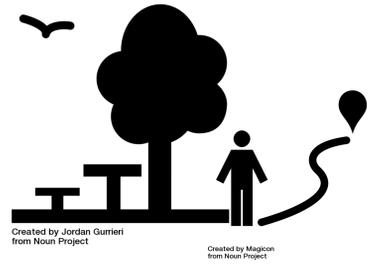


# UNDERSTANDING EXPERIENCES OF BLIND INDIVIDUALS IN NATURE

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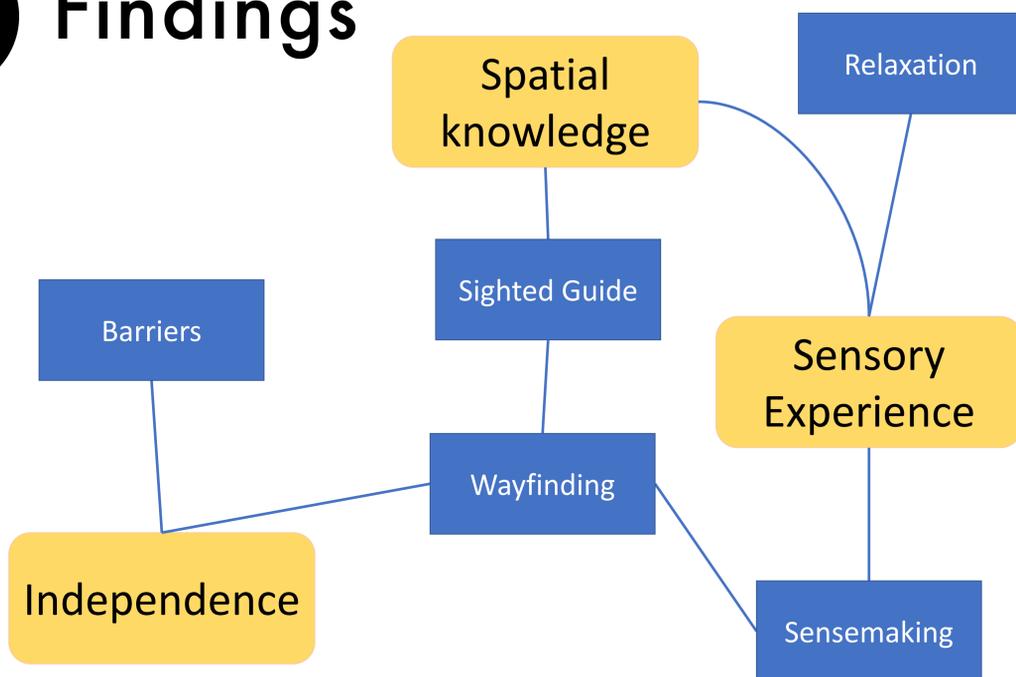
## 1 The Study

There is growing evidence on the benefits of nature on mental and physical health [1]. While recent HCI research [2] has focused on nature-based interactions, the experience of blind and partially sighted individuals (BPSI) in nature has been under-explored. This study aimed to gain in-depth insights into the experiences of BPSI in nature and understand their needs and the barriers.

## 2 Method

Remote interviews were carried out with 7 BPSI from UK and USA. Interviews included questions about respondents' previous experiences in open natural environments such as parks, woodlands, and coastal areas. Use of technology as a facilitator was also explored. Interviews were thematically analysed to elicit emergent themes.

## 3 Findings



“What I particularly like, is going out and exploring things on my own, not necessarily being guided by somebody.”, P2

“The worst environment for a blind person is the wide-open space because of no point of reference to guide you. That can be quite demanding.”, P3

“I used to be able to see and I can't, there's things I never did see [...] but I try to picture them so that I have a picture of the environment and the audio and tactile really adds to the experience.”, P1

## 4 Future Work

Our future work will aim to answer:

1. How does mobility training equip BPSI to explore nature?
2. How can technology facilitate exploration and enhance nature experience for BPSI?



Source: Royal Society for the Protection of Birds (RSPB)

S2: “You hear the birds and there are no car noises, it was beautiful.”, P6

“I can usually get a feel of a place but sometimes I ask what kind of flowers are there? What colour? I've never seen colours, but I would probably ask what colour it is more than anything. I just like to get as much information as I possibly can.”, P5

[1] Lisa Wood, Paula Hooper, Sarah Foster, and Fiona Bull. 2017. Public green spaces and positive mental health – investigating the relationship between access, quantity and types of parks and mental wellbeing. *Health and Place* 48: 63–71.

[2] Michael D Jones, Keith Cheverst, Zann Anderson, Florian Daiber, and Jonna Häkkinä. HCI Outdoors: Understanding Human-Computer Interaction in Outdoor Recreation.

[3] Riga Anggarendra and Margot Brereton. 2016. Engaging children with nature through environmental HCI. *Proceedings of the 28th Australian Conference on Computer-Human Interaction - OzCHI '16*, 310–315.

