



Digital Solutions

FROM MoCA COGNITION

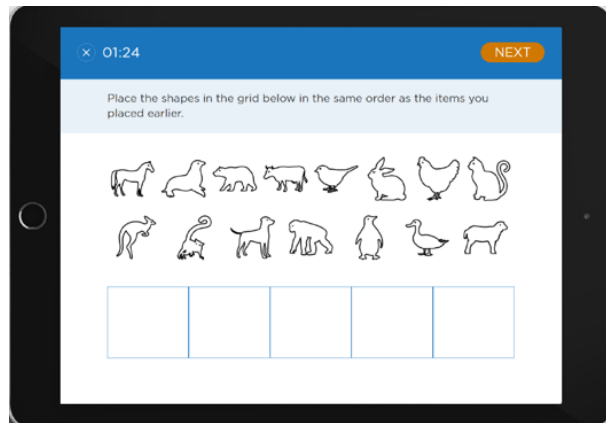
Early detection makes a difference.

MoCA ranked number 1 for Early AD
Delphi Global Consensus 2023

MoCA's portfolio of digital tools

for clinical research and future digital practices

XRESSO
BY MoCA



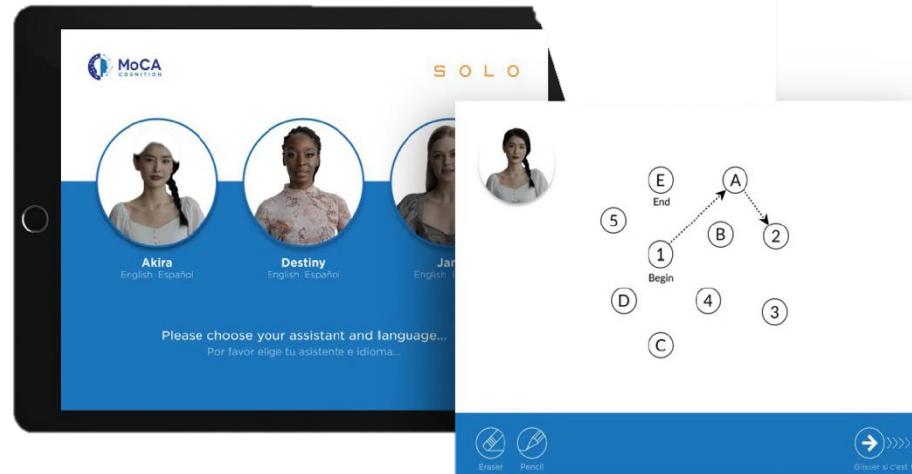
- Accurate:** predicts likelihood of participant scoring below MoCA of 25

- Rapid:** completed in a few minutes

- Scalable:** self-administered, fully digital delivery

MoCA
DUO

2.0

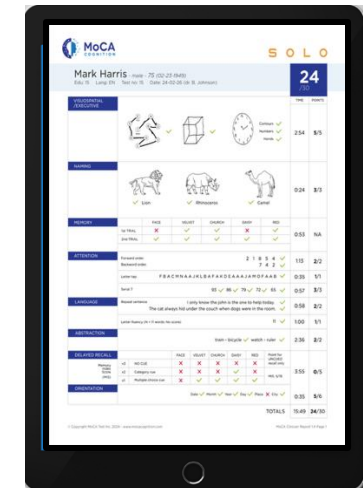


- Consistent :** structured admin of trusted MoCA test

- Inclusive:** language of AI avatars can be switched to that of participant

- Focussed:** psychometrist free to observe.

MoCA
SOLO



- All the advances of Duo 2.0**

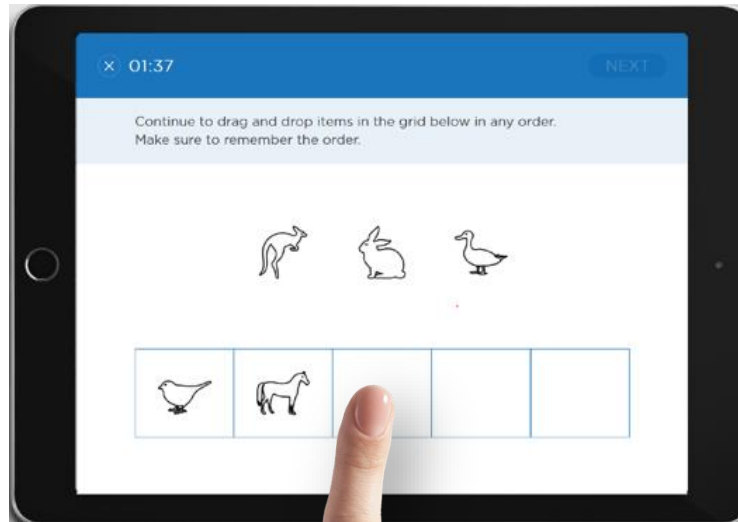
- Accurate:** AI scoring

- Scalable:** Performed under minimal supervision

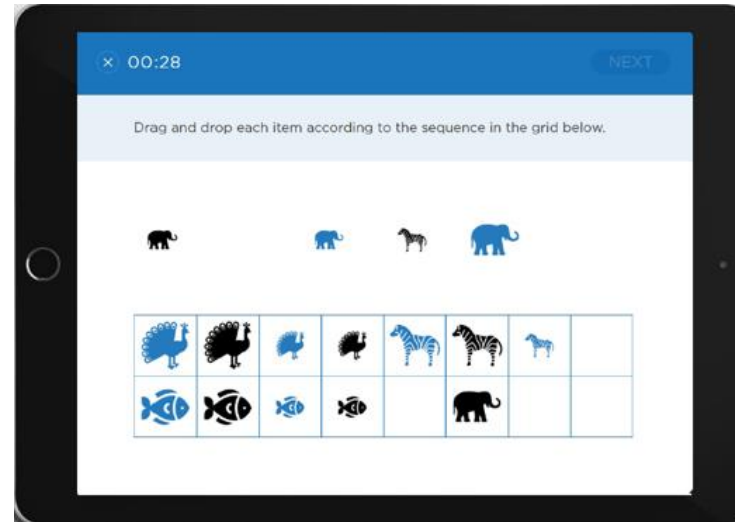
MoCA
COGNITION

MoCA XpressO consists of **three simple tasks**

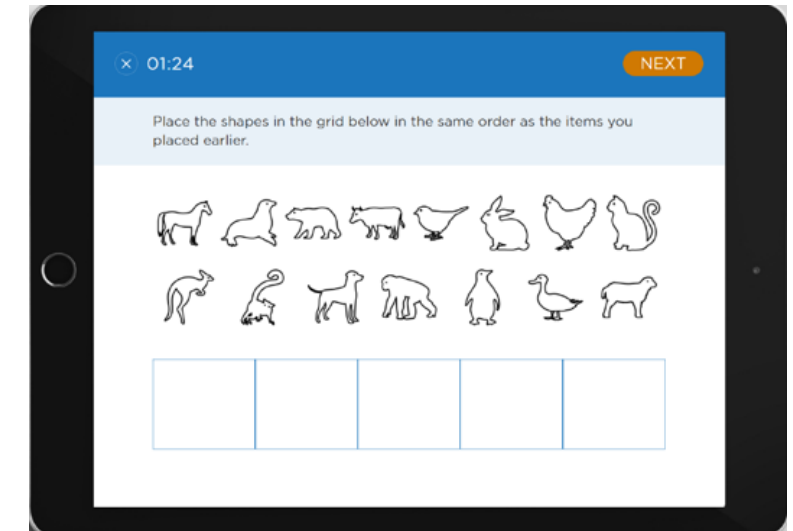
Placement Task
(memory encoding)



