

Table 2
Neuropsychology

	AQ-	AQ+	p	Age-sex- education adjusted p
General Intellect/Language				
MMSE	29.6 (.76)	29.7 (.58)	0.54	0.46
DRS	140.8 (2.9)	140.2 (3.0)	0.31	0.51
WAIS-information	12.6 (2.0)	13.0 (2.3)	0.32	0.61
WAIS-vocabulary	13.1 (2.0)	13.0 (2.1)	0.77	0.58
WAIS similarities	13.5 (1.9)	13.5 (2.2)	0.83	0.67
Boston Naming Test	56.3 (3.7)	55.1 (3.6)	0.066	0.035
Token Test	43.1 (1.6)	42.5 (2.5)	0.046	0.09
Visuospatial Skills				
JLO	24.9 (3.7)	25.2 (3.8)	0.7	0.96
Facial Recognition Test	46.1 (4.2)	44.9 (6.3)	0.12	0.14
WAIS-Block Design	12.8 (2.7)	12.7 (2.9)	0.81	0.63
CFT copy	34.5 (2.3)	34.0 (2.6)	0.27	0.18
Arithmetic/Working Memory				
Digit span forward	7.1 (1.0)	6.6 (1.1)	0.016	0.013
Digit span backward	5.1 (1.2)	4.9 (1.1)	0.37	0.41
WAIS-arithmetic	11.9 (2.6)	10.9 (2.8)	0.037	0.0102
PASAT-3	49.4 (11.8)	42.1 (15.8)	0.0015	0.0036
PASAT-2	40.9 (11.7)	34.7 (16.6)	0.0082	0.008
Mental Speed				
DSS items	55.3 (11.2)	48.9 (11.6)	0.0016	0.0034
TMT-A (seconds)	25.0 (9.4)	28.6 (8.7)	0.035	0.052
TMT-B (seconds)	66.1 (30.4)	83.3 (48.0)	0.0033	0.0091
COWA	49.2 (11.2)	44.5 (10.2)	0.019	0.033
Animal fluency	21.5 (5.1)	19.9 (4.7)	0.077	0.1
Vegetable fluency	15.8 (4.0)	14.5 (3.2)	0.058	0.18
Problem Solving				
WCST-Errors	32.4 (19.7)	40.7 (19.6)	0.021	0.027
WCST-Categories	4.8 (1.9)	4.3 (2.1)	0.14	0.17
WCST-Perseverative Errors	16.1 (11.3)	18.9 (10.9)	0.16	0.19
Iowa Gambling Task-T Score	8.9 (9.4)	50.9 (8.5)	0.58	0.58
Memory				
CFT recall	21.2 (6.6)	20.8 (6.7)	0.73	0.63
AVLT-TL	50.1 (10.3)	46.5 (8.2)	0.048	0.18
AVLT-LTM	9.8 (3.4)	9.1 (3.1)	0.23	0.55
AVLT-% recall	77.0 (19.2)	75.6 (21.6)	0.68	0.98
Visual Retention Test	7.1 (1.9)	6.6 (2.2)	0.21	0.18
SRT immediate free	78.5 (11.8)	71.7 (27.7)	0.0075	0.034
SRT delayed free	14.2 (2.0)	13.7 (2.4)	0.26	0.58
SRT total free	92.8 (12.7)	89.8 (11.5)	0.18	0.43
Logical memory immediate	14.4 (3.5)	13.5 (3.7)	0.21	0.42
Logical memory delayed	13.3 (3.7)	12.5 (4.1)	0.28	0.64

for age, sex and education, the AQ+ group performed less well on most measures of mental speed, working memory and arithmetic (Table 2). Though behavioral measures remained within a normal range, mean scores on multiple measures including somatization, anxiety, and depression were higher and a measure of personal warmth was lower in the AQ+ group (Table 3). On the NEO-PI-R five factor personality inventory the AQ+ group exhibited higher neuroticism, and lower extraversion and agreeableness (Table 4). **Conclusions:** In our cognitively normal aging cohort, approximately 10% of subjects completing the AQ scored in the BAP range, and differ from AQ- subjects on multiple cognitive, psychological and personality measures. The impact of the broad autism phenotype on longitudinal cognitive trajectories and outcomes awaits further study.

