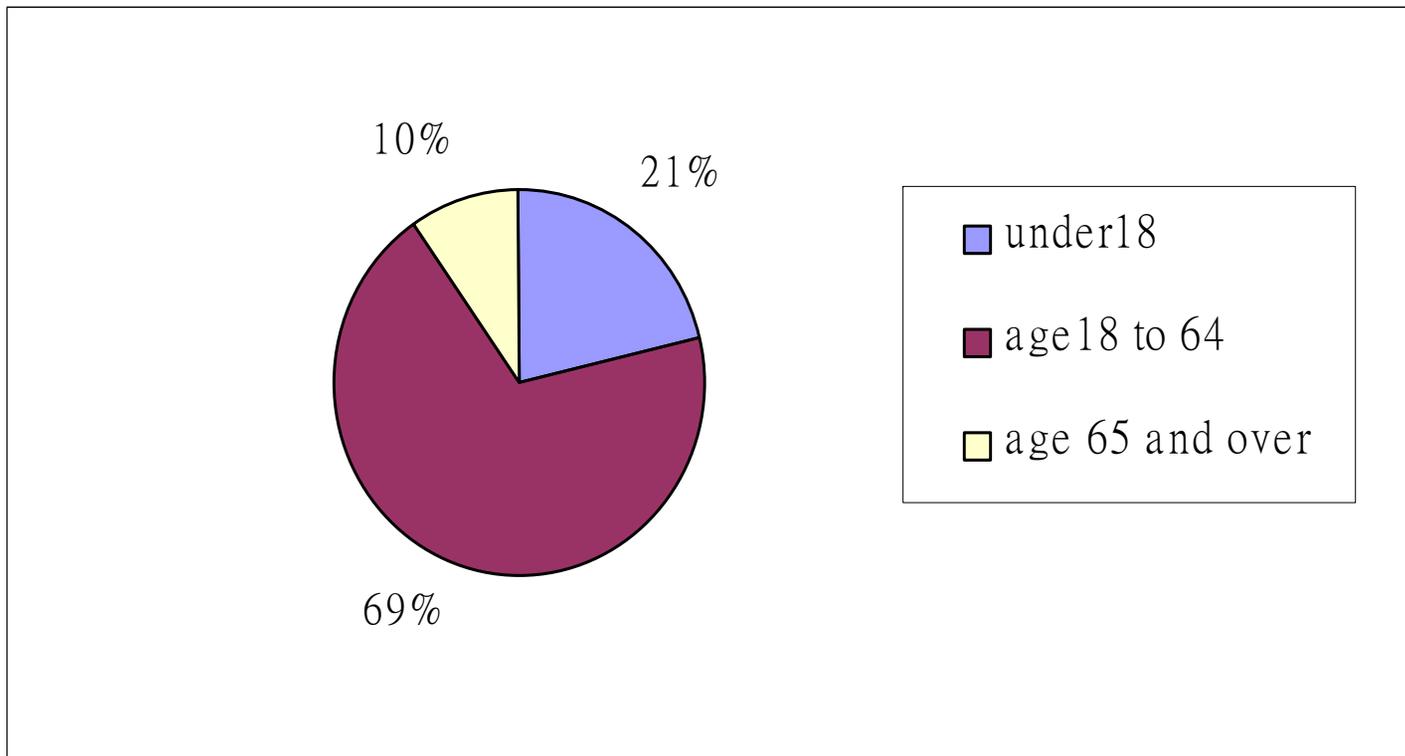
Estimated Prevalence of Alzheimer's Disease by Age

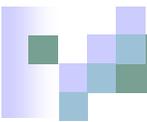


Source: Hebert, Liesi, Paul Scherr, Julia Bienias, David Bennett and Denis Evans (2003) Alzheimer Disease in the US Population, *Archives of Neurology*, vol. 60: 1119-1122.

We the people: Chinese in the United States

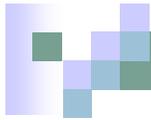
- The Chinese Population over age 65 currently represents about 10% of all Chinese Americans.





Challenges to Assessing Dementia in Chinese Elders

- On the part of the family, misconceptions about dementia are common – e.g., belief that memory problems are a normal part of aging. So diagnosis and treatment are not sought until the later stages of the disease, when behavioral problems are more apparent.
- In the Chinese language, the traditional character used to designate dementia is translated as “crazy” – it does not reflect Western understanding that dementia is a brain disease and not a mental illness.



Challenges, continued

- On the part of the professional community, there is significant under-recognition of cognitive impairment by health care providers.
- As well, there is a paucity of culturally and linguistically appropriate assessment tools that can be used to evaluate the elder.
- Existing neuro-cognitive measures do not have sufficient normative data based on the performance of Chinese elders, so scores can be difficult to interpret.

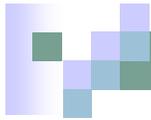


Commonly Used Screening Tools for Dementia in Chinese Elders

- Mini- Mental Status Examination (MMSE)

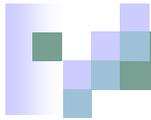
Alternatives to MMSE:

- Mini Cog
- Cognitive Abilities Screening Instrument (CASI) - research
- Clock Drawing Tests
- Montreal Cognitive Assessment (MoCA) – Beijing, Hong Kong, Taiwan, Cantonese, Japanese, Korean, Thai, Vietnamese



Value Of MMSE

- MMSE has been used for many years & studied extensively around the world.
- It has a number of strengths:
 - it is brief & needs short administration time
 - translated into multiple languages
 - useful screen for cognitive impairment when appropriate cut-off scores are used



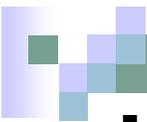
Weaknesses of MMSE

- Not always administered in a “standardized” manner (serial 7’s vs. spell “world” backwards)
- Scores are highly influenced by age and education – even in non-Hispanic Whites. Greater age and less education are associated with poorer performance on the MMSE.
- It is now copyrighted and copies in English, and authorized translations, must be purchased (no longer free)
- It is only a screen: does not give diagnosis.



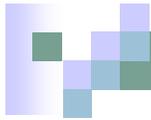
What to do next if screening suggests definite cognitive impairment?

- Stanford Neurology Dept. has a “Memory Clinic” that provides a similar service but is more equipped to handle persons for whom English is not the primary language since interpreter service is available through the medical center. Contact: 650 723 6469 or visit Dept. Neurology website: <http://med.stanford.edu/neurology/index.html>
- Stanford has an Alzheimer’s Disease Center that provides diagnostic work-ups for persons with suspected dementia. There are certain eligibility criteria & English is the preferred language. For more information contact: 650 858 3915 or visit **Web Site: <http://arcc.stanford.edu>**



Utility of MMSE with Chinese and Chinese-American Elders

- Scores are affected not only by age and education but also by cultural background: MMSE underestimates cognitive capacities of most minority elderly persons compared with Whites – so a high rate of “false positives” occurs in these groups.
- Study of Differential Item Functioning (DIF) shows that there is item bias in the MMSE – e.g., certain items perform poorly for Chinese speaking elders. Orientation questions are an example of this.



Translation Issues

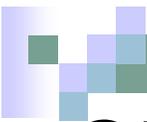
- Translation does not equal validation! Careful studies are still needed to validate MMSE in different cultural groups.
- “Semantic equivalence” rather than literal translation is usually done so that the meaning of the item is preserved.
- There are preferred (different) modes of expression in Chinese, as well as for the many other dialects spoken in mainland China. There are also urban/ rural differences.



Chinese Translations (I)

Chinese Mini Mental Status (CMMS): in Mandarin.

- Developed by Katzman et al.
- Major adaptations:
 - 1) “Forty-four stone lions” replaced “No if’s, and’s, or but’s.”
 - 2) “Please raise your hands” instead of “Please close your eyes.”
 - 3) “Say” a sentence instead of writing a sentence.
- Cut-off scores:
 - No education: <18
 - Elementary school education: <21
 - Middle school education: <24



Chinese Translations (II)

Chinese Mini-Mental State Exam (CMMSE): in

Mandarin. Available from Alz. Assoc.:

http://www.alz.org/professionals_and_researchers_chinese_communities.asp#assessment)

- Adaptations:
 - 1) The three recall items: ball, flag, tree
 - 2) “There is a moon in the sky.”

- Cut-off scores:
 - General practice: <23
 - Recommended by researchers: <18

簡易智能狀態檢查中文版

Chinese Mini-Mental State Exam (CMMSE)*

訪問員：現在我要說三樣東西的名稱，在我講完之前，請您重複說一遍，請您
 記住這三樣東西，因為等一會還要再問您。
 後

（請仔細說清楚，每一樣東西一秒鐘。）

“皮球”

“國旗”

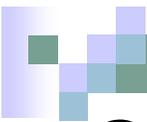
“樹木”

請把這三樣東西說一遍（以第一次答案記分）。

	對	錯	拒絕回答
11. 皮球	1	5	9
12. 國旗	1	5	9
13. 樹木	1	5	9

訪問員：現在我要說一句話，然後請您把它倒說一遍，這句話是“天上有月亮”，請倒說出來。（如有必要可重念。）

	錯誤數						拒絕
18(a). 亮月有上天	0	1	2	3	4	5	9



Chinese Translations (III)

Chinese-adapted MMSE (CAMSE): in Mandarin.

- Developed by Xu et al.
- For use with persons of little or no formal education.
- Adaptations:
 - 1) Say the five elements in Chinese philosophy backward.
 - 2) name a button rather than a pencil
 - 3) Imitate the posture of a man as illustrated in a cartoon instead of reading and following the written command “close your eyes.”
- Cut-off scores:
 - Illiterate individuals: <22
 - Literate individuals: <20

中文简易智能状态检查

Chinese Adapted Mini-Mental Status Examination (CAMSE)

13) 如果 12) 不能完成 , 可以作本题 : 我说五个字 , 请你按相反顺序说出来 ,

金木水火土

0 1 土

0 1 火

0 1 水

0 1 木

0 1 金



Chinese Translations (IV)

Cantonese version of MMSE

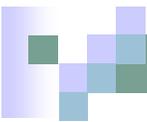
- Developed by Chiu et al.

- Adaptations:
 - 1) 3 recall items: apple, newspaper, train.
 - 2) Cantonese phrase “Uncle buys fish intestine.”
 - 3) Reverse five digits (4, 2, 7, 3, 1) instead of spelling WORLD backwards.

- Advised cut-off scores: 19 or 20

簡短智能測驗

- 3 () 依家我會講三樣野既名，講完之後，請你重複一次。
請記住佢地，因為幾分鐘後，我會叫你再講番俾我聽。
[蘋果]、[報紙]、[火車]。依家請你講番哩三樣野俾我聽。
(以第一次講的計分，一個一分；然後重複物件，直至全部三樣都記住。)
- 5 () 請你用一百減七，然後再減七，一路減落去，直至我叫你停為止。
(減五次後便停) ()
或：依家我讀幾個數目俾你聽，請你倒轉頭講番出黎。
[4 2 7 3 1] ()
- 9 () 哩樣係乜野？(鉛筆)(手錶)。(2)
請你跟我講句說話 [姨丈買魚腸](1)
依家檯上面有一張紙。用你既右手拿起張紙，用兩隻手一齊將紙摺成一半，然後放番張紙係檯上面。(3)
請讀出哩張紙上面既字，然後照住去做。(1)
請你講任何一句完整既句子俾我聽。例如：[我係一個人]、
[今日天氣好好]。(1)
哩處有幅圖，請你照住黎畫啦。(1)



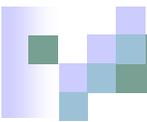
Mini Cog

- Developed by Borson et al. (2000)
- Mini Cog is quick to administer & simple to score, consisting of 3 item recall plus clock drawing. Takes 5 min. to give & has been used with Chinese, Japanese, Vietnamese and Spanish speaking older adults.
- Copy in English (only) in accompanying materials; no translations available. No charge to use. A sample can be download from:
<http://geridoc.net/MiniCogAssessmentForm.pdf>
- Under license from the University of Washington, solely for use as a clinical aid.
- To obtain information, contact Soo Borson at soob@u.washington.edu



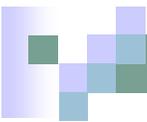
Cognitive Abilities Screening Instrument (CASI)

- Cognitive Abilities Screening Instrument was developed to be relatively culture fair. Administration takes about 20 min.; scoring takes additional time. Training is required to be able to administer the questions correctly.
- It is based on MMSE - with major modifications. CASI scores can be converted to “standard” MMSE scores using certain formulas.
- Available in English, Chinese, Japanese, Vietnamese and Spanish from developer, Professor Evelyn Lee Teng, Ph.D:
eteng@usc.edu



Clock Drawing Test

- Can be used as a screening tool with virtually all elders whether literate or not.
- Instructions are: draw a clock, put in all the numbers; set the hands at 10 past 11.
- 5 point scoring system is used to evaluate quality of clock. No charge to use this measure & interpretation is straightforward so it's worth considering as an addition to your main cognitive screening measure.
- Please visit http://www.neurosurvival.ca/ClinicalAssistant/scales/clock_drawing_test.htm to download example and summaries of scoring methods.



