Article Type: Commentary

Manuscript Number:  

Full Title: Consolidation, Wider Reflection, and Policy: Response to ‘Super-recognisers: From the Lab to the World and Back Again’

Corresponding Author: David James Robertson, PhD  
University of Strathclyde  
Glasgow, Scotland UNITED KINGDOM

Corresponding Author E-Mail: david.j.robertson@strath.ac.uk

Order of Authors (with Contributor Roles):
David James Robertson, PhD (Conceptualization; Writing – original draft; Writing – review & editing)
Markus Bindemann (Conceptualization; Writing – original draft; Writing – review & editing)

Keywords: Super-recogniser; Face Recognition; Identity Verification; Applied Psychology; Policy

Abstract: Here, David Robertson and Markus Bindemann respond to a recent BJP Target Article on ‘super-recognisers’ (SRs). They outline the need to consider human factors that could influence SR performance after selection, and the need for a co-ordinated effort to ensure best practice in the implementation of SRs in applied contexts.

Additional Information:

<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>If you have any potentially competing interests to declare, please enter them in the box below. If you have no interests to declare, please enter 'none'.</td>
<td>The authors declare no competing interests.</td>
</tr>
<tr>
<td>Does this submission have any links or overlap with any other submitted or published manuscripts, for this or any other publication? (For example; as part of a long-term project, using a shared data set, a response to, or extension of, earlier work). If yes, please give brief details. If no, please enter 'none'. Any overlap not declared and later discovered will result in the manuscript being withdrawn from consideration.</td>
<td>It is an invited response to the BJP paper ‘Super-recognisers: From the Lab to the World and Back Again’ by Ramon, Bobak and White</td>
</tr>
<tr>
<td>Please specify the word count of your manuscript (excluding the abstract, tables, figures and references).</td>
<td>998</td>
</tr>
</tbody>
</table>

Powered by Editorial Manager® and ProduXion Manager® from Aries Systems Corporation
Consolidation, Wider Reflection, and Policy: Response to ‘Super-recognisers: From the Lab to the World and Back Again’

Robertson, D. J.,¹ & Bindemann, M.²

1. School of Psychological Sciences and Health, University of Strathclyde, Glasgow, UK
2. School of Psychology, University of Kent, Canterbury, UK

*Corresponding Author
Dr. David J. Robertson, School of Psychological Sciences and Health, University of Strathclyde, 40 George Street, Glasgow UK. Phone: 0141 548 4461. E-mail: david.j.robertson@strath.ac.uk

Competing Interests
The authors declare no competing interests

Abstract
Here, David Robertson and Markus Bindemann respond to a recent BJP Target Article on ‘super-recognisers’ (SRs). They outline the need to consider human factors that could influence SR performance after selection, and the need for a co-ordinated effort to ensure best practice in the implementation of SRs in applied contexts.
Response

Ramon, Bobak and White’s (2019) target article ‘Super-recognisers: From the lab to the world and back again’ is a welcome addition to the literature at a time when consolidation, reflection, and forward planning within this field is required. Here we agree that co-ordinated efforts are needed to develop ecologically-valid SR tests, we add that occupational and cognitive factors should not be overlooked when considering SR performance in the workplace, and we support the call for a meeting of researchers, practitioners, and the judiciary to create a comprehensive policy framework and action plan for the use of SRs in society.

There has now been a decade of research on super-recognition since the concept was first introduced. This has established that SRs excel at tests of learned face memory, as well as unfamiliar face matching (Bobak, Dowsett, & Bate, 2016; Davis, Lander, Evans, & Jansari, 2016; Robertson, Noyes, Dowsett, Jenkins, & Burton, 2016). The latter provide simplified laboratory analogues to person verification processes in policing (i.e. matching the faces of perpetrators caught on CCTV to suspects in custody) and border control (i.e. matching travellers’ faces to their passport photos). However, researchers have also sounded a note of caution to those agencies, by demonstrating that high individual performance in one test (e.g., memory) does not always generalise to another (e.g., matching) (Bobak et al., 2016; Davis et al., 2016). Indeed, seemingly similar tasks, differentiated only by the face stimuli in use, can reveal very different performances in the same individuals (Fysh & Bindemann, 2018).