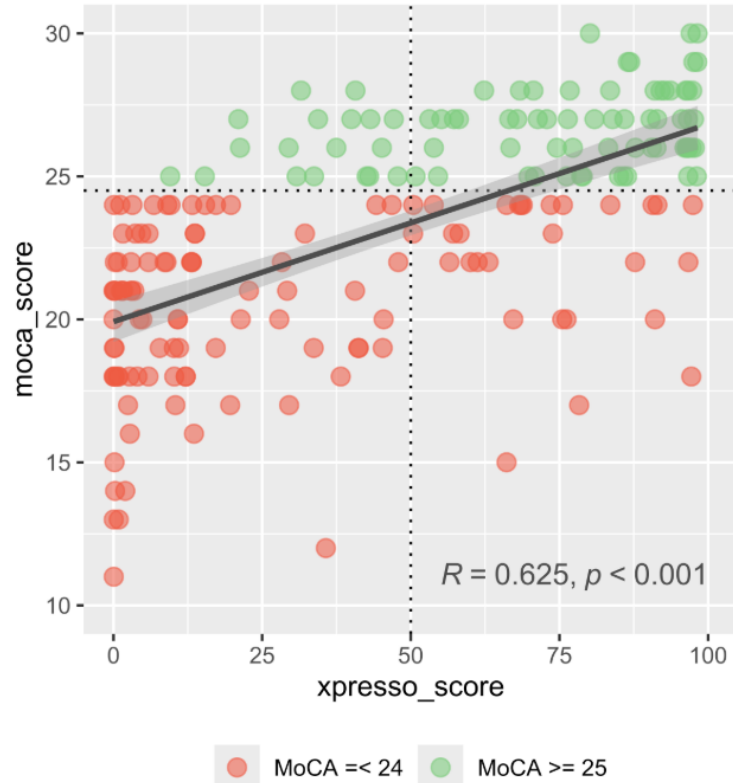
Logical Task
(executive function)



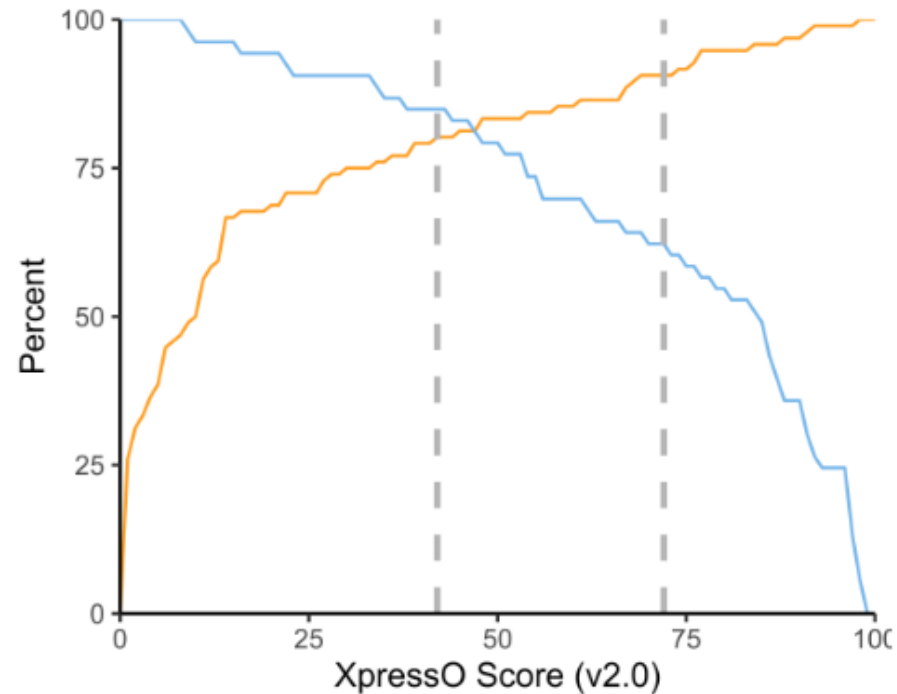
Recall Task
(visual spatial memory)




MoCA XpressO compares well to MoCA paper test



- + Data set of 200 patients at MoCA clinic
- Logistic regression model was constructed*




- + Prediction of MoCA>25 from XpressO
- AUC= 0.897
- NPV 93,1% with sensitivity of 91% for cut-off of 72
- PPV 72,4% with a specificity of 85% for a cut-off of 42
- Given prevalence of 33%



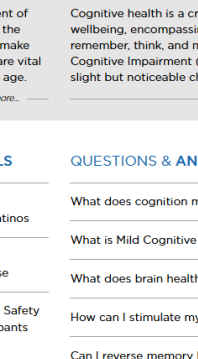
[Test Your Memory](#)
[Cognitive Health](#)
[Clinical Trials](#)
[FAQ](#)

[FR](#)
[Register](#)
[Login](#)



TEST YOUR MEMORY

and brain performance in just a few minutes...



COGNITIVE HEALTH

Cognitive health is a crucial component of our overall well-being, encompassing the ability to think, learn, remember, and make decisions. These cognitive functions are vital at every stage of life, not just in older age.

[more...](#)

SIGNS & SYMPTOMS

Cognitive health is a crucial part of our wellbeing, encompassing our ability to remember, think, and make decisions. Mild Cognitive Impairment (MCI) represents a slight but noticeable change in these abilities.

[more...](#)

SCREENING & DIAGNOSIS

As we journey into and through our golden years, giving attention to our cognitive health is just as essential as looking after our physical well-being.

[more...](#)

RECRUITING CLINICAL TRIALS

Testing the Effects of a Text Message Caregiver Support Intervention for Latinos

Study of LHP588 in Subjects with P. Gingivitis-Positive Alzheimer's Disease

A Double-blind Dual Study Assessing Safety and Efficacy of Buntanetap in Participants with Early AD

[more...](#)

QUESTIONS & ANSWERS

What does cognition mean?

What is Mild Cognitive Impairment?

What does brain health mean?

How can I stimulate my brain?

Can I reverse memory loss?

[more...](#)

REGISTER NOW

AND GAIN ACCESS TO:

- Calculate your [MoCA Cognitive Health Score](#)
- Test your memory with [XpressoQ by MoCA](#)

[REGISTER HERE](#)

Privacy | [Cookie policy](#) | [Terms & Conditions](#)

All rights reserved ©2025 MoCA Cognition

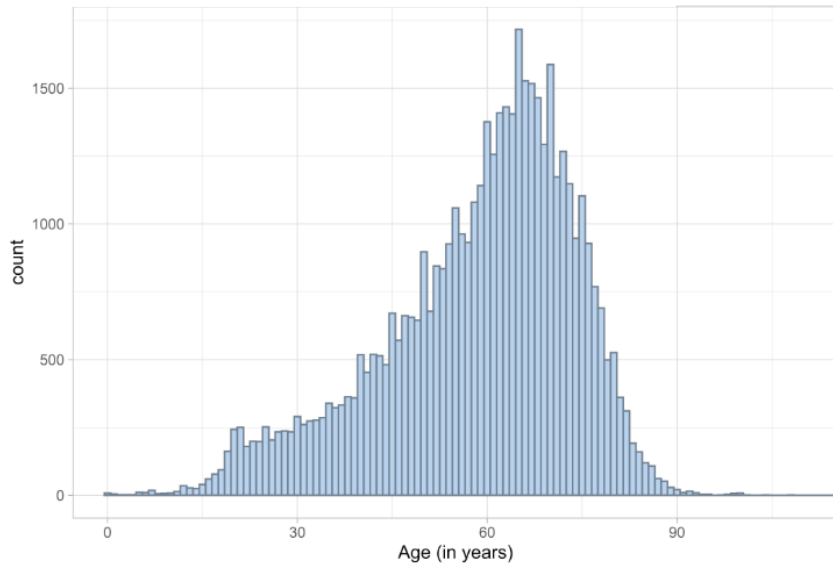
The bar chart displays the number of COVID-19 cases by week and year. The Y-axis is logarithmic, ranging from 1 to 10,000. The X-axis shows weeks from 2024-05 to 2025-04. The chart shows a significant peak in cases around week 2024-29, reaching over 10,000 cases. The data is as follows:

Week - Year	Cases
2024-05	15
2024-06	10
2024-07	400
2024-08	350
2024-09	350
2024-10	250
2024-11	150
2024-12	300
2025-01	200
2025-02	250
2025-03	250
2025-04	200
2025-05	150
2025-06	120
2025-07	100
2025-08	100
2025-09	150
2025-10	150
2025-11	150
2025-12	150
2026-01	150
2026-02	150
2026-03	150
2026-04	150
2026-05	150
2026-06	150
2026-07	150
2026-08	150
2026-09	150
2026-10	150
2026-11	150
2026-12	150
2027-01	150
2027-02	150
2027-03	150
2027-04	150
2027-05	150
2027-06	150
2027-07	150
2027-08	150
2027-09	150
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2027-11	150
2027-12	150
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2028-02	150
2028-03	150
2028-04	150
2028-05	150
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2028-12	150
2029-01	150
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2029-04	150
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2034-11	150
2034-12	150
2035-01	150
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2035-03	150
2035-04	150
2035-05	150
2035-06	150
2035-07	150
2035-08	150
2035-09	150
2035-10	150
2035-11	150
2035-12	150
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2036-05	150
2036-06	150
2036-07	150
2036-08	150
2036-09	150
2036-10	150
2036-11	150
2036-12	150
2037-01	150
2037-02	150
2037-03	

Stacked bar chart showing the proportion of OpenAccess publications from 2004-05 to 2020-04. The y-axis represents the 'Proportion of OpenAccess' from 0.00 to 1.00. The x-axis shows time periods. The legend indicates three categories: Green (Open Access), Yellow (Open Access), and Red (Not Open Access). The chart shows a steady increase in the proportion of Open Access publications over time, starting around 0.55 in 2004-05 and reaching nearly 1.00 by 2020-04.

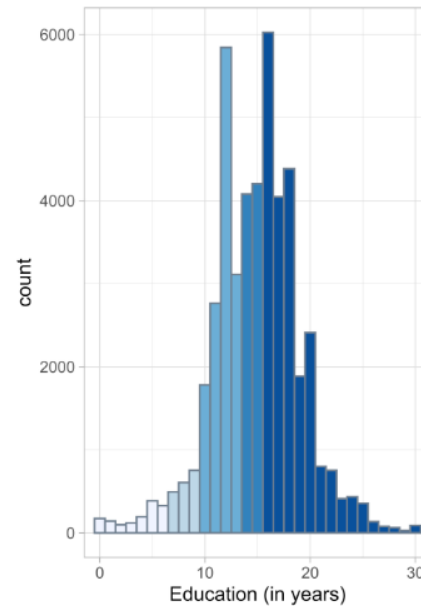
MoCA XpressO online community's demographics

Age



Proportion of each sex in XpressO RWE dataset (self-reported)

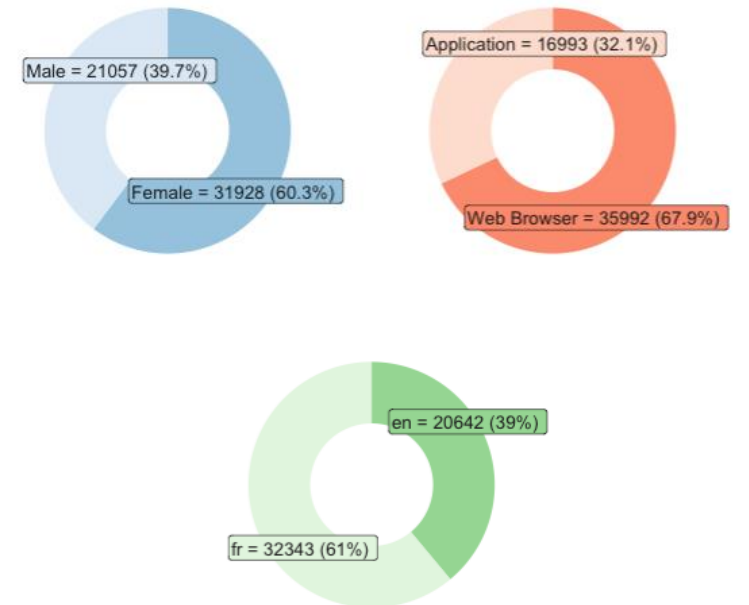
Education



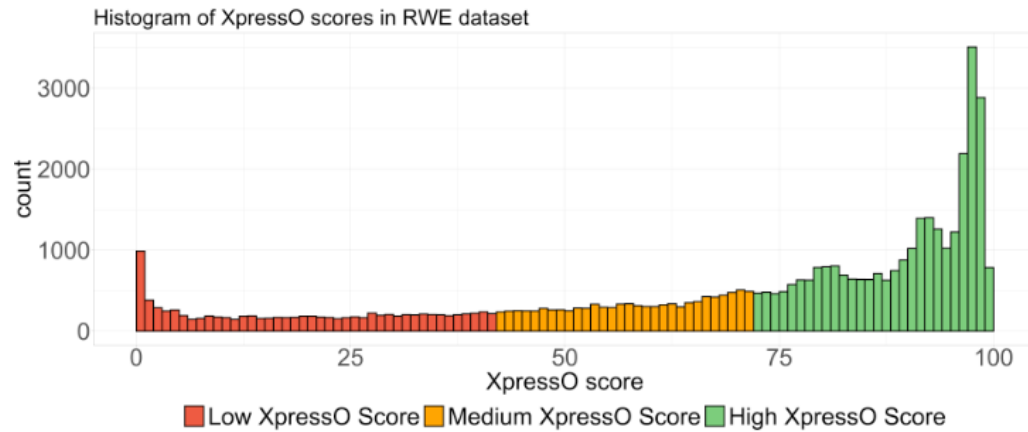
edu_group

- Primary (ISCED levels 0-1)
- Lower Secondary Education (ISCED level 2)
- Upper Secondary Education (ISCED level 3)
- Post-Secondary Non-Tertiary Education (ISCED level 4)
- Tertiary Education (ISCED levels 5-8)