Table 3
Psychological symptomatology

	AQ-	AQ+	p	Age-sex- education adjusted p
Hamilton Depression Scale	2.2 (3.2)	3.1 (3.3)	0.14	0.17
Beck Depression Inventory	4.4 (4.1)	6.3 (6.7)	0.015	0.021
Geriatric Depression Scale	2.6 (3.1)	5.1 (4.4)	<.0001	0.0002
PAI-Somatization	47.5 (7.4)	52.7 (10.2)	0.0094	0.017
PAI-Anxiety	44.1 (5.4)	51.4 (9.0)	<.0001	<.0001
PAI-Anxiety Related Disorders	42.8 (6.4)	53.7 (13')	<.0001	<.0001
PAI-Depression	45.8 (7.3)	51.4 (14.4)	0.0073	0.029
PAI-Mania	42.6 (8.2)	50.1 (9.2)	0.0006	0.0041
PAI-Paranoia	42.2 (6.0)	47.8 (8.5)	0.0007	0.0021
PAI-Schizophrenia	43.4 (5.5)	55.3 (9.5)	<.0001	<.0001
PAI-Borderline	41.8 (6.2)	49.8 (10.4)	<.0001	0.0003
PAI-Antisocial	43.8 (5.6)	46.7 (7.8)	0.054	0.12
PAI-Alcoholism	47.4 (6.4)	45.4 (5.0)	0.24	0.13
PAI-Drugs	46.1 (6.7)	45.5 (6.8)	0.42	0.51
PAI-Aggression	42.9 (6.5)	50.1 (9.6)	<.0001	0.0009
PAI-Suicide	46.5 (5.9)	51.8 (11.8)	0.002	0.013
PAI-Stress	42.7 (6.3)	46.8 (8.9)	0.015	0.051
PAI-Nonsupport	45.6 (7.6)	55.0 (13.3)	<.0001	0.0002
PAI-Treatment rejection	58.6 (7.2)	55.5 (8.8)	0.11	0.18
PAI-Dominance	52.3 (7.8)	49.4 (13.6)	0.19	0.15
PAI-Warmth	53.3 (8.7)	41.2 (9.3)	<.0001	<.0001

Table 4
Personality (NEO-PI-R)

	AQ-	AQ+	p	Age-sex-education adjusted p
Neuroticism	41.9 (8.4)	51.9 (9.6)	<.0001	<.0001
Extraversion	50.0 (9.0)	40.4 (9.4)	<.0001	<.0001
Openness	52.7 (9.9)	50.3 (11.3)	0.2	0.34
Agreeableness	54.6 (8.5)	49.6 (10.8)	0.002	0.0025
Conscientiousness	50.9 (9.0)	53.8 (12.7)	0.089	0.12

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SEXUAL DIFFERENCES IN THE EMOTIONAL EVALUATION OF WORKS OF ART IN OLD ADULTS

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Background: Ratings of emotion in works of art including abstract ones have been found to be influenced by color, form and texture and follow consistent patterns among subjects. The International Affective Picture System (IAPS) is extensively used in cognitive neuroscience studies and allows the identification of emotions. In here, IAPS methodology was employed on art material, i.e., a set of photomontages of the artist Grete Stern. In Grete Stern works

of art inspired by dreams, the detection of emotion, bizarreness and gender differences have not been explored by the use of the IAPS self-assessment manikins. **Methods:** 28 Old Females (OF) (68.41 ± 8.19) and 18 Old Males (OM) (68.12 ± 7.45). Groups of OM and OF subjects were not different in age, years of education, Mini-Mental State Examination (MMSE), Geriatric Depression Scale, Short Anxiety Screening Test and Daily Activities of Katz Scale in their Spanish versions, nor were demented as assessed by the MMSE and Katz scale. 10 photomontages were exhibited on a computer screen. A bizarreness-normal category was added to the traditional valence, arousal and dominance scales (ratings of 1, 2 and 3 indicated bizarreness and 6, 7, 8 or 9, normal, while 5 meant nothing of both). Considering emotions and bizarreness, the mean of each of 10 images was obtained for each variable and its frequencies were submitted to Pearson's chi-square tests. **Results:** Probability level according to chi-squares rendered only arousal significant. OF showed more extreme evaluations and chose more excited and less neutral number of images than OM. Bizarreness was not significant between genders but exhibited a tendency in OM versus OF to follow a neutral response. **Conclusions:** The methodology of IAPS seems feasible to explore bizarreness and the emotional variables in art. OF rated Grete Stern works of art more extremely than OM, as a greater frequency for arousal and less neutral excitement in contrast to OM was found. The differences in arousal of old adults with this feminine material can be interpretable in terms of the usual response of males to show poorer sensitiveness in their emotions than females.

