

Scoring for the Colour Blind Quality of Life Scale (CBQoL) (Barry et al, 2017)

The Colour Blind Quality of Life Scale (CBQoL) (Barry et al, 2017) measures problems related to congenital colour vision deficiency (i.e. 'colour blindness') in relation to three areas: health (e.g. colour of a mole on skin), work (e.g. limited career choices), and emotional life (e.g. embarrassed by issues related to colour blindness). It uses 23 items measured on a 6-point Likert scale. The scale was developed in association with experts at the Academic Unit of Ophthalmology, University of Birmingham, UK. The CBQoL has been used by several research teams around the world.

The stimulus question was: "Some people have had difficulties related to colours in their everyday life, regardless of whether they have a diagnosis of colour blindness or not. Please answer the following questions, which are about how much seeing colours may have been a problem for you. Please answer the questions whether you have a diagnosis of colour blindness or not. For each of the questions below, please state how much any of the following situations have ever been a problem for you because of difficulty in seeing colours properly". Responses were on a 6-point Likert scale from I = A severe problem; 2 = A moderately severe problem; 3 = S ome problem; 4 = M ild problem; 5 = H ardly any problem; 6 = N o problem, with an option for 'not applicable' (N/A). The scores on each subscale are converted to means with a maximum score of 6 and minimum of 1. If a response was 'N\A', the mean of the remaining items are used, as long as at least 66% of a participant's responses in a scale have a valid numeric (non-N/A) response.

Not noticing change in colour of skin due to sunburn	H&L*
Difficulty choosing groceries due to colour	H&L
Not noticing change in colour of mole on skin	H&L
Can't tell when food is cooked due to colour	H&L
Difficulty choosing or buying clothes	H&L
Being confused about colour of pills or other medication due to colour-coding	H&L
Not noticing blood in stools (faeces)	H&L
Difficulty knowing when fruit is ripe due to colour	H&L
Difficulty reading maps (e.g. London Underground map)	H&L
Not noticing a change in colour of urine	H&L
Problems playing sports (e.g. colours of team clothing, colours of snooker balls etc)	H&L
Feeling anxious because of issues caused by problems seeing colours	Emotions



Feeling depressed because of issues caused by problems seeing colours	Emotions
Feeling unconfident because of issues caused by problems seeing colours	Emotions
Feeling embarrassed or humiliated because of CB issues	Emotions
Feeling low self esteem because of issues caused by problems seeing colours	Emotions
Feeling anxious because you might not realise when you can't see a colour properly	Emotions
Feeling different to other people because of issues caused by problems seeing colours	Emotions
Felt that had let down self or others due to problems seeing colours	Emotions
Avoiding conversations where colours are discussed	Emotions
Being limited in choice of work or career	Work
Difficulty performing work or other activities (e.g. charts)	Work
Accomplishing less than would like at work or in career	Work

^{*} Note: "H&L" indicates 'Health & Lifestyle'

If possible, let the author (John Barry, john.barry@ucl.ac.uk) know your findings, so that norms for the scale can be updated.

Reference

When using the scale, please cite with this reference:

Barry, J. A., Mollan, S., Burdon, M. A., Jenkins, M., & Denniston, A. K. (2017). Development and validation of a questionnaire assessing the quality of life impact of Colour Blindness (CBQoL). *BMC OPHTHALMOLOGY*, *17*, ARTN 179. doi:10.1186/s12886-017-0579-z Available online

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