Montreal Cognitive Assessment (MoCA)

- Brief screening tool for MCI (10 minutes)
- Intended for first-line physicians
- Greater sensitivity to detect MCI and mild AD than the MMSE
- Clinical Implications:
 - (1) Useful screening tool for the detection of mild AD and MCI
 - (2) Useful predictive screening tool for the development of dementia in subjects with MCI
- Limitation: No advantage in detecting change in cognition over a 6-month period.
- The test itself and instructions can be downloaded at:
<http://www.mocatest.org>



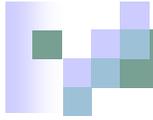
Assess Depression Too!

- Depression is a common contributor to cognitive impairment: often as depression improves, so does cognitive function. So it's good to evaluate if depression is present, and if so, the severity level.
- Two common measures: Geriatric Depression Scale and Beck Depression Inventory II – both discussed briefly in accompanying materials.



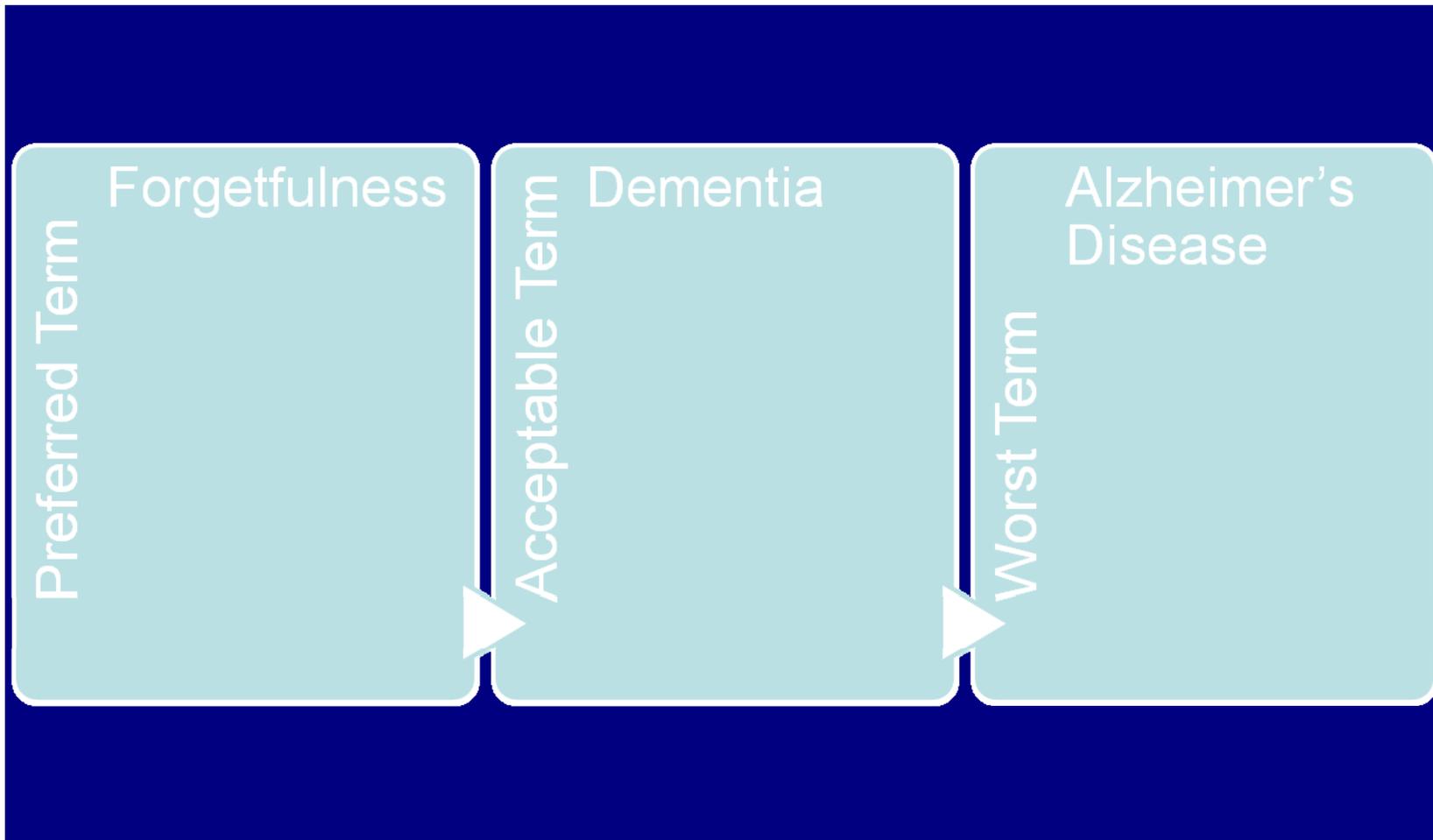
Comparison of GDS vs. BDI II

- **GDS is available in every major language; BDI II only in English and Spanish.**
- **GDS is free: download from internet (<http://www.stanford.edu/~yesavage/GDS.html>); BDI has to be purchased from the Psychological Corporation.**
- **GDS does not, however, assess “traditional” symptoms of depression; it focuses on negative self-worth, pessimism re the future, & other more “psychological” signs of depression. BDI asks about usual symptoms: sleep, appetite disturbances; low energy; sad mood, etc.**
- **GDS has simple response format: yes/ no so it can often be completed by those with cognitive impairments. BDI uses more complex response format & is too challenging for those with cognitive impairments.**



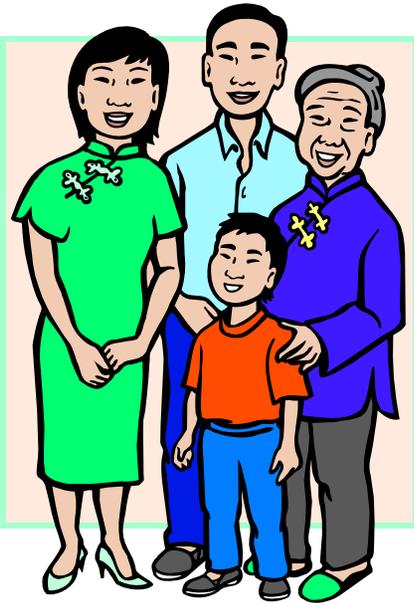
Working with Chinese Family Caregivers

Caregiver's Continuum of Preferred Terminology

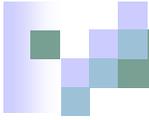


Cultural taboos regarding family issues

“Family disgrace should not be made public”



家醜不外揚



Filial Piety

Describes the correct way to act towards one's parents.

Filial piety consists of several factors

- loving one's parents, being respectful, polite, considerate, loyal, helpful, dutiful, and obedient.
- provide for the parents, spiritually and materially.

<input type="checkbox"/> Live close by	<input type="checkbox"/> Make sacrifices in time and energy
<input type="checkbox"/> Don't travel far	<input type="checkbox"/> Help with chores
<input type="checkbox"/> Keep in touch, visit/call regularly	<input type="checkbox"/> Accompany parents to do what they like
<input type="checkbox"/> Share a meal together	<input type="checkbox"/> Obey their wishes even if you disagree
<input type="checkbox"/> Avoid arguing	<input type="checkbox"/> Provide financial support

Caregiver Quote

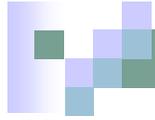


- “....It’s hard to keep a nice attitude over a long period of time. Doctors say that it doesn’t help to tell her what to do or even write it down. It is true. This disease is just like that. There is no way you could figure out whether she understands what you say. I could tell her the same thing day in and day out, but she just could not remember. There is no simple way to cope with it....” (Chinese caregiver)

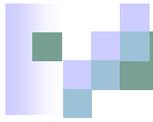
Caregiver Quote



- “There is nothing you can do about it. I think that we are sympathetic towards the patients. We feel heavy hearted. We need to comfort them by talking to them. As patients, they feel depressed. We should try to help them feel better. Give them sympathy and condolence, and hopefully they could get better. Sometimes if you help them it is easier for them to regain their memory. If you don’t help them, they will become worse. So to these kinds of patients we shouldn’t say anything to annoy them. We should show sympathy and try to help them.” (Chinese caregiver)



Suggestions for Working with Family Caregivers



Cultural humility

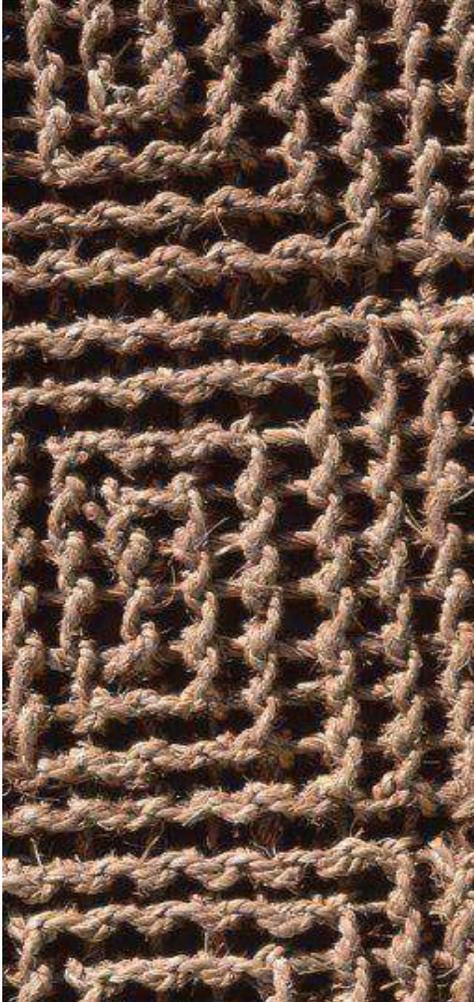
- Commitment and active engagement in a lifelong process one enters into with clients, communities and themselves.



I will learn to pronounce every student's full given name correctly. No student should feel the need to shorten or change her or his name to make it easier for me or their classmates to pronounce. I will practice and learn every name, regardless of how difficult it feels or how time-consuming it becomes. That is the first step in being inclusive.

By Paul C. Gorski for **EdChange**

Culture and Alzheimer's



- What issues come up?
- Who will provide care?
- What kind of care?
- Where? To move or not to move?



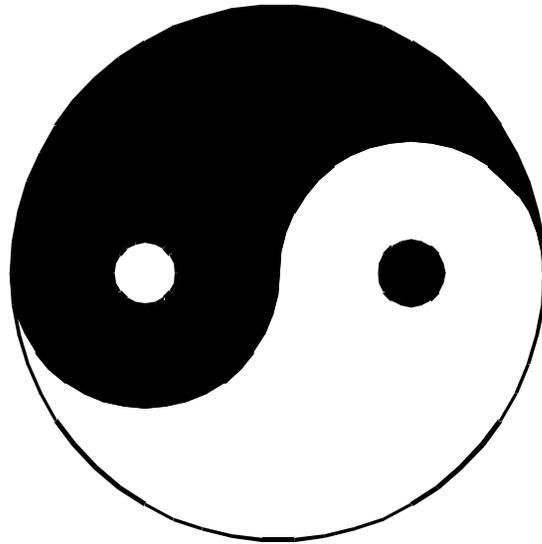
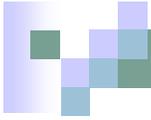
Take Time To Get To Know Your Patient

- **Determine patient's country of origin**
 - *Where is your family's country of origin?*
- **Determine the patient and family's immigration history and the impact of this on the available kin network**
 - *I'm interested in understanding your family history, tell me a little about how you've arrived here today.*
- **Determine the language (or dialect) spoken by the patient and family**
 - *What language do you speak?*

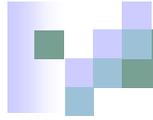


Be Knowledgeable about Family Structure & Decision-making

- **Identify the decision maker in the family, & consult with this individual**
 - *Tell me who makes important decisions in your family? Should we include him/her in this discussion going forward?*
- **Learn to respect combining Western and culturally-based forms of treatment: this is common**
 - *I know it is common practice to use chinese herbal medicine for ailments. Do you use any in addition to prescribed medicine?*



	Yang	Yin
Light	Bright	Dark
Temperature	Hot	Cold
Position	Upper	Lower
Action	Movement	Rest
Direction	Outward	Inward
Physiological functions	Excitatory	Inhibitory



Be Aware of Your Communication Style

- Address patients and family members by last names to show respect
- Assure patients of confidentiality
- Relate caregiving information to patient care.



Acculturation

- TV, radio and newspaper
- Friendship
- Lifestyle
- Way of thinking

More acculturated persons have more accurate knowledge about AD. (more american media, american friends, american lifestyle.)

Knowing persons with AD & AD caregivers is significantly related to higher specific AD knowledge

Lee SE, Lee HY, Diwan S. 2009. What do Korean American immigrants know about Alzheimer's disease (AD)? The impact of acculturation and exposure to the disease on AD knowledge.