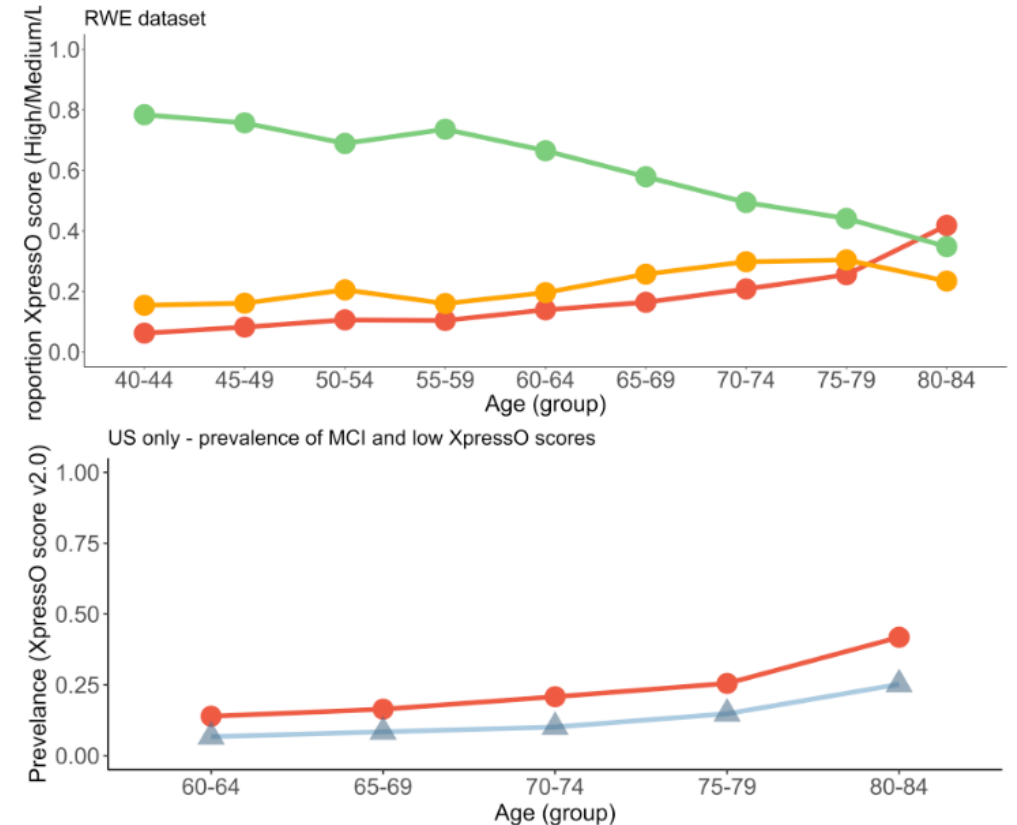
Sex



MoCA XpressO online community's cognition

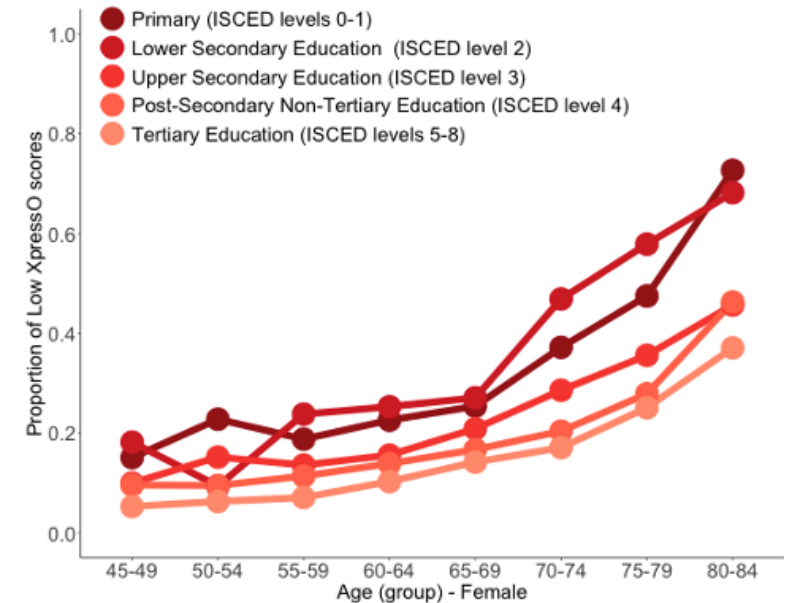
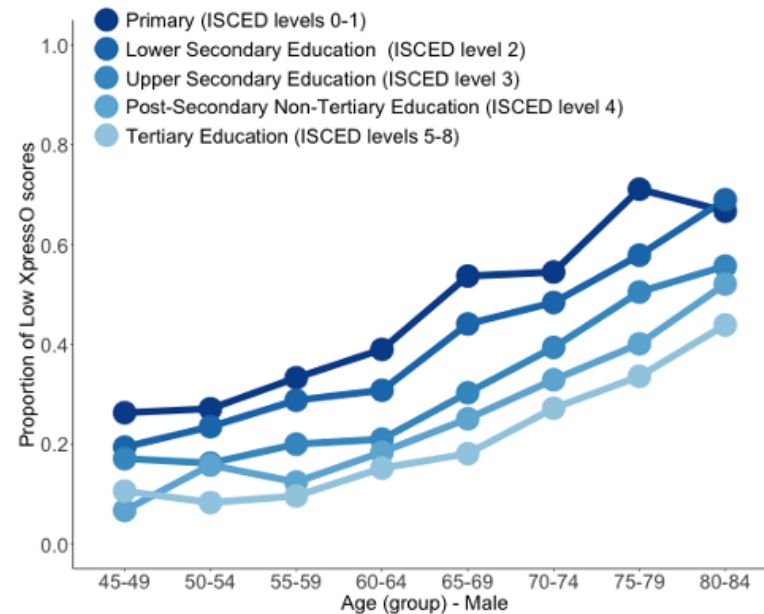
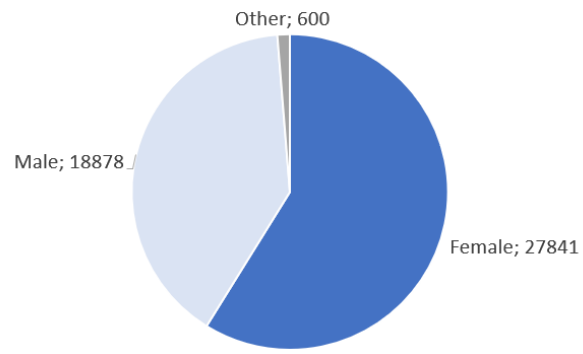


The relative proportion of low XpressO scores increases with age, in-line with the prevalence of MCI in the United States



