Psychologists from UNSW Sydney have developed a new face identification ability test that will help find facial recognition experts for a variety of police and government agencies, including contract tracing.

The Glasgow Face Matching Test 2 [GFMT2] targets high-performing facial recognition individuals known as super-recognisers, who have an extraordinary ability to memorise and recall faces.

The type of professional roles that involve face identification and that could benefit from the test include visa processors, passport issuers, border control officers, police, contract tracers, as well as security staff in private industry.

"Being able to recognise faces of friends and family is a skill that most of us take for granted," Scientia Fellow Dr. David White from UNSW Science's School of Psychology says.

"But comparing images of unfamiliar faces and deciding if they show the same person is a task that most of our participants find challenging, even passport officers with many years of experience in the task.

"A major finding in our field in recent years has been that some people are much better than others at identifying faces from photographs.

"This is an insight that has changed the way staff are recruited, for example passport and police officers."

The lead investigator at UNSW Sydney's Face Research Lab says the GFMT2 test is valuable for identifying super-recognisers who have been used by the London Metropolitan Police Service in criminal investigations, and famously in the alleged poisoning of former Russian spies in Salisbury.

The GFMT2 test, an expanded version of the original Glasgow Face Matching Test which was launched ten years ago, has been published in the journal Behavior Research Methods.

It was developed in collaboration with the University of York and the Australian Passport Office.

Dr. White says the current test involves matching faces across changes that make face identification difficult in real world tasks.

"For example when matching CCTV to mugshot images, there may be changes in head angle, subject-to-camera distance, image quality and expression," he says.

It also includes tests that target low-performing face recognition individuals such as people with prosopagnosia, or ‘face blindness’.

The improved test comes as the federal government has been considering the introduction of a centralised database which would host photos collected by a range of state and federal agencies,
including police charge and passport photos, immigration documents, and driver's licences.

One of the criticisms of the database proposal has been that face recognition software is prone to large amounts of errors that has resulted in wrongful arrests.

"This technology shows close matches to a suspect on a screen, and so human error at that stage can have serious implications," Dr. White says.

But super-recognisers revealed by GFMT2 can be used to review identity matches made by facial recognition software and help prevent false identity matches, he says.

"This new test is especially important in this day and age, where facial recognition software is increasingly used as a search engine in police investigation and security settings," he says.

"It is far more promising than training people to have these face identification skills.

"Our recent work suggests that current professional training courses in face identification do not improve people's performance."

The test will be able to be used in a number of countries including Australia, New Zealand, UK and Canada.

"We've learned a lot from a decade of collaboration with professional groups," Dr. Rob Jenkins from the School of Psychology at the University of York says.

"The new test is a response to their requirements."

The test also allows before and after comparisons to assess the impact of training and other interventions.

"Scientific understanding of face perception has made tremendous advances in the last ten years," Professor Mike Burton from the School of Psychology at the University of York says.

"This update gave us a chance to build in new knowledge."

All tests are available free for scientific use.


Provided by University of New South Wales.