Programs from the Alzheimer's Association

- Helpline in Chinese 1.800.272.3900
- Bridge to Healthy Families
 - API Dementia Care Network in Sacramento
- Chinese Caregiver Forum
- Support groups
- Chinese info at www.alz.org

阿滋海默症講座 分享最新資訊

阿滋海默協會與北大、香港中大、台大校友會合辦

【本報記者王慶偉山景城報導】阿滋海默協會 (Alzheimer's Association) 與中國北京大學、香港中文大學、北加州台灣大學三校友會，於8月17日舉行「心與心的對話2—認識阿滋海默症」腦部健康免費華語講座，邀請醫師、專家、義工就阿滋海默症相關議題和大家分享最新資訊。

講座由美華慈心關懷聯盟、約翰23中心、Pathways、安老自助處、UCSF記憶力研究及治療中心協辦。

阿滋海默協會華人社區推廣專員張佩寧表示，協會與台大校友會於2007年首次舉辦「認識阿滋海默」講座，受到熱烈歡迎；今年由台大校友會邀請平時一起舉辦活動的北京大學、香港中文大學，三所學校的校友會聯合舉辦，場地也改在較大場地的凱撒醫院舉行，希望有更多的僑胞參加，瞭解阿滋海默症，早期作好預防。

講座邀請到UCSF記憶力研究及治療中心腦部神經專科臨床進修醫師趙壯志主講「認識阿滋海默症」。趙壯志專長於阿滋海默症、額顳葉型失智症與其他失智症的早期診斷及治療。

現任美華慈心關懷聯盟董事會主席李玲將談「生命關懷」；探討及面對生命末期議題，強調在有尊嚴、被尊重下過世的重要性。

UCSF病理學與神經學助教黃亞東將談「載脂蛋白E與阿滋海默症」及其在阿滋海默症病理機制

中所扮演的角色。黃亞東在載脂蛋白與阿滋海默症的研究領域已發表超過50篇的研究報告。

阿滋海默症家屬、阿滋海默症協會幫助熟練資深義工黃河清將分享「明日的記憶—照護者心路歷程」。黃河清自2000年起投入協會義工，於2007年獲「傑出服務獎」。

阿滋海默協會北加州多元文化部主任丘美成表示，阿滋海默協會將於9月、10月舉行全國性「為記憶而走」(Memory Walk)，歡迎隨時參加。

香港中文大學校友會會長李海

滋、台大校友會理事長林筱莉、北京大學校友會秘書長呂小洲31日出席記者會時表示，今年三校友會希望辦些回饋社區，舉辦有益僑胞的活動，首次聯合舉辦，希望校友及僑胞到時參加。

「認識阿滋海默症」免費講座於17日下午1時30分到4時30分，在聖他克拉拉凱撒醫院Kaiser Medical Office Building, Conference Center Room A1, A2, A5, 710 Lawrence Expressway, Santa Clara舉行，現場有資訊攤位，座位有限，報名請電650-623-3143，Chinese.event@alzncorcal.org。



▲阿滋海默協會與中港台校友會舉辦「認識阿滋海默」講座。左起：呂小洲、李海滋、林筱莉、丘美成、張佩寧、何沛靜、黎雁琴。

(記者王慶偉攝)

失智症中文資訊多

【本報記者王慶偉聖荷西報導】華人對老人面對的問題如失智、阿滋海默症、臨終關懷若有疑問，灣區有許多專門組織及中文資訊，以華語免費提供服務。

阿滋海默協會自2007年開始成立華語專線650-623-3143，有華人專員及華裔義工為各界解答失智、阿滋海默相關問題。協會有完整中文資訊，介紹阿滋海默症如何診斷，照護者應採步驟，和患者溝通、相處方法，法律問題。

阿滋海默協會提供免費中文版「看護阿滋海默」DVD，為需要看護患者的家屬，提供完整照顧資訊，包

括如何照顧，平衡生活，基本需要，有效溝通，計畫未來等內容，並有練習手冊。阿滋海默協會不但提供DVD，也和家屬保持追蹤聯絡，瞭解進度。協會網址：www.alz.org。

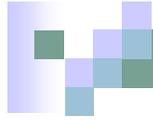
舊金山加大 (UCSF) 「記憶力研究及治療中心」(Memory and Aging Center) 有中文熱線415-476-1692，為華裔解答失智及阿滋海默相關問題，以及評估、診療等服務。網址：memory.ucsf.edu/Chinese。

「美華慈心關懷聯盟」除教導華人如何有尊嚴、被尊重及有意義的面對生命末期之外，也提供「喘息」家庭服務。電話：415-970-6499、408-457-6979，網址：www.cqccc-usa.org。

World Journal

August 1, 2008

Promoting Alzheimer's Caregiver Forum

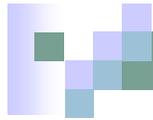


*Promising Interventions to
Reduce Distress in
Chinese American caregivers*



Home-based psychoeducational interventions

- ❖ Why a psychoeducational approach for Chinese caregivers?
 - Asian cultures value education (E. Lee, 1997)
 - Need to provide more **education** to Chinese communities
 - Often cognitive loss & and behavioral problems are regarded as a **normal** part of aging or childhood regression
 - More education is needed to reduce negative stigma associated with Alzheimer's disease or dementia so that treatment is sought **earlier in the process**
 - **Reframing** psychological treatment as psychoeducational training increases willingness to participate in research and treatment programs



Design of First Chinese Caregiver Assistance Project

Chinese women family caregivers were randomly assigned to 2 conditions:

a) Home-based behavioral intervention (12 weekly sessions)

SIX MODULES: behavior management, relaxation techniques, cognitive restructuring, communication skills, increasing positive activities, & transitional issues, including end of life care.

b) Telephone Minimal Support (6 bi-weekly sessions)
Each telephone session lasted about 15 minutes.



CWC Chinese

Chinese Caregiver Assistance Project Workbook

華人照護者協助計畫 練習手冊

Peng Chih Wang, Ph.D., Project Coordinator
王鵬智博士. 本計畫的主持協調人

Shao Chun Sunny Liao 廖少君 先生
Weiling Liu 劉維綾 小姐
Yung Hui Vivien Lin 林詠蕙 女士

Dolores Gallagher Thompson, Ph.D.

Older Adult and Family Center
Stanford University School of Medicine

(800) 943-4333
(650) 617-2774

<http://oafc.stanford.edu>
dolorest@stanford.edu

CWC Chinese Examples



D. 第二章活動二(精)

家中練習 行為記錄表

方法: 請用這記錄表填寫[被照護者]所做的使你懊惱的行為，以及你用來改變它的策略。(請依照以下的步驟填寫):

一. 找出一種問題行為. 二. 然後思考什麼是引發這問題行為的引因? 三. 然後想一下您都是如何反應/應對這個問題行為? 四. 思索出一個可以改變引因或是自己的反應的策略為因應之道, 並加以採行. 五. 在您採行此策略後, 觀察有何變化? 請將變化紀錄到第五個空格.

日期	時間	人物	引因	行為	反應	我用來改變行為的策略是:
			二.	一.	三.	四.
						用了策略後有甚麼發生?
						五.

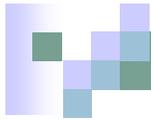
Table 1: Sociodemographic Characteristics of Chinese Caregivers and Care Recipients

	TSC (n=22)		IHBM (n=22)		F	p
	M	SD	M	SD		
<u>Caregiver</u>						
Age	58.95	12.62	60.91	10.99	0.30	0.58
Years in U.S.	36.59	23.07	26.50	17.72	2.65	0.11
Years of Education	13.50	3.53	13.32	4.88	0.02	0.89
	N	%	N	%	χ^2	p
Relationship to CR						
Spouse	7	35	6	29	.111	1.00
Non-spouse	14	65	15	71		

Table 2: Linear Regression Analysis Summary of Primary Outcome Variables

	B	SE	<u>B</u>	P-value	Effect Size (Cohen's d)
CES-D	-4.91	2.13	-.224	<u>.026*</u>	0.72
Caregiving Related Stress	-.0532	0.228	-.294	<u>.025*</u>	0.71
Perceived Stress	-.010	1.035	-.001	.992	0.00

Note: B = Unstandardized Coefficient B;
SE = Standard Error of Measurement; B = Standardized Beta;
CESD = Center for Epidemiological Studies Depression Scale
*p < .05.



Qualitative Findings: Satisfaction with In-Home Behavior Management

Questions	Score range	Mean score
How much do you think you've learned in this program, overall?	1-10	9.57
How useful do you think what you've learned in this program will be to you?	1-10	9.71
Please rate your overall satisfaction with this program?	1-5	4.79



Second Chinese Caregiver Assistance Program (CCAP2)

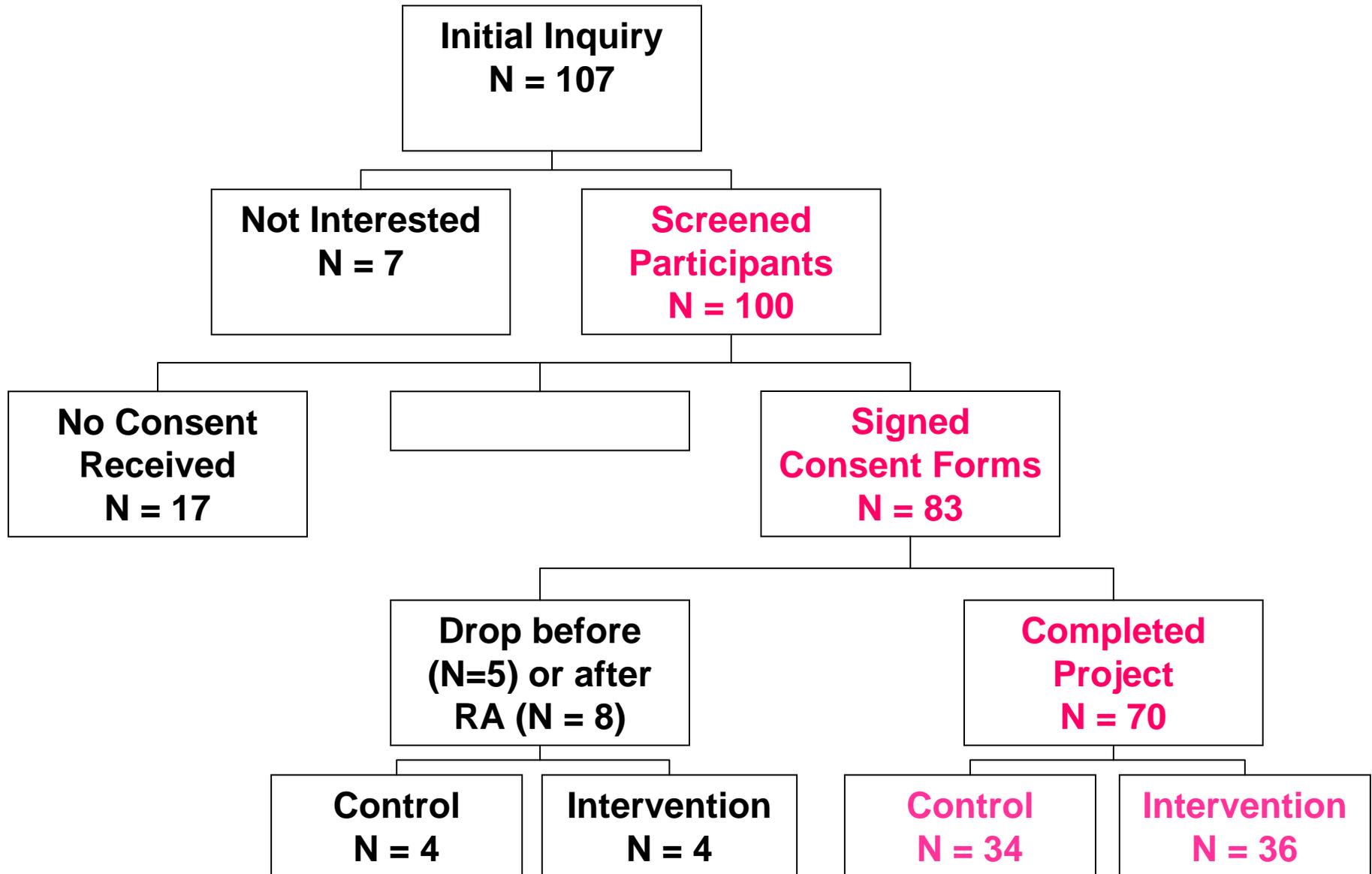
- Study of Chinese/Chinese-American women and men who care for individuals with significant memory problems.
- To investigate whether it would be effective & helpful to Chinese caregivers to have skills training material delivered to them in an educational format (DVD) vs. in-home program (expensive, time-consuming, not practical).
- Study examined the helpfulness of two different DVDs in the Mandarin Chinese dialect (with Chinese or English sub-titles).



DVD Conditions

- Skill-Training Program: Demonstrated to CGs how to handle specific everyday problems:
 - How to manage, modify, and/or change troublesome behaviors
 - How to challenge unhelpful negative thoughts
 - Role Plays to learn more effective methods of communication (with family, primarily)
 - **Workbook** accompanied this DVD to amplify material & give opportunity for practice exercises; able to be shared with other family members
- Educational Program
 - Information about dementia
 - How to recognize dementia
 - What to do to help care recipient

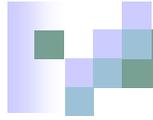
CCAP 2 Flow Chart





Demographic Characteristics

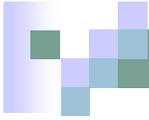
- These caregivers are about the same age as in the first study: median age of about 60, with at least a high school education.
- Most were daughters or daughters-in-law; about 1/3 were spouses.
- There were also 12 paid caregivers (not family members) in this study, and there were 10 men enrolled.
- There were 13 drops -- either men family caregivers (5) or paid CGs (the remaining 8), suggesting that this may not be an effective intervention for these sub-groups of Chinese caregivers.