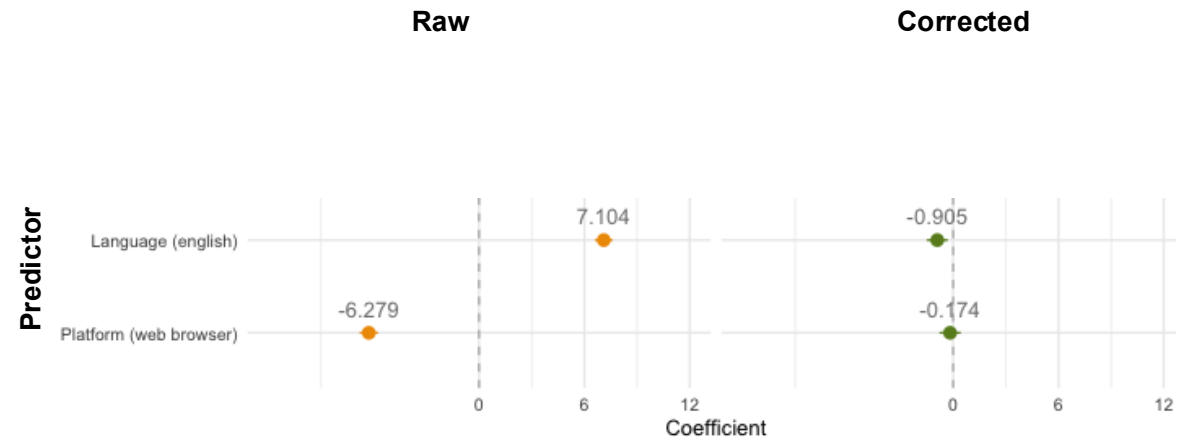
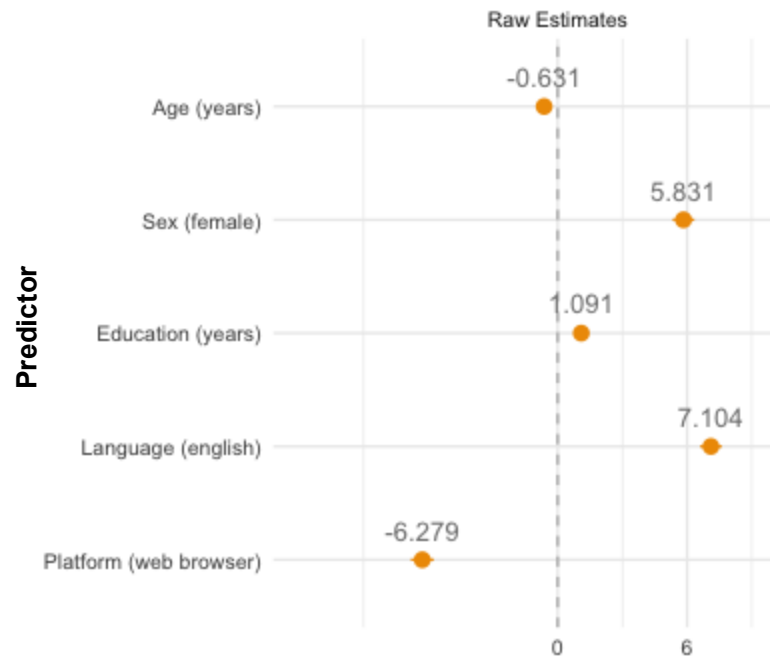
MoCA XpressO online community

Sex and Education

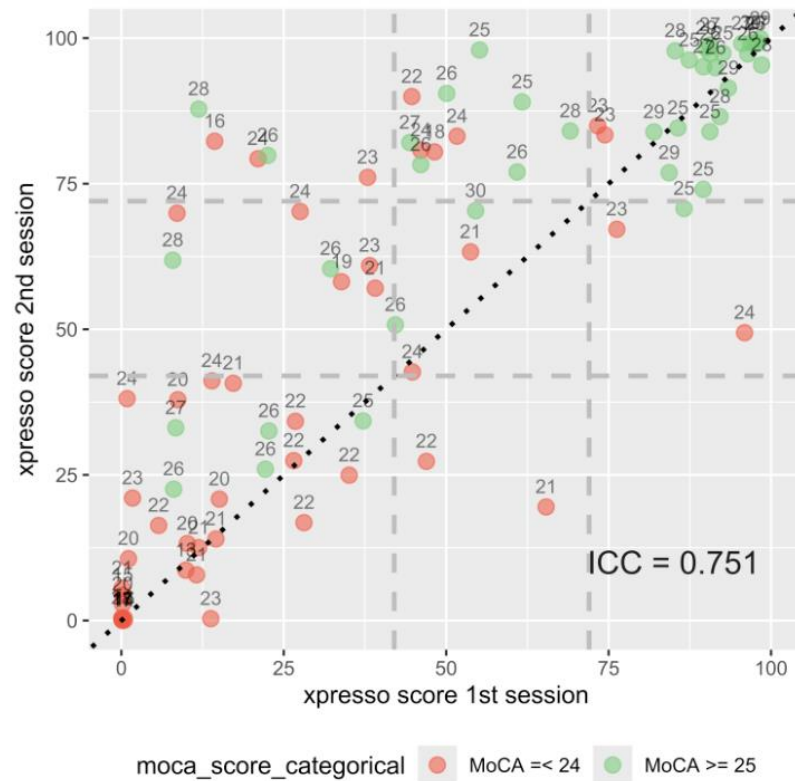


- Being female shifts increases the age where 50% of participants have a low XpressO by approximately 10 years

Compensating for age, education and sex **removes any dependency** on platform and language



Double XpressOs reveal an ICC of 0.751 for test-retest



See moderate learning effects

Next version of XpressO will feature rotation of stimuli

ML algorithm will take into account session number

XpressO Poster for your clinic



XPRESSO
BY MoCA™

ARE YOU CONCERNED ABOUT YOUR MEMORY?

Test yourself in only a few minutes with the XpressO app
for peace of mind and meaningful next steps



Test yourself here!

Speak to the receptionist or with a healthcare
professional to complete the XpressO test



Test yourself at home!

Scan the QR code with your smartphone
to download the app on your smartphone or tablet



OR

Complete the test on your web browser: www.mocaxpresso.com

Developed by the team behind the MoCA Test
www.mocacognition.com | www.mocaxpresso.com

Patients can test on-site or at-home

Keep track of their scores over time

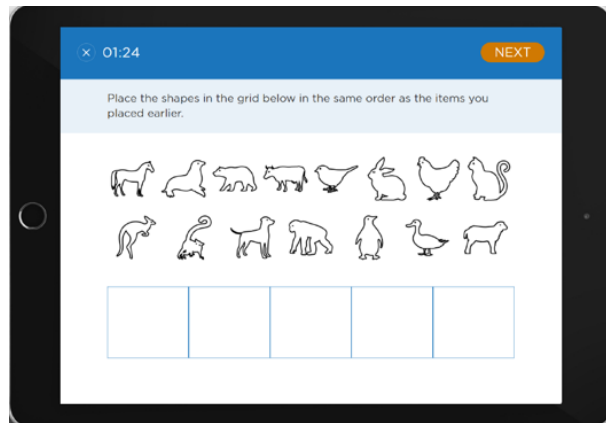
Red/yellow can prompt MoCA testing and
further evaluation

XPRESSO
BY MoCA

MoCA's portfolio of digital tools

for clinical research and future digital practices

XRESSO
BY MoCA



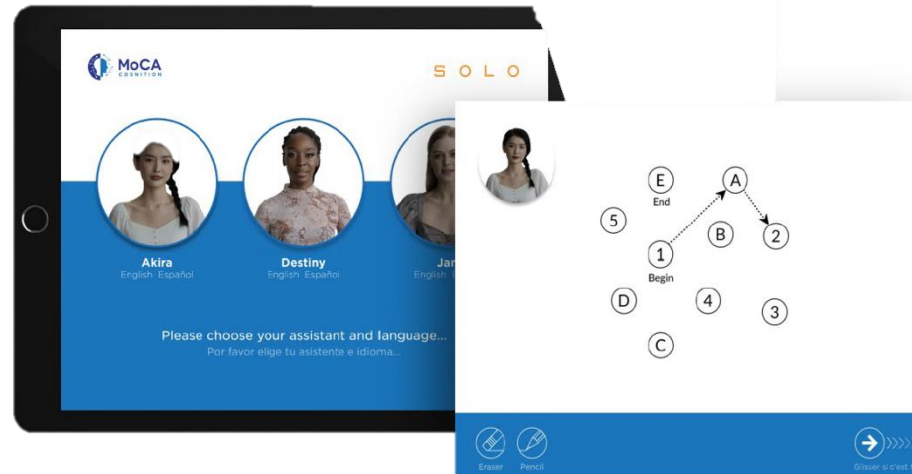
Accurate: predicts likelihood of participant scoring below MoCA of 25

Rapid: completed in a few minutes

Scalable: self-administered, fully digital delivery

MoCA
DUO

2.0

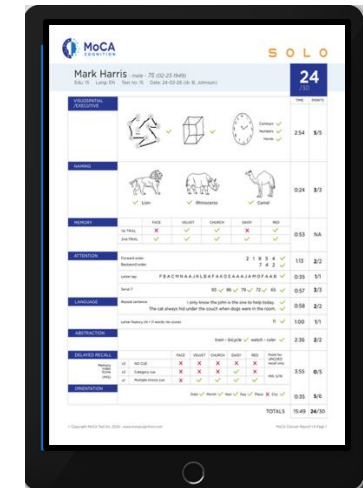


Consistent : structured admin of trusted MoCA test

Inclusive: language of AI avatars can be switched to that of participant

Focussed: psychometrist free to observe.