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THE MINNESOTA MEMORY PROJECT: USE OF THE ALBERTA SMELL TEST IN A LONGITUDINAL AGING COHORT

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Background: The Minnesota Memory Project is a longitudinal study investigating cognitive and lifestyle factors associated with advancing age. Gathering information about memory function and health prior to diagnosis can help identify ways to make earlier diagnoses, identify risk factors of memory loss, and develop programs to help prevent or delay symptoms. Olfactory deficits are an early feature of cognitive impairment and have been linked to disease progression. The Alberta Smell Test (AST) is a fast and cost-effective method of evaluating olfactory function. **Methods:** Adults living in the community were recruited for participation in the Minnesota Memory Project. Annual assessments included cognitive screening (Montreal Cognitive Assessment; MoCA), neuropsychological testing, physical measurements, and self-report inventories of health history and lifestyle characteristics. The AST, an optional sub-study, investigates sense of smell by asking participants to identify odors from scented felt tipped markers. This sensitivity analysis examines the accuracy of the AST in detecting cognitive impairment using MoCA scores. **Results:** Subjects who completed the AST (N=134) ranged in age from 50–92 (average 70) and were generally female (70.1%), white (98.5%), and without a diagnosis of memory loss (97.8%). The average MoCA score was 26.7 (SD 2.3) and the average

AST total score was 8.6 (SD 4.2). Using a cutoff of ≤ 25 to indicate potential cognitive impairment, 31 of the subjects had low MoCA scores (23.1%). Total AST score (out of 20 trials) and minimum unirhinal score (out of 10 trials) were significantly worse in the low MoCA group. This group also tended to be older (mean 75.4) and have fewer females (55.8%). Both AST scores significantly predicted the MoCA group, accounting for 8–10% of the variance in MoCA group status. ROC curve results demonstrated that the AST minimum unirhinal score may be a slightly better predictor of MoCA group than AST total score (AUC = 0.646 and 0.668, respectively). **Conclusions:** Results suggest that the AST is a potential screening tool for cognitive impairment. The Minnesota Memory Project will continue to collect longitudinal data on participants in increase capacity for testing this association.

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THE RELATIONSHIP OF SUBJECTIVE COGNITIVE CONCERNS AND COGNITIVE FUNCTIONING IN A SAMPLE OF COGNITIVELY NORMAL MEXICAN-AMERICAN ADULTS

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Background: Subjective memory complaints and more general subjective cognitive complaints have been related to the diagnosis of MCI; quality of life and predictors of cognitive impairment. Our previous work has shown that Mexican-Americans tend to score high on measures of depression, anxiety and worry and are at a higher risk for developing cognitive decline. The present study investigated the relationship between subjective cognitive concerns and objective performance on cognitive testing in a cognitively normal population. **Methods:** Participants were drawn from the Health & Aging Brain among Latino Elders (HABLE) study, a community-based study of aging and cognition in Mexican Americans. 421 Mexican-American adults who had been found to be cognitively normal based on performance on neuropsychological testing which included measures of attention, language, executive functioning and memory were included in the sample. Scores on the Cognitive Impairment subscale of Geriatric Depression scale which measures concern with changes in cognitive functioning were used to divide participants into two groups based on a median split. The two groups' performance on neuropsychological testing was compared with Multivariate Analyses of Variance with a significance level of $\leq .01$. **Results:** The groups formed based on high versus low level of concern with cognitive changes did not differ on age, education or gender distribution, anxiety, worry, depression nor on measures of executive functioning (CLOX, EXIT); attention (Trials A, Digit Span); or language (Boston Naming, COWAT, Animal Naming). The group with lower level of concerns scored significantly higher on WMS Logical Memory Immediate ($p = .001$); WMS Logical Memory Delayed ($p = .001$); CERAD Immediate Recall ($p = .01$); CERAD Delayed Recall ($p = .01$) and lower on Trails B total time ($p = .000$). **Conclusions:** Subjective concern with cognitive change is significantly related to poorer performance on verbal memory measures even among cognitively normal and may be a better predictor of cognitive decline than other measures including depression for Mexican-Americans. Longitudinal studies of predictive utility of this measure of subjective concern are needed.