Outcome Data from DVD Project

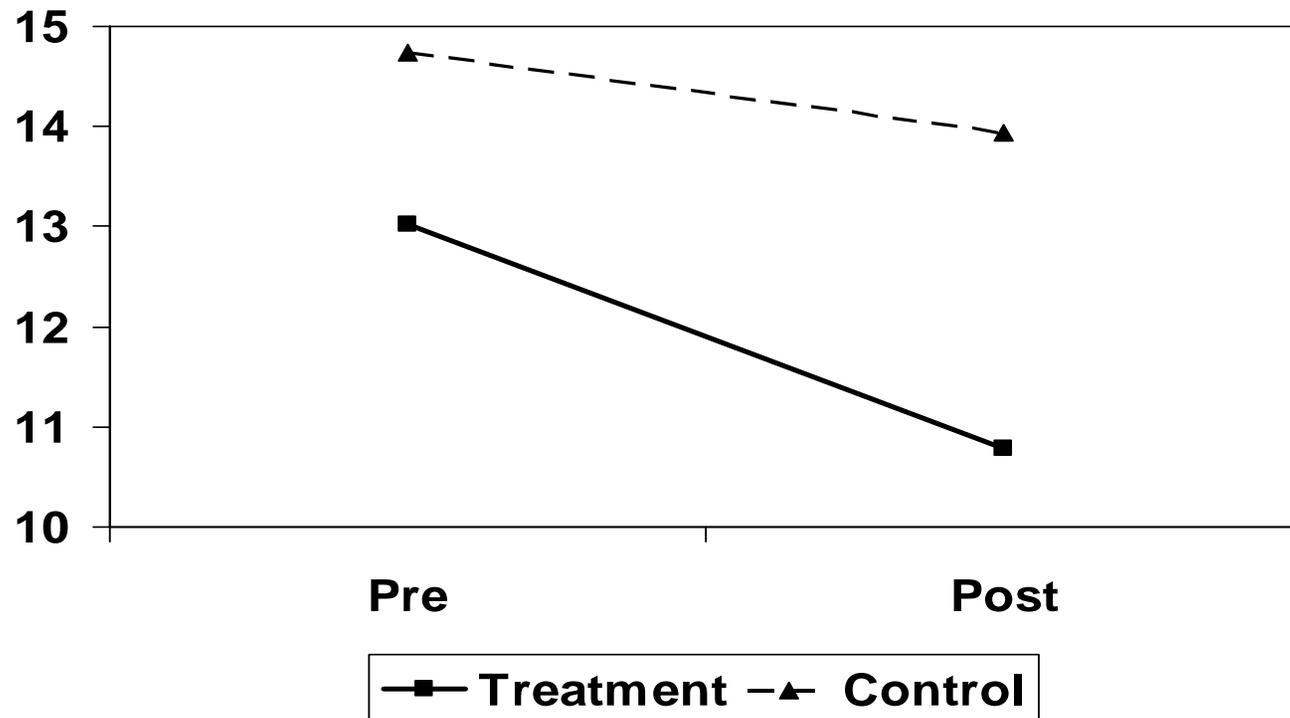
--Quantitative Results: Improved quality of life on 2 indices.

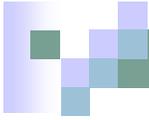
--Qualitative Results: Reported satisfaction with intervention and extent of new skills learned.



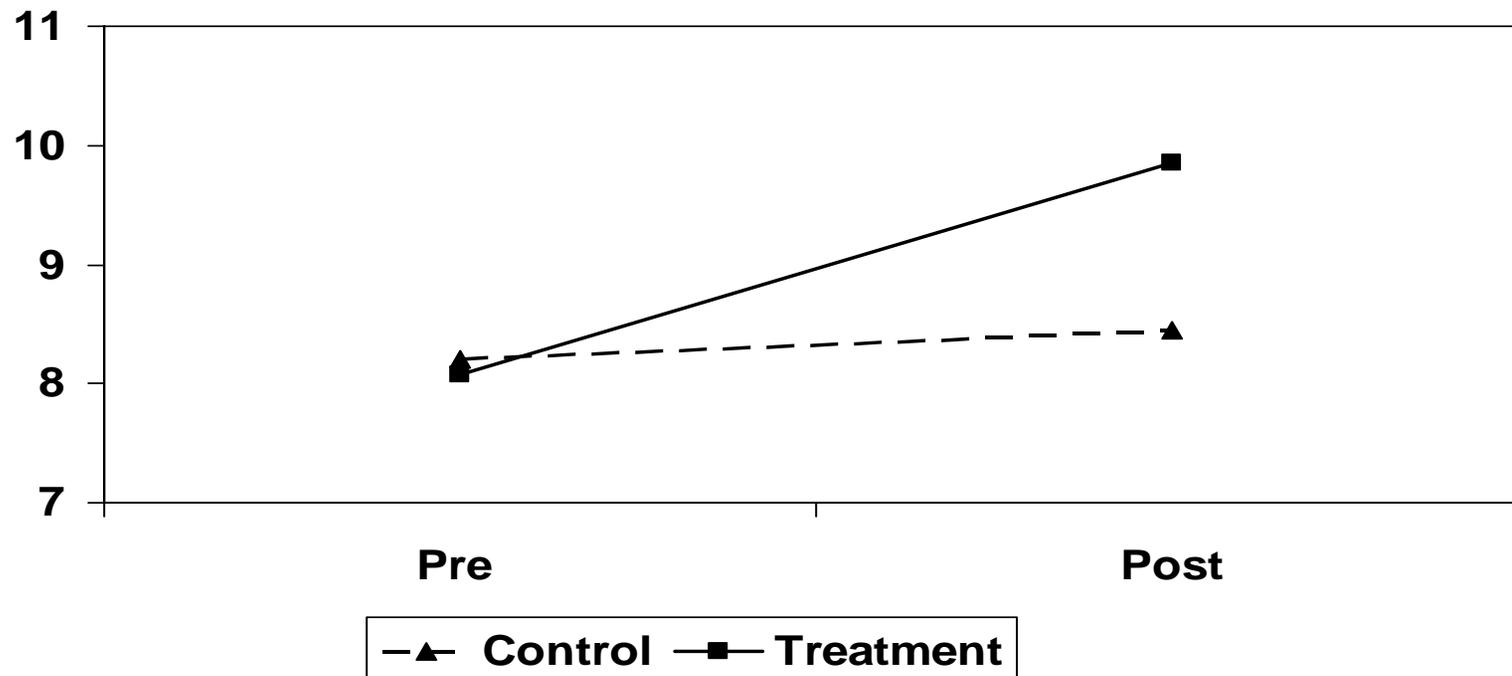
Effect of Treatment on Change in the CESD

Total Score (N=70; $t=1.41$; $p=.164$)

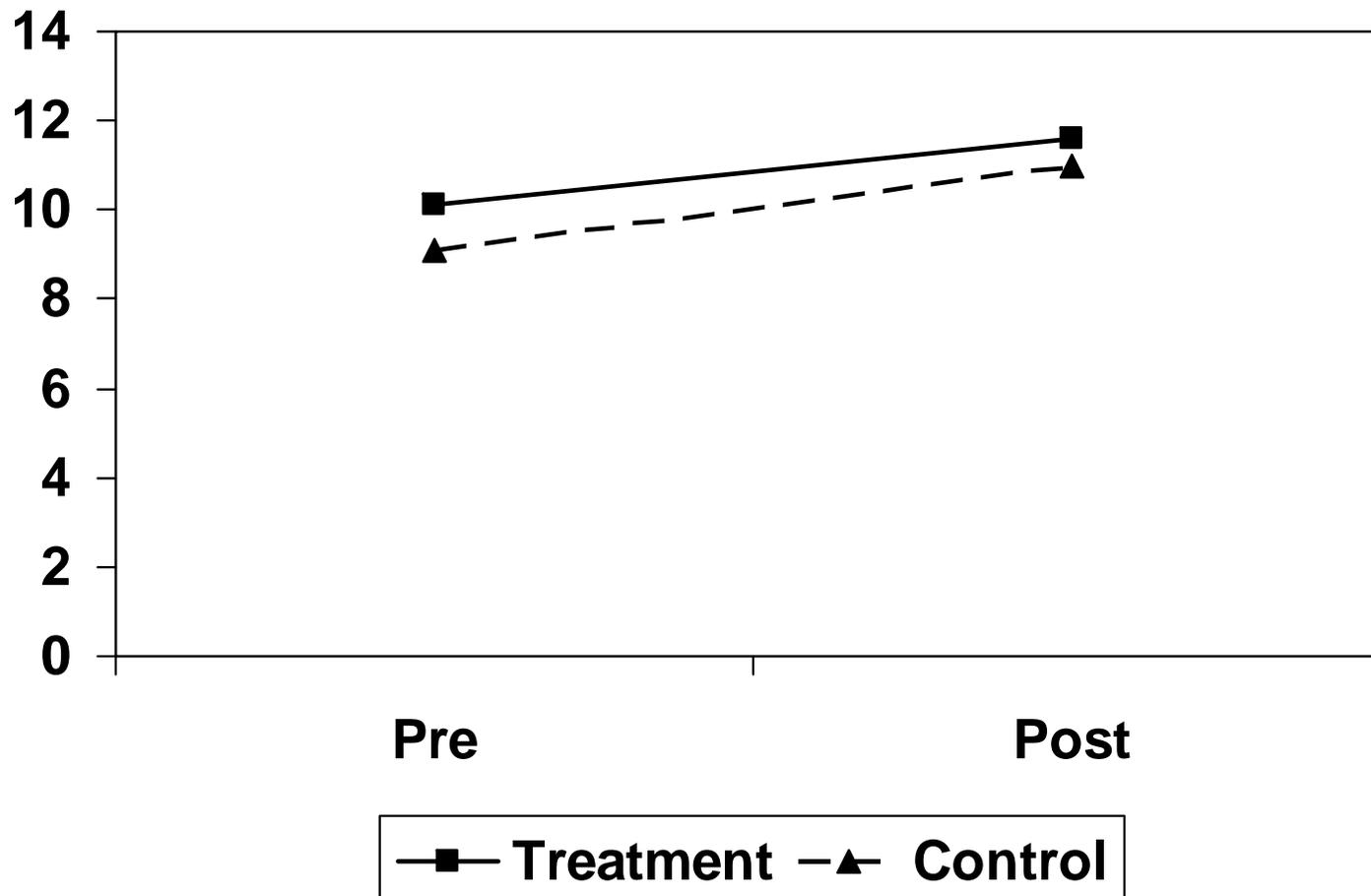


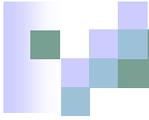


Effect of Treatment on Change in **Positive Affect** Subscale in the CESD (N=70; $t=2.66$; $p=.010$)

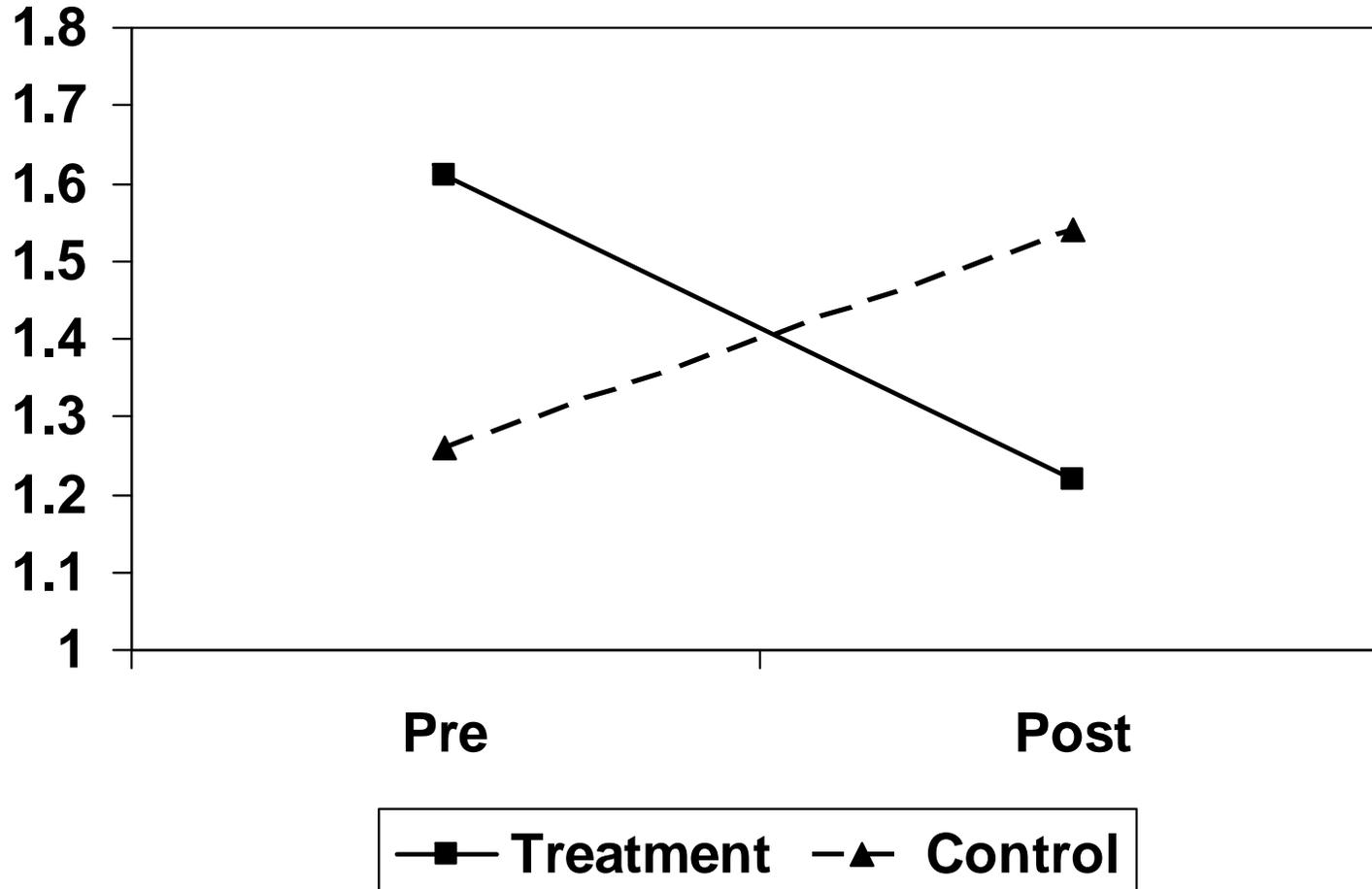


Effect of Treatment on Change in **Total Number** of Memory and Behavior Problems: Total Score (N=70; $t=0.31$; $p>.10$)