MoCA
SOLO



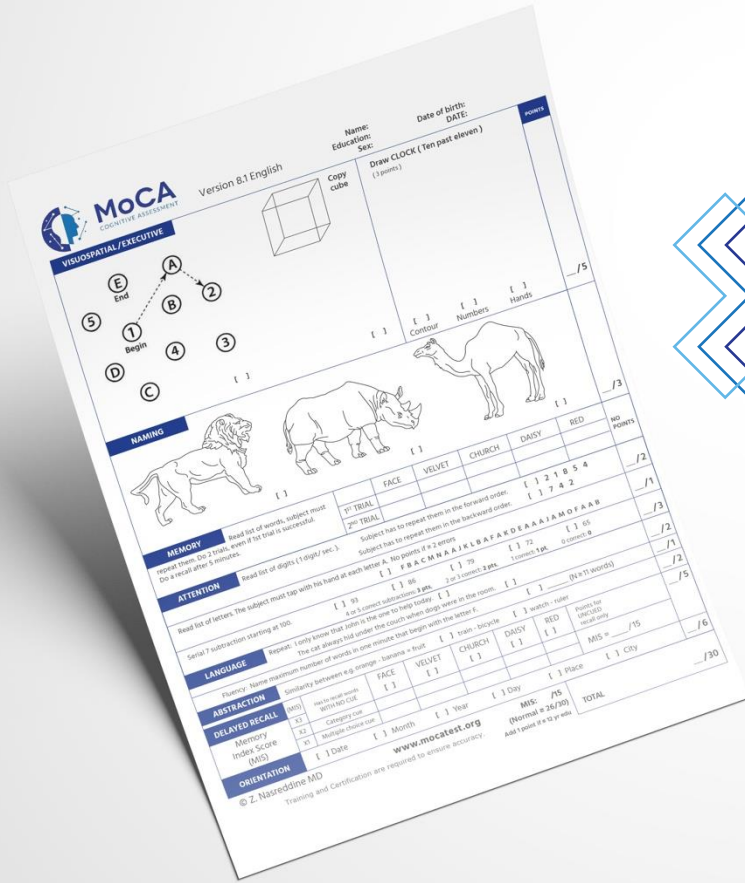
All the advances of Duo 2.0

Accurate: AI scoring

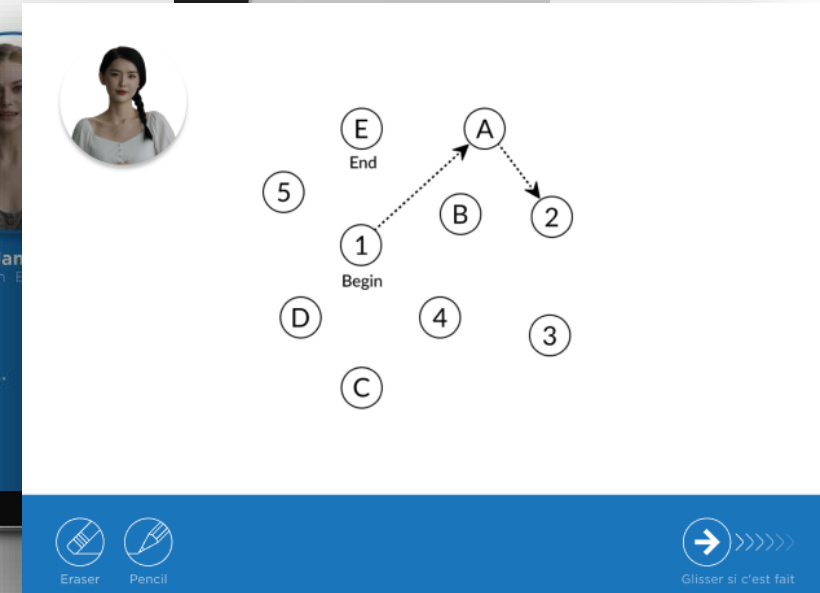
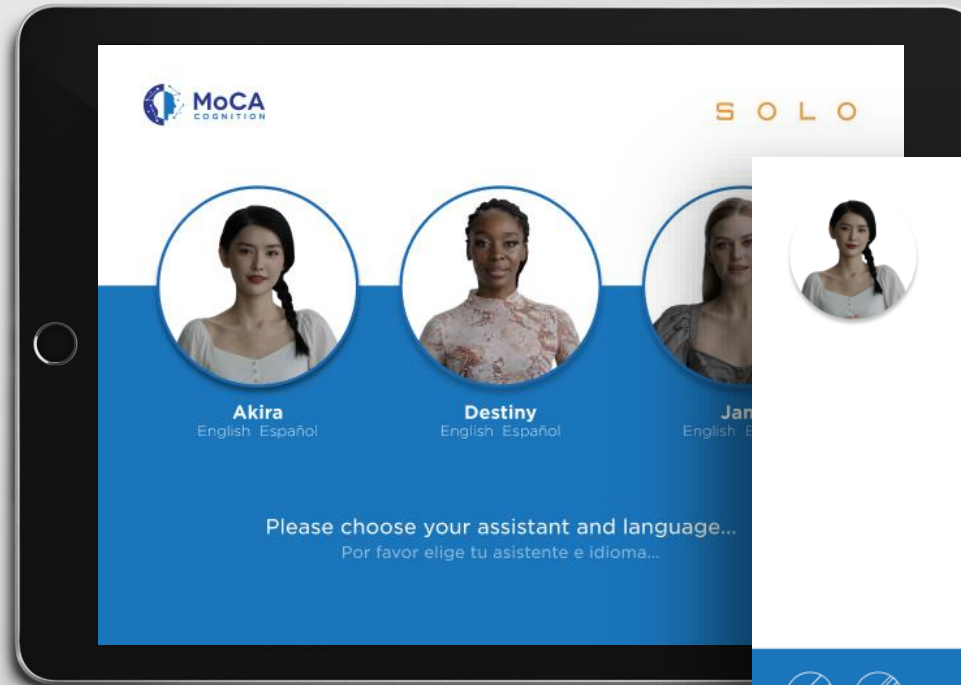
Scalable: Performed under minimal supervision

MoCA
COGNITION

MoCA Duo 2.0 has automated data collection, Solo will have extend to AI scoring



The image shows a paper form for the MoCA (Montreal Cognitive Assessment) Version 8.1 English. The form is divided into several sections: VISUOSPATIAL/EXECUTIVE, NAMING, MEMORY, ATTENTION, LANGUAGE, ABSTRACTION, DELAYED RECALL, and ORIENTATION. Each section contains various tasks and questions, such as drawing a cube, naming objects, repeating words, and solving math problems. The form is designed to be filled out by a clinician or a patient.