For reasons such as this, we argued recently that “selection of individuals for professional roles by their face-matching ability cannot be achieved with a “quick” test, but must likely involve thorough testing over a prolonged period” (p. 8; Lander, Bruce, & Bindemann, 2018). This resonates with Ramon, Bobak and White’s (2019) argument that
occupational selection should be based on a comprehensive battery of assessments. This must mirror critical aspects of real world processes to ensure best practice in occupational selection of SRs for specific roles.

We made these comments with broader reference to policing and border security, as the majority of professionals responsible for person identification have not undergone SR testing. The key issues outlined by Ramon, Bobak and White (2019) also reflect professional practice more generally, beyond deployment of SRs. For example, there still exists limited standardization across countries in facial image comparison training, and short training courses do not lead to improvements in identification accuracy, suggesting limiting scientific testing during their development (Towler, Kemp, Burton, Dunn, & Wayne, 2019). Similarly, the extent to which personnel selection for security roles such as passport officers is based on scientifically-validated tests of face identification is typically opaque.

In Psychology, work has already started on the development of more ecologically valid tests (see Bate et al., 2018). In line with Ramon, Bobak and White (2019), we agree that these developments must take account of the face stimuli (e.g., CCTV stills, passport photos) and identification methods (e.g., passport renewal displays) that individuals are likely to encounter on the job, to provide effective selection measures. We suggest creation of a battery of tests, for SRs and others working in similar settings, which incorporate real-world processes and workplace environments as closely as possible. Of course, a joint venture between the various agencies and researchers is the best way to achieve this.

This battery must take account of factors apparent in applied settings, such as time pressure, task repetition, and shift patterns (see Fysh & Bindemann, 2017). Use-inspired basic research from the laboratory has begun to investigate these, but replication with increased ecological validity must be targeted next. Laboratory research also points to factors less obvious in occupational settings, such as influences of personality and cognitive processing
styles (see Lander, Bruce, & Bindemann, 2018). Broader discussion with representatives from policing, passport renewal, and border control is still required to raise awareness of this research, to consider its implications, and to design field tests and interventions.

We support Ramon, Bobak and White’s (2019) view that we are at a critical juncture for ensuring that SR research will translate into meaningful gains in society in the long-term. In order to do that, we now need to engage with the relevant agencies and policy makers to end the patchwork of awareness and implementation of SRs. We therefore agree that a working group, with representatives from research, Policing, Border Control, the Home Office, Passport Office and Ministry of Justice, should be convened as soon as possible to effect change in the UK.

This working group must create an action plan for the use of SRs in society. In addition to the points above, we believe that the following six items should be considered. First, to provide non-specialist research summaries highlighting the evidence base for selection of SRs in policing, passport renewal and border control (work has already started to that end, see Robertson, 2018; Robertson, Middleton, & Burton, 2015). Second, to evaluate current use of SRs across forces and agencies, and to generate case studies where possible. Third, to provide an action plan for co-ordinated development of ecologically-valid selection tests for SRs, as well as other professionals performing similar identification tasks. Fourth, to evaluate administration of ‘specialist’ testimony in the criminal justice system, working towards official judicial guidelines for the use of SR evidence in court. Fifth, to collate this information and disseminate it to researchers and practitioners for feedback. Sixth, to incorporate that feedback and work with the field to achieve the action points.

As we enter the second decade of SR research, researchers and practitioners need to work in co-ordination to ensure that psychological research on facial identification has positive, lasting effects on society. If we, as scientists and practitioners, do not act to control
this narrative and process then, as stated in the target article, it is possible that private
industry may fill the vacuum, and an opportunity for psychological science to make a
significant impact on policing and national security may be missed.

References

Bate, S., Frowd, C., Bennetts, R., Hasshim, N., Murray, E., Bobak, A. K., ... & Richards, S.
Research: Principles and Implications, 3*(1), 22.

Bobak, A. K., Dowsett, A. J., & Bate, S. (2016). Solving the border control problem:
Evidence of enhanced face matching in individuals with extraordinary face recognition skills.
*PLoS ONE, 11*(2), e0148148.

face recognition ability in police super-recognisers. *Applied Cognitive Psychology, 30*(6),
827-840.

Psychology, 109*, 219-231.

& A. M. Megreya (eds.), *Face processing: Systems, Disorders and Cultural Differences*. (pp.