Effect of Treatment on Change in **STRESS** related to total Memory and Behavior Problems: Total Score (N=70; $t=2.58$; $p=.010$)



Qualitative Results

	<u>DVD Skill Building/ CBT</u> N=36		<u>DVD Education Only</u> N=34		p
	<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>	
Watching the DVD helped me understand:					
Memory loss and its effect on people	2.3	0.5	2.3	0.5	.833
Stress and its relation to caregiving & health	2.4	0.5	2.2	0.6	.118
How to monitor & change CR behavior	2.3	0.7	1.5	0.6	.000
How to reduce my unhelpful thoughts	2.1	0.7	1.5	0.7	.002
How to use effective communication skills	2.2	0.6	1.5	0.7	.001
End-of-life issues and advanced directives	1.8	0.7	1.4	0.8	.053
When and how to use relaxation skills	2.3	0.6	1.4	0.6	.000
How and why to increase everyday pleasant Activities (both for self & with CR)	2.2	0.7	1.4	0.7	.000



Conclusions regarding

Interventions

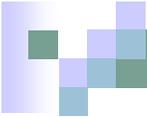
- Chinese American caregivers suffer distress similar to other CGs studied.
- They respond well to a variety of programs developed (or “tailored”) specifically to meet their needs, that overcome language and access barriers (education programs, support groups).
- Promising new programs include one based on individualized care planning that uses home visits to deliver services, and a second that uses a DVD in Mandarin Chinese to model effective coping skills.

Drinking the Sea



Being a caregiver
Is like drinking the sea:
Overwhelming magnitude
with
No chance of success-
Alone.
Yet, with help from others
Even that becomes
possible.

-Lani Kaaihue



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- Teng, E.L., et al. (1994). The Cognitive Abilities Screening Instrument: A practical test for cross-cultural epidemiological studies of dementia. *International Psychogeriatrics*, 6(1), 45-62.
- Nasreddine, Z. S., Phillips, N.A., Bedirian, V., Charbonneau, S., Whitehead, V., & Collin, I., et al. (2005). The Montreal Cognitive Assessment, MoCA: A Brief Screening Tool For Mild Cognitive Impairment. *Journal of the American Geriatrics Society*, 53, 695-699.
- Borson, S., Scanlan, J., Brush, M., Vitaliano, P., & Dokmak, A. (2000). The mini-cog: a cognitive 'vital signs' measure for dementia screening in multi-lingual elderly. *International Journal of Geriatric Psychiatry*, 15(11), 1021-1027.

Summary of Diagnostic Tests for Dementia and Depression

Dolores Gallagher-Thompson, PhD
Larry Thompson, PhD
Marian Tzuang, MSW

January 13, 2010

Mini-Mental State Examination

MMSE is now published by “Psychological Assessment Resources (PAR), Inc.”

Visit: <http://www.minimental.com/>

The following information is extracted from this website.

Authorized Foreign Language Translations of the MMSE

The following authorized translations of the MMSE are currently available:

Afrikaans	Austrian German	Norwegian
Albanian	German	Polish
Arabic	Greek	Portuguese
Argentinean Spanish	Gujarati	Punjabi
Belgian Dutch	Hebrew	Romanian
Belgian French	Hindi	Russian
Bosnian	Hungarian	Russian for Estonia
Brazilian Portuguese	Indian English	Serbian
Bulgarian	Israeli English	Slovakian
Chilean Spanish	Italian	Slovenian
Chinese	Japanese	South African English
Croatian	Kannada	Spanish
Czech	Korean	Swedish
Danish	Latvian	Tamil
Dutch	Lithuanian	Telugu
Estonian	Macedonian	Turkish
Farsi	Malay	UK English
Filipino	Malayalam	Ukrainian
Finnish	Marathi	Urdu
French		

To order an authorized translation of the MMSE, contact Custsup@parinc.com or call 1.800.331.8378

Cost:

MMSE Comprehensive Kit (includes MMSE Clinical Guide, Pocket Norms Card, User's Guide, and 50 Test Forms) <i>Kit Value: \$139.00</i>	\$135.00
MMSE Test Forms (pkg/50)...	\$62.00
2-4 packages (price per package)...	\$60.00
5 or more packages (price per package)...	\$58.00
MMSE Clinical Guide with Pocket Norms Card	\$72.00

Chinese Translations of the MMSE

CMMS:

A minimally adapted Chinese version of the MMSE, the CMMS, has been used in epidemiological studies in Shanghai (Katzman et al., 1998; Zhang et al., 1990) and Beijing (Li et al., 1991).

Most of the items on the MMSE were directly translated. Items requiring major adaptations include:

- (1) "No if's, and's, or but's," was substituted by "forty-four stone lions."
- (2) "Please close your eyes" was replaced by "Please raise your hands." Because "close eyes" sometimes has a death connotation in the Chinese culture.
- (3) Instead of "Please write a sentence," the respondent was asked to "Say a sentence" to guard against failure on this item due to inability to write as a result of lack of education.

Advised cut-off scores for different levels of education:

- No education cut-off: <18
- Elementary school education cut-off: <21
- Middle school education cut-off: <24

CMMSE:

CMMSE can be downloaded from the National Alzheimer's Association website at:
http://www.alz.org/professionals_and_researchers_chinese_communities.asp#assessment

CAMSE:

While the CMMS proved appropriate for testing the more Westernized and educated individuals living in these metropolitan areas, the MMSE required further adaptations to effectively assess cognitive impairment in the less-educated, rural-dwelling individuals who comprise 80% of mainland China's population (Xu et al., 2003) In developing the Chinese-adapted MMSE (CAMSE) for persons with little or no formal education, Xu et al. strove to keep the contents of test items similar to those of the original MMSE while reducing language dependence and increasing sociocultural relevance. For example, in the CAMSE, the elder is asked to name a button rather than a pencil, because an illiterate individual would have little experience with a writing instrument. Similarly, as reading and following the written command "Close your eyes" would be inappropriate for an illiterate individual, the comparable item in the CAMSE involves orally directing the elder to imitate the posture of a man with his arms crossed over his chest, as illustrated in a cartoon.

Advised cut-off scores based on literacy:

- For illiterate individuals: <22
- For literate individuals: <20

Cantonese Version of MMSE:

This is an adapted Cantonese version of the MMSE. Adaptations include:

- (1) “No if’s, and’s, or but’s” was changed to a Cantonese phrase of “Uncle buys fish intestine 姨丈買魚腸.”
- (2) “Please close your eyes” was replaced by “Please raise your hands” for the same reason as described in CMMS.
- (3) Instead of “Please write a sentence,” the respondent was asked to “Say a sentence.”
- (4) Instead of spelling “W-O-R-L-D” backwards, respondents were asked to reverse five digits.

Advised cut-off scores: 19/20

Mini-Cog

The Mini-Cog is a very simple and quick test carried out by a doctor or clinician. It takes about 3 minutes to administer and is often used in emergency departments to identify people who require further investigation into their clinical presentation.

The test consists of a three item recall and a clock drawing test.

1) First the 'patient' is asked to repeat three unrelated words. This is the same as in the Mini Mental State Examination (MMSE).

(2) The 'patient' is then asked to draw a clock. This is the same as the Clock Drawing Test (CDT).

(3) The 'patient' is then asked to recall the three words.

Results of the Mini-Cog

If the 'patient' is unable to recall any of the three words then they are categorized as 'probably demented'. If they can recall all three words then they are categorized as 'probably not demented'. People who can recall one or two words are categorized based on their clock drawing test.

Results of the Clock Drawing Test

If the 'patient' draws a clock that is in any way abnormal they are considered as 'probably demented'. If the clock is normally constructed then they are considered 'probably not demented'.

The mini-Cog test results only contribute to a diagnosis of dementia. The test cannot be used in isolation in diagnostic tests for Alzheimer's.

The Mini-Cog has been used in various Chinese and Spanish languages and dialects, Italian, Japanese, and Vietnamese. The issue is one of which three unrelated words to use. In an Italy study where education levels are very low (<5 years), extremely simple words (the Italian equivalent of house-cat-green) were used; in better educated groups 'banana-sunrise-chair' was adopted.

You can pick words that you think are appropriate to the population. The key, however, is to be sure that they are truly unrelated to each other and unrelated to probable stimuli in the testing room. For example, you wouldn't want to pick 'pen' as one of the words, then hand the subject/patient a pen to draw the clock with.

The Cognitive Abilities Screening Instrument (CASI)

The Cognitive Abilities Screening Instrument (CASI) has a score range of 0 to 100 and provides quantitative assessment on attention, concentration, orientation, short-term memory, long-term memory, language abilities, visual construction, list-generating fluency, abstraction, and judgment. Scores of the Mini-Mental State Examination, the Modified Mini-Mental State Test, and the Hasegawa Dementia Screening Scale can also be estimated from subsets of the CASI items.

Typical administration time is 15 to 20 minutes. Record form, manual, videotape of test administration, and quizzes to qualify potential users on the administration and scoring of the CASI are available upon request.

Chinese version: <http://content.karger.com/ProdukteDB/produkte.asp?Doi=66024>

CASI in English has two versions. CASI Version E-1.0 is for computer scoring and is meant for large studies. In this 1.0 version, each item's score is an integer in order to simplify computer input, and all domain scores are calculated automatically by computer before they are summed to the CASI Total score. In this version and for the two domains of Short-Term Memory and Language, their item scores go through some simple arithmetic manipulations before they are summed to the domain scores. In contrast, CASI Version E-1.1 is meant for clinical use where the domain and total scores usually need to be hand calculated right after CASI administration. In the 1.1 version, some of its item scores for Short-Term Memory and Language involve decimal points, but the domain scores are simply summed from its constituent item scores. (based on email communications with Professor Evelyn Teng)

Please note that the Vietnamese version of the CASI has not been validated outside of the one project.

Clock Drawing Test

This is a simple test that can be used as a part of a neurological test or as a screening tool for Alzheimer's and other types of dementia.

The person undergoing testing is asked to;
Draw a clock
Put in all the numbers
Set the hands at ten past eleven.

Scoring system for Clock Drawing test (CDT)

There are a number of scoring systems for this test. The Alzheimer's disease cooperative scoring system is based on a score of five points.

1 point for the clock circle
1 point for all the numbers being in the correct order
1 point for the numbers being in the proper special order
1 point for the two hands of the clock
1 point for the correct time.
A normal score is four or five points.

The test can provide huge amounts of information about general cognitive and adaptive functioning such as memory, how people are able to process information and vision. A normal clock drawing almost always predicts that a person's cognitive abilities are within normal limits. The Clock Drawing test does offer specific clues about the area of change or damage. Research varies on the ability of the Clock Drawing test to differentiate between, for example, vascular dementia and Alzheimer's disease. The CDT has been shown to lack sensitivity for mild cognitive impairment.

For more information, visit:

http://www.neurosurgical.ca/ClinicalAssistant/scales/clock_drawing_test.htm#settingandscore

The Montreal Cognitive Assessment (MoCA)

The MoCA is a brief cognitive screening tool with high sensitivity and specificity for detecting MCI as currently conceptualized in patients performing in the normal range on the MMSE (over 25 points). It takes about 10 minutes to complete.

It is available in the following languages: English, Arabic, Afrikaans, Chinese (Beijing), Chinese (Cantonese), Chinese (Hong Kong), Chinese (Taiwan), Czech, Croatian, Danish, Dutch, Estonian, French, Finnish, German, Greek, Hebrew, Italian, Japanese, Korean, Polish, Portuguese, Portuguese (Brazil), Serbian, Spanish, Swedish, Thai, Turkish, Vietnamese

The test itself and instructions can be downloaded at: <http://www.mocatest.org>

MoCA may be used, reproduced, and distributed WITHOUT permission if it is for clinical, educational or research use at Universities/Foundations/Health Professionals/Hospitals/Clinics/Public Health Institutes.