MoCA Solo is not yet available but will be released in USA as
SaMD mid-2026

MoCA Solo for **efficiency and accuracy**



- Designed for minimal supervision
- Automated data collection
- AI scoring of answers

MoCA Solo report enables accurate longitudinal tracking

SOLO

Mark Harris - male - 75 (02-23-1949)

Edu: 15

Lang: EN

Test no: 15

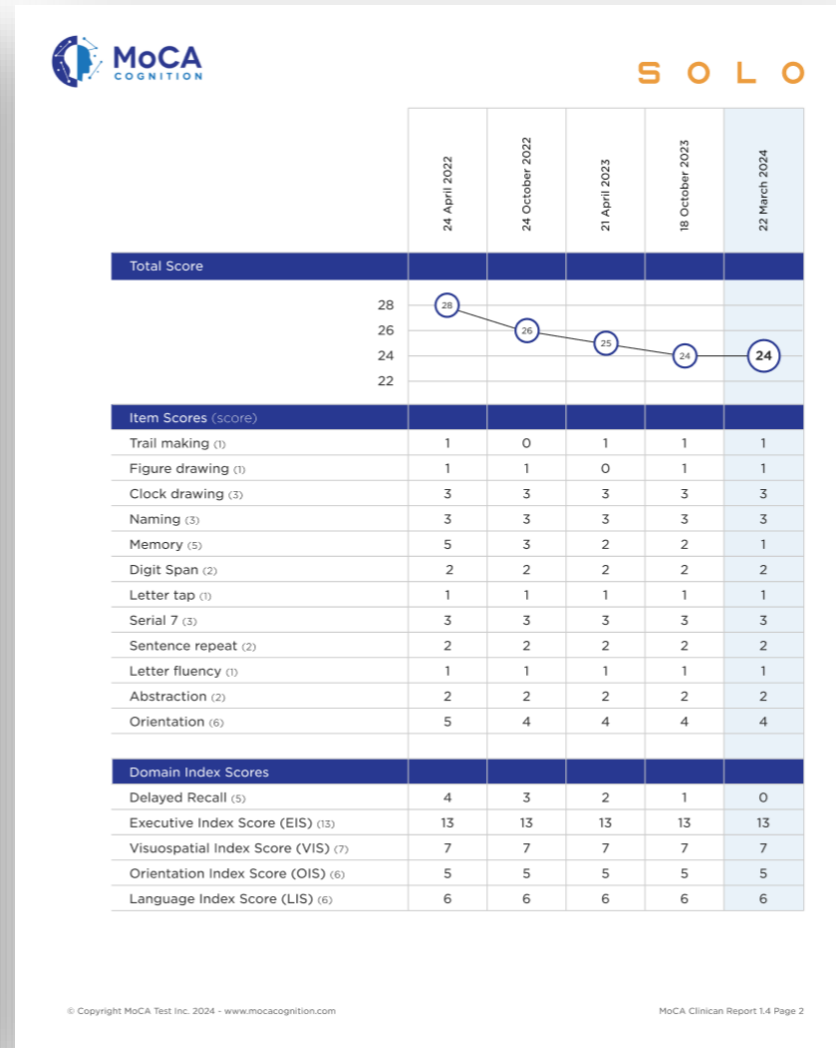
Date: 24-02-26 (dr. B. Johnson)

24 / 30

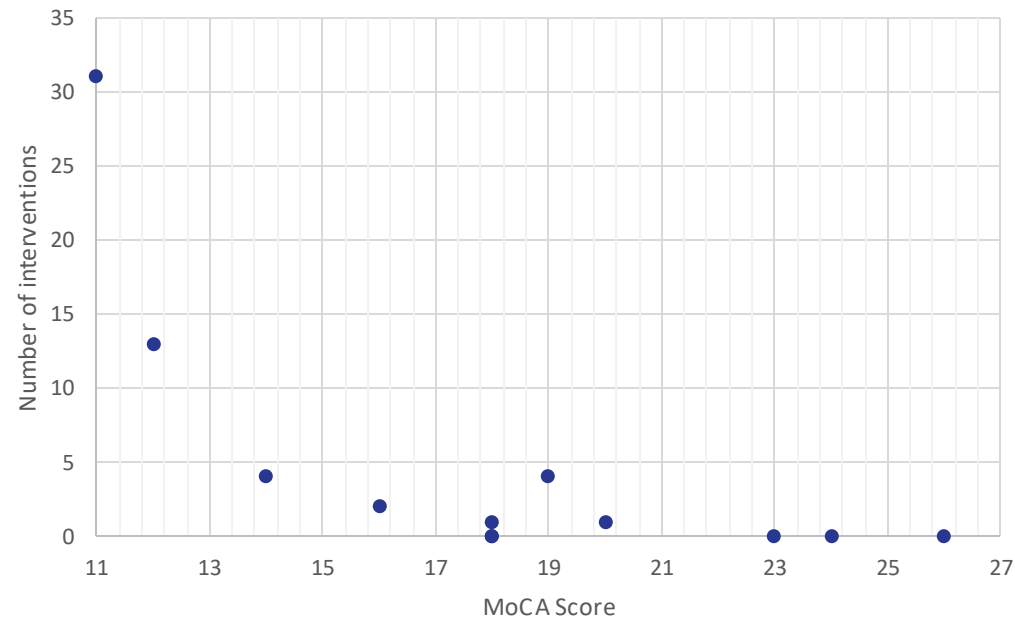
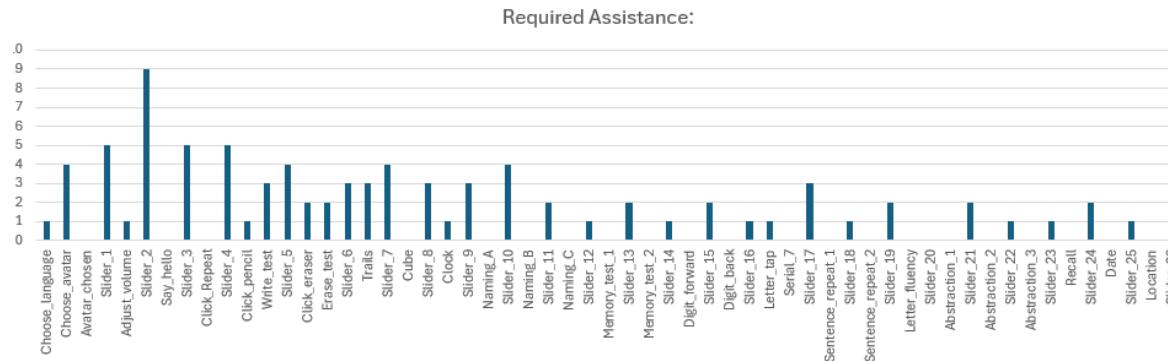
VISUOSPATIAL / EXECUTIVE	<div> <div>Contours ✓</div> <div>Numbers ✓</div> <div>Hands ✓</div> </div>	2:54	5/5																												
NAMING	<div> <div>✓ Lion</div> <div>✓ Rhinoceros</div> <div>✓ Camel</div> </div>	0:24	3/3																												
MEMORY	<table> <tr> <th></th> <th>FACE</th> <th>VELVET</th> <th>CHURCH</th> <th>DAISY</th> <th>RED</th> </tr> <tr> <td>1st TRIAL</td> <td>✗</td> <td>✓</td> <td>✓</td> <td>✗</td> <td>✓</td> </tr> <tr> <td>2nd TRIAL</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> </tr> </table>		FACE	VELVET	CHURCH	DAISY	RED	1st TRIAL	✗	✓	✓	✗	✓	2nd TRIAL	✓	✓	✓	✓	✓	0:53	NA										
	FACE	VELVET	CHURCH	DAISY	RED																										
1st TRIAL	✗	✓	✓	✗	✓																										
2nd TRIAL	✓	✓	✓	✓	✓																										
ATTENTION	<div>Forward order. 2 1 8 5 4 ✓</div> <div>Backward order. 7 4 2 ✓</div> <div>Letter tap F B A C M N A A J K L B A F A K D E A A A J A M O F A A B ✓</div> <div>Serial 7 93 ✓ 86 ✓ 79 ✓ 72 ✓ 65 ✓</div>	1:13	2/2																												
LANGUAGE	<div>Repeat sentence I only know the john is the one to help today. ✓</div> <div>The cat always hid under the couch when dogs were in the room. ✓</div> <div>Letter fluency (N < 11 words: No score) 11 ✓</div>	0:58	2/2																												
ABSTRACTION	<div>train - bicycle ✓</div> <div>watch - ruler ✓</div>	2:36	2/2																												
DELAYED RECALL	<table> <tr> <th></th> <th>FACE</th> <th>VELVET</th> <th>CHURCH</th> <th>DAISY</th> <th>RED</th> <th>Point for UNCUED recall only</th> </tr> <tr> <td>x3 NO CUE</td> <td>✗</td> <td>✗</td> <td>✗</td> <td>✗</td> <td>✗</td> <td></td> </tr> <tr> <td>x2 Category cue</td> <td>✗</td> <td>✗</td> <td>✗</td> <td>✓</td> <td>✗</td> <td></td> </tr> <tr> <td>x1 Multiple choice cue</td> <td>✗</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>MIS: 5/15</td> </tr> </table>		FACE	VELVET	CHURCH	DAISY	RED	Point for UNCUED recall only	x3 NO CUE	✗	✗	✗	✗	✗		x2 Category cue	✗	✗	✗	✓	✗		x1 Multiple choice cue	✗	✓	✓	✓	✓	MIS: 5/15	3:55	0/5
	FACE	VELVET	CHURCH	DAISY	RED	Point for UNCUED recall only																									
x3 NO CUE	✗	✗	✗	✗	✗																										
x2 Category cue	✗	✗	✗	✓	✗																										
x1 Multiple choice cue	✗	✓	✓	✓	✓	MIS: 5/15																									
ORIENTATION	<div>Date ✓</div> <div>Month ✓</div> <div>Year ✓</div> <div>Day ✓</div> <div>Place ✗</div> <div>City ✓</div>	0:35	5/6																												
TOTALS		15:49	24/30																												

