

Child passport photographs ineffective for reliable identification at borders: study

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Passport style photographs are not a reliable way to validate a child's identity at border control or in child protection cases, according to a new study into the facial identification of infants.

Psychologists presented research [participants](#) with pairs of photos, some

showing only infant faces and some showing both an infant and an older [child](#)'s face, and asked them to determine whether the image pair showed the same child or two different children.

For the images of children who were less than a year old, half of the pairs showed the same child while half showed different children. Results demonstrated that, on average, participants made mistakes on 28 per cent of pairs.

Because UK child passports are valid for up to five years, the researchers also presented participants with photo pairs where an infant photo was shown with a photo of a child aged between four and five years old. Half of the pairs showed pictures of the same child while half showed different children. Participants found this task more difficult, getting it wrong on 36 per cent of pairs.

Although gender could be determined from the child photos, accuracy was low when participants were asked to judge the gender of the infants. Participants also found it difficult to ignore changes in hair colour or style across images, despite the likelihood of such changes for a child over a five year period.

In comparison with current work, previous studies using photographs to identify adults showed significantly higher accuracy rates, with participants matching photographs correctly around 90 per cent of the time.

The results suggest that child passport photos are not as reliable as those of adults, and have implications for border control in countries which require children to travel on their own five year passport for security purposes – including combatting child trafficking – such as the United Kingdom, Canada, the United States, and Australia.

Dr. Robin Kramer, lead researcher from the School of Psychology at the University of Lincoln, UK, said: "The results of our experiments provide evidence that child facial photographs are ineffective for use in real-world identification situations such as border control or issues of child protection. Our findings suggest that alternative methods of identification should be considered.

"While these experiments have demonstrated that, on the whole, it is more difficult to match identities using infant faces rather than adult faces, the next step is to investigate why this is the case and how we might attempt to improve performance for real-world practitioners."

During the experiments, no attempt was made to match images according to hair colour or gender. As such, the performance levels in these studies were higher than could be expected in real world applications since fraudsters would intentionally choose passport images that best approximate an infant or child that is travelling illegally.

The study "Unfamiliar face matching with photographs of [infants](#) and [children](#)," has been published in the journal *PeerJ*.

More information: Robin S.S. Kramer et al. Unfamiliar face matching with photographs of infants and children, *PeerJ* (2018). [DOI: 10.7717/peerj.5010](https://doi.org/10.7717/peerj.5010)

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