For more information, contact Dr. Ziad Nasreddine MD info@mocatest.org

Depression Scales

Geriatric Depression Scale (visit: <http://www.stanford.edu/~yesavage/GDS.html>)

Other available versions:

Arab, Chinese, Creole, Danish, Dutch, Farsi, French, German, Greek, Hebrew, Hindi, Hungarian, Icelandic, Italian, Japanese, Korean, Lithuania, Malay, Maltse, Norwegian, Portuguese, Rumanian, Russian, Russian Ukrainian, Spanish, Swedish, Thai, Turkish, Vietnamese, Yiddish

There is no copyright. These can be downloaded and copied at no cost.

Beck Depression Inventory II

Publisher: Pearson (<http://pearsonassess.com/haiweb/cultures/en-us/productdetail.htm?pid=015-8018-370>)

The complete kit that includes Manual and 25 forms sell for \$109.
It's also available in Spanish. 25 Spanish forms sell for \$49.

簡易智能狀態檢查中文版

Chinese Mini-Mental State Exam (CMMSE)*

訪問員：現在要問您一些問題，來檢查您的注意力和記憶力，大多數問題都很容易。（記錄回答并圈分數，不知者算是錯誤。）

		正確	錯誤
1. 今年的年份?	年_____	1	5
2. 現在是什麼季節?	季節_____	1	5
3. 今天是幾號?	日_____	1	5
4. 今天是星期幾?	星期_____	1	5
5. 現在是幾月份?	月_____	1	5
6. 您能告訴我現在我們在哪里嗎? 例如，現在我們在哪個省、市?	省(市)_____	1	5
7. 您現在在什麼區(縣)?	區(縣)_____	1	5
8. 您住在什麼街道?	街道(鄉)_____	1	5
9. 我們現在在第幾樓?	層樓_____	1	5
10. 這兒是什麼地方? 地址(名稱)_____		1	5

訪問員：現在我要說三樣東西的名稱，在我講完之前，請您重複說一遍，請您
 記住這三樣東西，因為等一等還要再問您的。
 （請仔細說清楚，每一樣東西一秒鐘。）

“皮球”

“國旗”

“樹木”

請把這三樣東西說一遍（以第一次答案記分）。

	對	錯	拒絕回答
11. 皮球 _____	1	5	9
12. 國旗 _____	1	5	9
13. 樹木 _____	1	5	9

訪問員：（繼續重複這三樣東西，直到受訪者能正確重述，可重複六次。）

13(a). 重復幾次? _____次

訪問員：現在請您從 100 減去 7，然後從所得的數目再減去 7，如此一直計算下去，把每一個答案都告訴我，直到我說“停”為止。

(若錯了，但下一個答案卻是對的，那麼只記一次錯誤。)

	對	錯	說不會做	其他原因不做
14. () _____	1	5	7	9
15. () _____	1	5	7	9
16. () _____	1	5	7	9
17. () _____	1	5	7	9
18. () _____	1	5	7	9

(停止!)

訪問員：現在我要說一句話，然後請您把它倒說一遍，這句話是“天上有月亮”，請倒說出來。(如有必要可重念。)

18(a). 亮月有上天	錯誤數						拒絕
	0	1	2	3	4	5	9

訪問員：現在請您告訴我，剛才我要您記住的三樣東西是什麼？

	對	錯	說不會做	拒絕
19. 皮球 _____	1	5	7	9
20. 國旗 _____	1	5	7	9
21. 樹木 _____	1	5	7	9

訪問員：(請拿出手表)請問這是什麼？

	對	錯	拒絕
22. 手表 _____	1	5	9

訪問員：(出示鉛筆)請問這是什麼？

	對	錯	拒絕
23. 鉛筆 _____	1	5	9

訪問員：現在我要說一句話，請清楚地重復一遍，這句話是：
 “四十四只石獅子”。（只許說一遍，只有正確、咬字清楚的才記一分。）

		正確	不清楚	拒絕
24. 四十四只石獅子	_____	1	5	9

訪問員：（把一張寫有“閉上你的眼睛”的卡片交給受訪者）請照這卡片所寫的去
 做。

（如果受訪者閉上眼睛，記一分）

		有	沒有	說不會做	拒絕	文盲
25. 閉眼睛	_____	1	5	7	9	8

訪問員：（請念下面一段話，並給對方一張空白紙，不要重復說明，也不要作示
 範。）請用右手拿這張紙，再用雙手把紙對摺，然後將紙放在您的大腿上。

		對	錯	說不會做	拒絕
26. 用右手拿紙	_____	1	5	7	9
27. 把紙對摺	_____	1	5	7	9
28. 放在大腿上	_____	1	5	7	9

訪問員：請您說一句完整的、有意義的句子（句子必須有主語、動詞）。

記下所敘述句子的全文 _____

		合乎標準	不合標準	不會做	拒絕
29. 句子	_____	1	5	7	9

訪問員：（把卡片交給受訪者）這是一張圖，請您在同一張卡片上照樣把它畫出
 來。（對：兩個五邊形的圖案，交叉處形成一個小四邊形。）

		對	錯	說不會做	拒絕
30. 畫圖	_____	1	5	7	9

*Translated and adapted from Polstein, M. E., Polstein, S. W., and Nchugh, P. R. (1975). "Mini-Mental State: A Practical Method for Grading the Cognitive State of Patients for the Clinician." Journal of Psychiatric Research 12: 189-198. The format and score used in Shanghai are patterned after the MMSE section of the Diagnostic Interview Schedule (DIS) published by the National Institute of Mental Health.

中文简易智能状态检查

Chinese Adapted Mini-Mental Status Examination (CAMSE)

姓名: _____ 病案号: _____ 利手: _____
测试日期: _____年__月__日 教育程度: _____

错误 正确

0 1 1) 今年是哪一年?

0 1 2) 现在是什么季节?

0 1 3) 今天是几号?

0 1 4) 今天星期几?

0 1 5) 现在是几月?

0 1 6) 我们在那一个省?

0 1 7) 我们现在是在那一个县/市?

0 1 8) 这里是什么医院?

0 1 9) 我们在几楼?

0 1 10) 这是什么科?

0 1 11) 皮球 请重复这三个名称, 按照第一次重复的结果计分, 最多重复三次.

0 1 树木 练习次数: _____

0 1 国旗

0 1 12) 请从 100 开始, 连续减去 7, 直到我说停为止。(每减对一次得一分)

0 1 93_____;

0 1 86_____;

0 1 79_____;

0 1 72_____;

0 1 65_____

13) 如果 12) 不能完成, 可以作本题: 我说五个字, 请你按相反顺序说出来,

金木水火土

0 1 土

0 1 火

0 1 水

0 1 木

0 1 金

0 1 14) 皮球 (约五分钟后, 请说出刚才让你记住的三个名称, 不分顺序)

0 1 15) 树木

0 1 16) 国旗

0 1 17) (拿出手表) 这是什么? _____

0 1 18) (拿出铅笔) 这是什么? _____

0 1 19) 请跟着我说 “四十四只石狮子”。

0 1 20) 跟我读并照着做: “闭上你的眼睛”

0 1 21) 请用右手拿着这张纸, 将纸对折, 然后放在你的大腿上 (三个步骤, 每一步正确得一分)

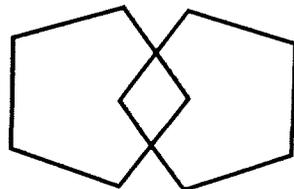
0 1 右手拿纸

0 1 把它对折

0 1 放在大腿上

0 1 22) 写一个句子 (必须要在没有提示的情况下完成, 句子应至少有主语, 谓语)

0 1 23) 这里有一幅图, 请照着画下来 (两个五边形, 相交为四边形, 有两个交点)



评分:

测试者:

注: 12 和 13 题选择分数高的一项计入总分

Appendix

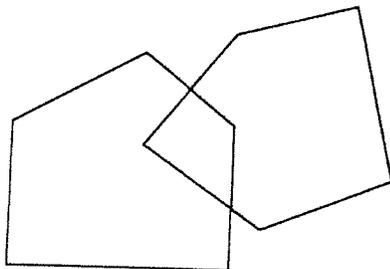
簡短智能測驗

最高
分數 分數

- 5 () 依家係乜野日子(年份)(季節)(月份)(幾號)(星期幾)?
- 5 () 我地依家係邊嘅?
(九龍/新界/香港)(九龍/新界/香港既邊度)(醫院)(邊層樓)(病房)
或:(九龍/新界/香港)(九龍/新界/香港既邊度)(邊一科診所)(診所名字)
(邊層樓)
或:(九龍/新界/香港)(九龍/新界/香港既邊度)(邊條街)(邊一座)(邊層樓)
或:(九龍/新界/香港)(九龍/新界/香港既邊度)(邊個屋村)(中心名字)
(邊層樓)
- 3 () 依家我會講三樣野既名, 講完之後, 請你重複一次。
請記住佢地, 因為幾分鐘後, 我會叫你再講番俾我聽。
[蘋果]、[報紙]、[火車]。依家請你講番哩三樣野俾我聽。
(以第一次講的計分, 一個一分; 然後重複物件, 直至全部三樣
都記住。)
- 5 () 請你用一百減七, 然後再減七, 一路減落去, 直至我叫你停為止。
(減五次後便停) ()
或: 依家我讀幾個數目俾你聽, 請你倒轉頭講番出黎。
[4 2 7 3 1] ()
- 3 () 我頭先叫你記住既三樣野係乜野呀?
- 9 () 哩樣係乜野? (鉛筆)(手錶)。(2)
請你跟我講句說話 [姨丈買魚腸](1)
依家檯上面有一張紙。用你既右手拿起張紙, 用兩隻手一齊將
紙摺成一半, 然後放番張紙係檯上面。(3)
請讀出哩張紙上面既字, 然後照住去做。(1)
請你講任何一句完整既句子俾我聽。例如: [我係一個人]、
[今日天氣好好]。(1)
哩處有幅圖, 請你照住黎畫啦。(1)

總分: _____

拍手



MINI-COG™

- 1) GET THE PATIENT'S ATTENTION, THEN SAY: "I am going to say three words that I want you to remember now and later. The words are **Banana Sunrise Chair**. Please say them for me now." (Give the patient 3 tries to repeat the words. If unable after 3 tries, go to next item.) (Fold this page back at the TWO dotted lines BELOW to make a blank space and cover the memory words. Hand the patient a pencil/pen.)
- 2) SAY ALL THE FOLLOWING PHRASES IN THE ORDER INDICATED. "Please draw a clock in the space below. Start by drawing a large circle." (When this is done, say) "Put all the numbers in the circle." (When done, say) "Now set the hands to show 11:10 (10 past 11)." If subject has not finished clock drawing in 3 minutes, discontinue and ask for recall items.

3) SAY: "What were the three words I asked you to remember?"

Score the clock (see other side for instructions): _____ (Score 1 point for each) 3-Item Recall Score

Normal clock 2 points
 Abnormal clock 0 points

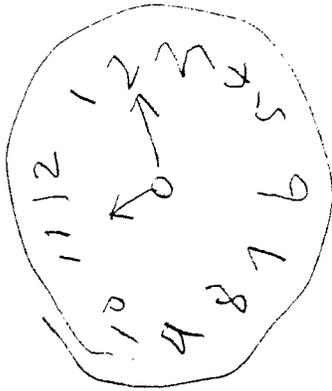
Score Clock Score

Total Score = 3-item recall plus clock score

0, 1, or 2 possible impairment; 3, 4, or 5 suggests no impairment

CLOCK SCORING

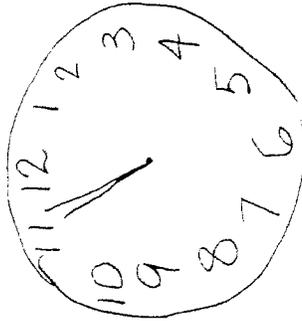
NORMAL CLOCK



A NORMAL CLOCK HAS ALL OF THE FOLLOWING ELEMENTS:
All numbers 1-12, each only once, are present in the correct order and direction (clockwise).
Two hands are present, one pointing to 11 and one pointing to 2.

ANY CLOCK MISSING ANY OF THESE ELEMENTS IS SCORED ABNORMAL. REFUSAL TO DRAW A CLOCK IS SCORED ABNORMAL.

SOME EXAMPLES OF ABNORMAL CLOCKS (THERE ARE MANY OTHER KINDS)



Abnormal Hands



Missing Number

Montreal Cognitive Assessment (MoCA)

Administration and Scoring Instructions

The Montreal Cognitive Assessment (MoCA) was designed as a rapid screening instrument for mild cognitive dysfunction. It assesses different cognitive domains: attention and concentration, executive functions, memory, language, visuoconstructional skills, conceptual thinking, calculations, and orientation. Time to administer the MoCA is approximately 10 minutes. The total possible score is 30 points; a score of 26 or above is considered normal.

1. **Alternating Trail Making:**

Administration: The examiner instructs the subject: "Please draw a line, going from a number to a letter in ascending order. Begin here [point to (1)] and draw a line from 1 then to A then to 2 and so on. End here [point to (E)]."