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MoCA Clinician Report 1.4 Page 1



MoCA Solo automated administration UX



- Current UX sufficient for >MoCA of 18
- Minor user navigation issues identified and will be improved upon before validation
- Algorithm development ongoing with several algorithms already at performance of humans

MoCA Solo: two important studies

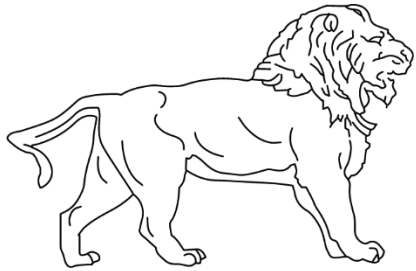
Study 1:

- + Construct validity to paper tests in both administration & scoring
- + Data collection for both English and Spanish algorithm validation
- + Subjects representative of US population: race, sex, age demographic.
- + N=750
- + Funding: ADDF & MoCA

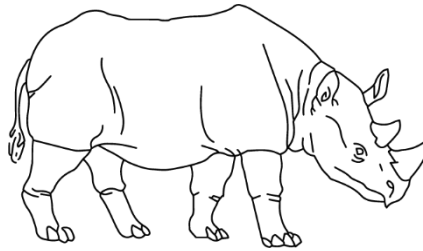
Study 2:

- + Data collection in MoCA clinic
- + Dr Nasreddine's waiting list
- + Paper MoCA, Solo, XpressO, Blood Based Biomarkers (p-tau 217, amyloid ratios)
- + N=500
- + Funding: Lilly Canada & MoCA

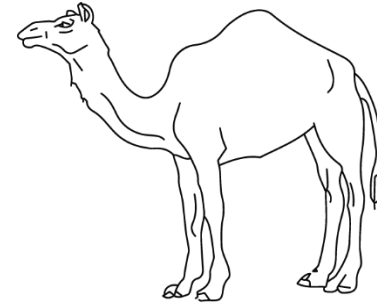
MoCA Solo: New outcome measures from dynamics of drawing & speech



✓ Lion



✓ Rhinoceros



✓ Camel

MoCA Digital Study Platform completes the cognition eco-system

The screenshot shows the 'Edit study' interface for study SD-001. It includes fields for Study ID, Study name, Study description, Expected number of participants, and a list of assessments to be included in the study. The assessments listed are XpressO, SOLO, DUO 2.0, MoCA-P, ATST-C, ATST-P, CHQ, and FAQ+.

Study ID: SD-001

Study name: Blood Based Biomarkers

Study description: Lorem ipsum dolor sit amet agnus dei blanic clarus magnus urbi et orbi

Expected number of participants: 500

Assessments:

- ☒ XpressO
- ☒ SOLO
- ☒ DUO 2.0
- ☒ MoCA-P
- ☒ ATST-C
- ☒ ATST-P
- ☒ CHQ
- ☒ FAQ+

CANCEL UPDATE

The screenshot shows the 'Study details' interface for study SD-001. It displays a table of participant data with columns for Participant ID, Sex, Age, XpressO, SOLO, DUO 2.0, MoCA-P, ATST-C, ATST-P, CHQ, and FAQ+. The table shows data for 10 participants (PID-001 to PID-010). A 'page 1 of 36' indicator is visible at the bottom of the table.

Participant ID	Sex	Age	XpressO	SOLO	DUO 2.0	MoCA-P	ATST-C	ATST-P	CHQ	FAQ+
PID-001	M	65	42	--	--	16	✓	✓	✓	✓
PID-002	M	67	72	28	27	27	✓	✓	✓	✓
PID-003	F	73	71	22	--	24	✓	✓	✓	✓
PID-004	F	67	88	--	30	30	✓	✓	✓	✓
PID-005	F	73	66	20	19	19	✓	✓	✓	✓
PID-006	M	65	35	14	12	12	✓	✓	✓	✓
PID-007	F	69	--	--	--	--	--	--	--	--
PID-008	F	69	--	--	--	--	--	--	--	--
PID-009	F	69	--	--	--	--	--	--	--	--
PID-010	M	65	35	14	12	12	✓	✓	✓	✓

page 1 of 36

Solo to be release in 2026

XpressO

Duo 2.0

Solo

Questionnaires

THANK YOU!

The image shows two computer monitors side-by-side. The left monitor displays a dark background with a grid of binary digits (0s and 1s) and some faint, larger characters that appear to be '01' and '10'. The right monitor displays a dark background with a grid of binary digits and some faint, larger characters that appear to be '10' and '10'. Both monitors have a thin bezel and are mounted on a stand. The overall scene is dimly lit, with the light from the screens illuminating the surrounding area.