Scoring: Allocate one point if the subject successfully draws the following pattern: 1 -A- 2- B- 3- C- 4- D- 5- E, without drawing any lines that cross. Any error that is not immediately self-corrected earns a score of 0.

2. **Visuoconstructional Skills (Cube):**

Administration: The examiner gives the following instructions, pointing to the cube: "Copy this drawing as accurately as you can, in the space below".

Scoring: One point is allocated for a correctly executed drawing.

- Drawing must be three-dimensional
- All lines are drawn
- No line is added
- Lines are relatively parallel and their length is similar (rectangular prisms are accepted)

A point is not assigned if any of the above-criteria are not met.

3. **Visuoconstructional Skills (Clock):**

Administration: Indicate the right third of the space and give the following instructions: "Draw a clock. Put in all the numbers and set the time to 10 after 11".

Scoring: One point is allocated for each of the following three criteria:

- Contour (1 pt.): the clock face must be a circle with only minor distortion acceptable (e.g., slight imperfection on closing the circle);
- Numbers (1 pt.): all clock numbers must be present with no additional numbers; numbers must be in the correct order and placed in the approximate quadrants on the clock face; Roman numerals are acceptable; numbers can be placed outside the circle contour;
- Hands (1 pt.): there must be two hands jointly indicating the correct time; the hour hand must be clearly shorter than the minute hand; hands must be centred within the clock face with their junction close to the clock centre.

A point is not assigned for a given element if any of the above-criteria are not met.

4. **Naming:**

Administration: Beginning on the left, point to each figure and say: *“Tell me the name of this animal”*.

Scoring: One point each is given for the following responses: (1) camel or dromedary, (2) lion, (3) rhinoceros or rhino.

5. **Memory:**

Administration: The examiner reads a list of 5 words at a rate of one per second, giving the following instructions: *“This is a memory test. I am going to read a list of words that you will have to remember now and later on. Listen carefully. When I am through, tell me as many words as you can remember. It doesn’t matter in what order you say them”*. Mark a check in the allocated space for each word the subject produces on this first trial. When the subject indicates that (s)he has finished (has recalled all words), or can recall no more words, read the list a second time with the following instructions: *“I am going to read the same list for a second time. Try to remember and tell me as many words as you can, including words you said the first time.”* Put a check in the allocated space for each word the subject recalls after the second trial.

At the end of the second trial, inform the subject that (s)he will be asked to recall these words again by saying, *“I will ask you to recall those words again at the end of the test.”*

Scoring: No points are given for Trials One and Two.

6. **Attention:**

Forward Digit Span: Administration: Give the following instruction: *“I am going to say some numbers and when I am through, repeat them to me exactly as I said them”*. Read the five number sequence at a rate of one digit per second.

Backward Digit Span: Administration: Give the following instruction: *“Now I am going to say some more numbers, but when I am through you must repeat them to me in the backwards order.”* Read the three number sequence at a rate of one digit per second.

Scoring: Allocate one point for each sequence correctly repeated, (*N.B.*: the correct response for the backwards trial is 2-4-7).

Vigilance: Administration: The examiner reads the list of letters at a rate of one per second, after giving the following instruction: *“I am going to read a sequence of letters. Every time I say the letter A, tap your hand once. If I say a different letter, do not tap your hand”*.

Scoring: Give one point if there is zero to one errors (an error is a tap on a wrong letter or a failure to tap on letter A).

Serial 7s: Administration: The examiner gives the following instruction: "Now, I will ask you to count by subtracting seven from 100, and then, keep subtracting seven from your answer until I tell you to stop." Give this instruction twice if necessary.

Scoring: This item is scored out of 3 points. Give no (0) points for no correct subtractions, 1 point for one correction subtraction, 2 points for two-to-three correct subtractions, and 3 points if the participant successfully makes four or five correct subtractions. Count each correct subtraction of 7 beginning at 100. Each subtraction is evaluated independently; that is, if the participant responds with an incorrect number but continues to correctly subtract 7 from it, give a point for each correct subtraction. For example, a participant may respond "92 - 85 - 78 - 71 - 64" where the "92" is incorrect, but all subsequent numbers are subtracted correctly. This is one error and the item would be given a score of 3.

7. **Sentence repetition:**

Administration: The examiner gives the following instructions: "I am going to read you a sentence. Repeat it after me, exactly as I say it [pause]: *I only know that John is the one to help today.*" Following the response, say: "Now I am going to read you another sentence. Repeat it after me, exactly as I say it [pause]: *The cat always hid under the couch when dogs were in the room.*"

Scoring: Allocate 1 point for each sentence correctly repeated. Repetition must be exact. Be alert for errors that are omissions (e.g., omitting "only", "always") and substitutions/additions (e.g., "John is the one who helped today;" substituting "hides" for "hid", altering plurals, etc.).

8. **Verbal fluency:**

Administration: The examiner gives the following instruction: "Tell me as many words as you can think of that begin with a certain letter of the alphabet that I will tell you in a moment. You can say any kind of word you want, except for proper nouns (like Bob or Boston), numbers, or words that begin with the same sound but have a different suffix, for example, love, lover, loving. I will tell you to stop after one minute. Are you ready? [Pause] Now, tell me as many words as you can think of that begin with the letter F. [time for 60 sec]. Stop."

Scoring: Allocate one point if the subject generates 11 words or more in 60 sec. Record the subject's response in the bottom or side margins.

9. **Abstraction:**

Administration: The examiner asks the subject to explain what each pair of words has in common, starting with the example: "Tell me how an orange and a banana are alike". If the subject answers in a concrete manner, then say only one additional time: "Tell me another way in which those items are alike". If the subject does not give the appropriate response (*fruit*), say, "Yes, and they are also both fruit." Do not give any additional instructions or clarification.

After the practice trial, say: "Now, tell me how a train and a bicycle are alike". Following the response, administer the second trial, saying: "Now tell me how a ruler and a watch are alike". Do not give any additional instructions or prompts.

Scoring: Only the last two item pairs are scored. Give 1 point to each item pair correctly answered. The following responses are acceptable:

Train-bicycle = means of transportation, means of travelling, you take trips in both;

Ruler-watch = measuring instruments, used to measure.

The following responses are **not** acceptable: Train-bicycle = they have wheels; Ruler-watch = they have numbers.

10. Delayed recall:

Administration: The examiner gives the following instruction: “*I read some words to you earlier, which I asked you to remember. Tell me as many of those words as you can remember. Make a check mark (✓) for each of the words correctly recalled spontaneously without any cues, in the allocated space.*”

Scoring: Allocate 1 point for each word recalled freely without any cues.

Optional:

Following the delayed free recall trial, prompt the subject with the semantic category cue provided below for any word not recalled. Make a check mark (✓) in the allocated space if the subject remembered the word with the help of a category or multiple-choice cue. Prompt all non-recalled words in this manner. If the subject does not recall the word after the category cue, give him/her a multiple choice trial, using the following example instruction, “*Which of the following words do you think it was, NOSE, FACE, or HAND?*”

Use the following category and/or multiple-choice cues for each word, when appropriate:

FACE: category cue: part of the body multiple choice: nose, face, hand

VELVET: category cue: type of fabric multiple choice: denim, cotton, velvet

CHURCH: category cue: type of building multiple choice: church, school, hospital

DAISY: category cue: type of flower multiple choice: rose, daisy, tulip

RED: category cue: a colour multiple choice: red, blue, green

Scoring: No points are allocated for words recalled with a cue. A cue is used for clinical information purposes only and can give the test interpreter additional information about the type of memory disorder. For memory deficits due to retrieval failures, performance can be improved with a cue. For memory deficits due to encoding failures, performance does not improve with a cue.

11. Orientation:

Administration: The examiner gives the following instructions: “*Tell me the date today*”. If the subject does not give a complete answer, then prompt accordingly by saying: “*Tell me the [year, month, exact date, and day of the week].*” Then say: “*Now, tell me the name of this place, and which city it is in.*”

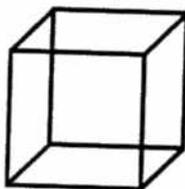
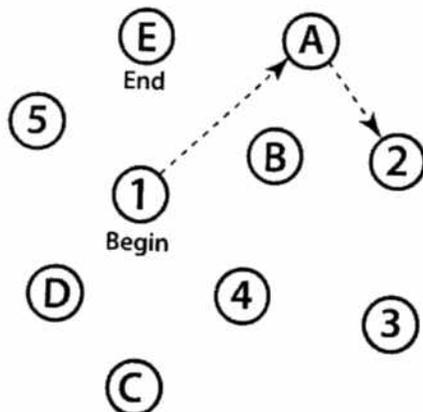
Scoring: Give one point for each item correctly answered. The subject must tell the exact date and the exact place (name of hospital, clinic, office). No points are allocated if subject makes an error of one day for the day and date.

TOTAL SCORE: Sum all subscores listed on the right-hand side. Add one point for an individual who has 12 years or fewer of formal education, for a possible maximum of 30 points. A final total score of 26 and above is considered normal.

MONTREAL COGNITIVE ASSESSMENT (MOCA)

NAME: _____
 Education: _____ Date of birth: _____
 Sex: _____ DATE: _____

VISUOSPATIAL / EXECUTIVE



Copy cube

Draw CLOCK (Ten past eleven)
(3 points)

POINTS

[]

[]

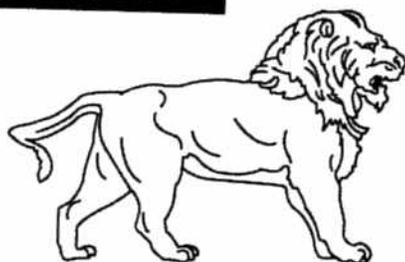
[]
Contour

[]
Numbers

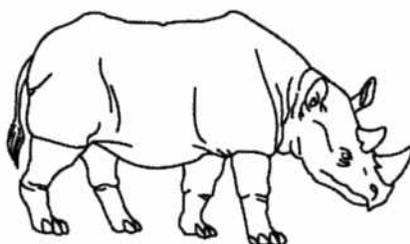
[]
Hands

___/5

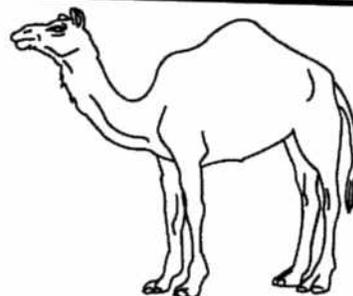
NAMING



[]



[]



[]

___/3

MEMORY

Read list of words, subject must repeat them. Do 2 trials, even if 1st trial is successful. Do a recall after 5 minutes.

	FACE	VELVET	CHURCH	DAISY	RED
1st trial					
2nd trial					

No points

ATTENTION

Read list of digits (1 digit/ sec.).

Subject has to repeat them in the forward order

[] 2 1 8 5 4

Subject has to repeat them in the backward order

[] 7 4 2

___/2

Read list of letters. The subject must tap with his hand at each letter A. No points if ≥ 2 errors

[] FBACMNAAJKLBAFAKDEAAAJAMOF AAB

___/1

Serial 7 subtraction starting at 100

[] 93

[] 86

[] 79

[] 72

[] 65

4 or 5 correct subtractions: **3 pts**, 2 or 3 correct: **2 pts**, 1 correct: **1 pt**, 0 correct: **0 pt**

___/3

LANGUAGE

Repeat: I only know that John is the one to help today. []

The cat always hid under the couch when dogs were in the room. []

___/2

Fluency / Name maximum number of words in one minute that begin with the letter F

[] _____ (N ≥ 11 words)

___/1

ABSTRACTION

Similarity between e.g. banana - orange = fruit

[]

train - bicycle

[]

watch - ruler

___/2

DELAYED RECALL

Has to recall words

WITH NO CUE

FACE

[]

VELVET

[]

CHURCH

[]

DAISY

[]

RED

[]

Points for UNCUED recall only

___/5

Optional

Category cue

Multiple choice cue

ORIENTATION

[] Date

[] Month

[] Year

[] Day

[] Place

[] City

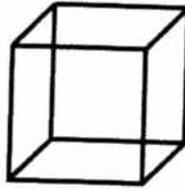
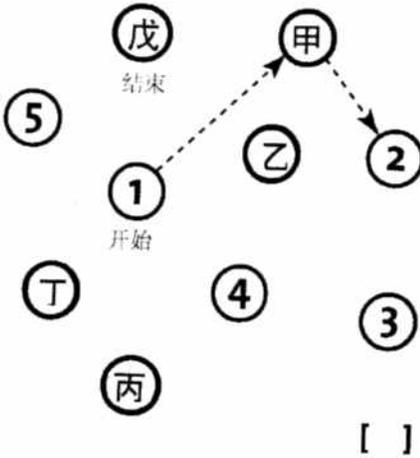
___/6

Montreal Cognitive Assessment (MoCA) Beijing Version
蒙特利尔认知评估北京版

出生日期：
教育水平：
性 别：

姓名：
检查日期：

视空间与执行功能



复制
立方体

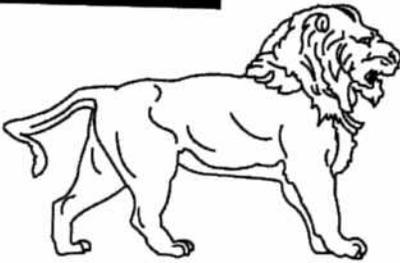
画钟表 (11点过10分) (3分)

得分

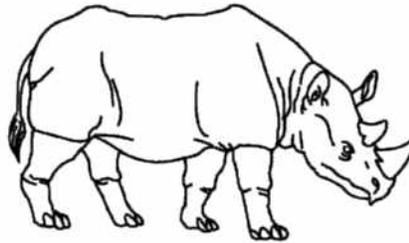
[] 轮廓 [] 数字 [] 指针

___/5

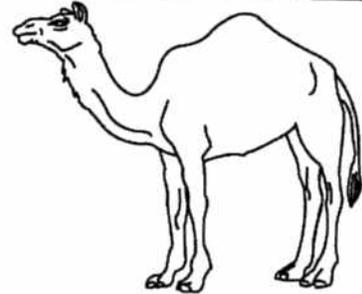
命名



[]



[]



[]

___/3

记忆

读出下列词语,而后由患者重复
上述过程重复2次
5分钟后回忆

	面孔	天鹅绒	教堂	菊花	红色
第一次					
第二次					

不
计
分

注意

读出下列数字,请患者重复
(每秒1个)

顺背 [] 2 1 8 5 4
倒背 [] 7 4 2

___/2

读出下列数字,每当数字1出现时,患者必须用手敲打一下桌面,错误数大于或等于2个不给分

[] 5 2 1 3 9 4 1 1 8 0 6 2 1 5 1 9 4 5 1 1 1 4 1 9 0 5 1 1 2

___/1

100连续减7

[] 93 [] 86 [] 79 [] 72 [] 65
4-5个正确给3分,2-3个正确给2分,1个正确给1分,全都错误为0分

___/3

语言

重复: 我只知道今天张亮是来帮过忙的人 []
狗在房间的时候,猫总是躲在沙发下面 []

___/2

流畅性: 在1分钟内尽可能多的说出动物的名字

[] ___ (N ≥ 11 名称)

___/1

抽象

词语相似性: 如香蕉-桔子=水果 [] 火车-自行车 [] 手表-尺子

___/2

延迟回忆

回忆时不能提示	面孔	天鹅绒	教堂	菊花	红色
	[]	[]	[]	[]	[]

仅根据非提示回忆
计分

___/5

选项

分类提示					
多选提示					

定向

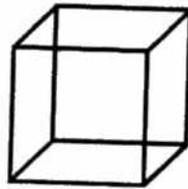
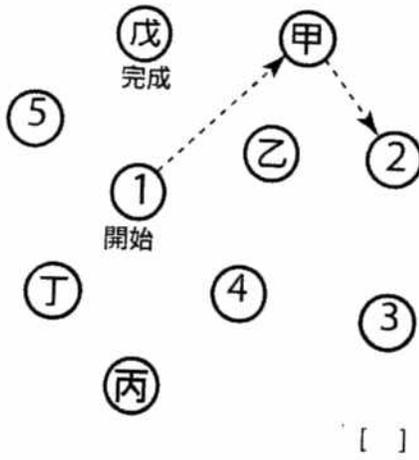
[] 日期 [] 月份 [] 年代 [] 星期几 [] 地点 [] 城市

___/6

总分

___/30

視覺空覺/執行



抄畫
立方體

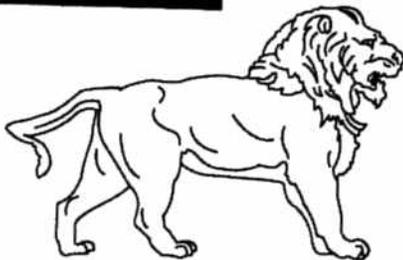
畫時鐘 (11點2)
(3分)

分數

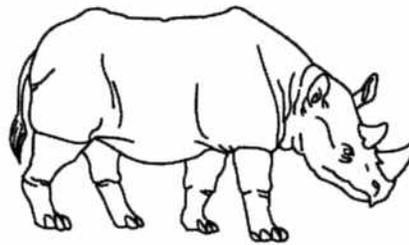
[] 外形 [] 數字 [] 指針

___/5

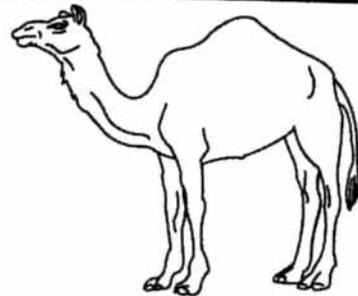
名稱



[]



[]



[]

___/3

記憶

讀出一系列詞語，由測試對象複述。進行兩次嘗試。五分鐘後再憶述。

	面孔	絨布	寺廟	菊花	紅色
第一次嘗試					
第二次嘗試					

不計分

專注力

讀出一系列數字 (每秒讀一個)。

測試對象需要順序背出數字 [] 2 1 8 5 4

測試對象需要倒序背出數字 [] 7 4 2

讀出數字。當主考人讀到1時，測試對象輕輕拍一下枱面。如有兩個或以上錯誤，沒有分數。

[] 6 2 1 3 9 8 1 1 7 6 5 2 1 6 1 6 4 5 1 1 1 7 1 9 8 6 1 1 2

___/1

從100開始連續減7

[] 93 [] 86 [] 79 [] 72 [] 65

4或5次正確減算: 3分, 2或3次正確: 2分, 1次正確: 1分, 0次正確: 0分

___/3

語言

重複: 我只知道今日黎幫手既係大文。 []
當有狗係度時，隻貓一定走去梳化下面。 []

___/2

流暢度/一分鐘內說出最多個水果的名稱

[] _____ (≥ 11個詞語)

___/1

抽象概念

共通點: 例如: 香蕉 - 橙 = 生果

[] 火車 - 單車 [] 磅 - 尺

___/2

延遲記憶

在沒有提示下 記得的詞語	面孔	絨布	寺廟	菊花	紅色
	[]	[]	[]	[]	[]

只有無需提示
而能記得的詞語
才可得分

___/5

選擇性使用

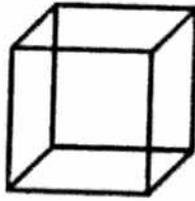
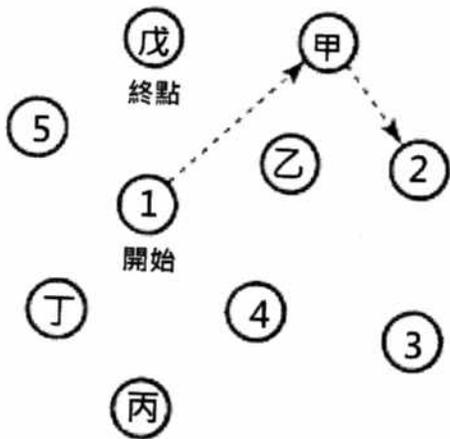
題目提示					
多項選擇提示					

導向

[] 日期 [] 月份 [] 年份 [] 星期 [] 地點 [] 地區

___/6

視覺空間/執行



複製立方體

畫時鐘 (11點10分)
(3分)

分數

[]

[]

[]

[]

[]

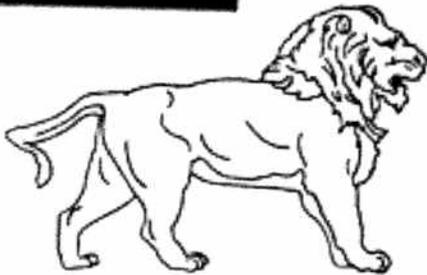
形狀

數字

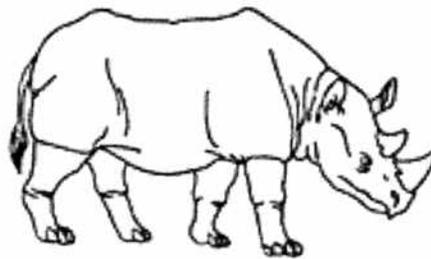
指針

___/5

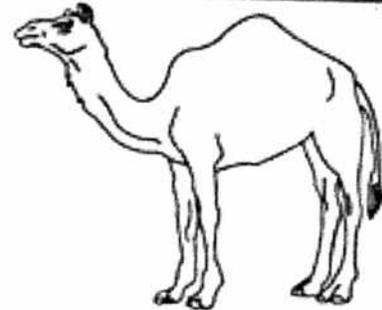
命名



[]



[]



[]

___/3

記憶

讀出右方詞語，由受測對象複述。上述步驟重複兩次。五分鐘後再測能否回憶。

	臉	絨布	教堂	菊花	紅色
第一次嘗試					
第二次嘗試					

不計分

專注

施測者讀出右方數字(每秒讀一個)。

受測對象需要順序背出數字 [] 2 1 8 5 4

受測對象需要倒序背出數字 [] 7 4 2

讀出數字。當施測者讀到1時，受測者輕輕拍一下桌面。如錯誤兩個或以上，沒有得分。

[] 6 2 1 3 9 8 1 1 7 6 5 2 1 6 1 6 4 5 1 1 1 7 1 9 8 6 1 1 2

___/1

從100開始連續減7

[] 93 [] 86 [] 79 [] 72 [] 65

4或5次正確:3分, 2或3次正確:2分, 1次正確:1分, 0次正確:0分

___/3

語言

(國)我知道今天來幫忙的是小吳 []

(國)當狗在房間時，貓總是躲在桌子下 []

(台)我知影今日來幫忙的是蔡桑 []

(台)狗那置咧房間內，貓總是密置ㄟ桌子腳 []

流暢度/一分鐘內說出最多個水果的名字

[] _____ (≥ 11個即得分)

___/1

抽象概念

共通點：例如：香蕉-橘子 = 水果

[] 火車-腳踏車

[] 手錶-尺

___/2

延遲記憶

在沒有提示下答出

臉孔

絨布

教堂

菊花

紅色

只有不需提示而能記得的詞語才得分

選擇性使用

類別提示

多選提示

___/5

定向

[] 日期

[] 月份

[] 年份

[] 星期

[] 地點

[] 城市

___/6

Geriatric Depression Scale (Chinese Version)

以下的問題是人們對一些事物的感受。在過去一星期內，如果你曾有以下的感受，請圈「是」，如果沒有的話請圈「否」。

- | | | |
|-------------------------------------|---|---|
| 1. 你是否對自己的人生大致感覺滿意？ | 是 | 否 |
| 2. 你是否已放棄了很多以往常做的活動和有興趣的事？ | 是 | 否 |
| 3. 你是否覺得你的人生是無意義、空虛的呢？ | 是 | 否 |
| 4. 你是否常感到無聊？ | 是 | 否 |
| 5. 你是否覺得你的未來是有希望的？ | 是 | 否 |
| 6. 你是否被自己一些揮之不去的念頭所困擾？ | 是 | 否 |
| 7. 你是否大部份的時間都感到朝氣蓬勃的呢？ | 是 | 否 |
| 8. 你是否害怕將會有不好的事情發生在你身上？ | 是 | 否 |
| 9. 你是否大部份時間都感到快樂？ | 是 | 否 |
| 10. 你是否常有無助的感覺？ | 是 | 否 |
| 11. 你是否常感覺煩燥及坐立不安？ | 是 | 否 |
| 12. 你是否寧願留在家裡，而不想外出並且去做些新的事呢？ | 是 | 否 |
| 13. 你是否常常擔心未來的事情呢？ | 是 | 否 |
| 14. 你是否覺得自己比多數人有更多記憶力的問題呢？ | 是 | 否 |
| 15. 你是否覺得現在可以活著是一件好事？ | 是 | 否 |
| 16. 你是否常常感到無精打采及鬱悶呢？ | 是 | 否 |
| 17. 你是否覺得自己現在是很沒用的呢？ | 是 | 否 |
| 18. 你是否對過去的事很憂慮？ | 是 | 否 |
| 19. 你是否覺得人生很有趣呢？ | 是 | 否 |
| 20. 你是否覺得要開始新計劃是一件困難的事呢？ | 是 | 否 |
| 21. 你是否感到精力充沛？ | 是 | 否 |
| 22. 你是否覺得自己的處境是沒有希望的呢？ | 是 | 否 |
| 23. 你是否覺得大部份人的情況比你呢？ | 是 | 否 |
| 24. 你是否常為小事感到不開心呢？ | 是 | 否 |
| 25. 你是否時常覺得想哭？ | 是 | 否 |
| 26. 你是否在困難集中精神？ | 是 | 否 |
| 27. 你是否在早上樂於起床？ | 是 | 否 |
| 28. 你是否寧願避免參加社交聚會呢？ | 是 | 否 |
| 29. 要你做決定是一件容易的事嗎？ | 是 | 否 |
| 30. 你的頭腦是否和以前一樣清晰呢？ | 是 | 否 |

Sandy Chen Stokes, RN, BSN San Jose State University 1998

Topics Include:

Part I: Risk of Dementia

Part II: Assessment of Dementia in Diverse Populations

Part III: Treatment and Management of Dementia

Part IV: Working With Families
(14 chapters featuring diverse populations)

Part V: Community Partnerships for Support of Ethnic Elders and Families

Preview Available at: 

Ethnicity and the Dementias

Second Edition



*Edited by
Gwen Yeo and Dolores Gallagher-Thompson*

