

Authors	Test objects/colours	Task and matching paradigm	# Obs.	Results and colour shifts
Bartleson (1960)	10 objects (red brick, green grass, dry grass, blue sky, flesh, tanned flesh, broad-leaved summer foliage, evergreen trees, inland soil and beach sand)	an object was named and a Munsell colour chip that best represented the object's colour was picked out of an array of 931 chips, which varied in hue and chroma	50	the hue of the remembered object colour differs from the actual hue of the object; generally, colours were remembered more saturated and lighter
Loftus (1977)	green car	observing a scene of a car-pedestrian accident and selecting the matching colour of 10 named objects (including the green car) from a colour wheel (30 different colours)	100	selection was affected by prior misleading information colour selection shifted towards misleading information
Siple & Springer (1983)	6 objects (carrot, corn, lettuce, lime, orange and peanut), which were shown with varying degrees of visual cues to their identity	reproducing the colour of the test objects (a) how they were remembered (memory) and (b) how they should look like (preference)	18	cue availability does not alter colour appearance; preferred and remembered object colours coincide almost perfectly; hue and lightness were reproduced rather accurately and saturation was overestimated
Perez-Carpinell et al. (1998)	8 objects (aubergine, green watermelon, green lettuce, yellow lemon, orange, pink rose, brown chestnut and red tomato)	after an object was named observers selected the matching object colour out of an array of 10 NCS colour samples (selection from memory)	100	matching accuracy was object dependent; regarding saturation, some objects were remembered more and others less saturated
Yendrikhovskij et al. (1999)	16 objects (banana, potato, carrot, lime, orange, kiwi, tomato, plum, peas, green and blue grapes, green and red apples, and green, red and yellow pepper) shown in three contextual different conditions	an object was displayed and observers judged the similarity of this colour and the colour with which the object was remembered; a category scale was used to classify the similarity	8	the more natural an object looks the easier the similarity judgement
Bodrogi & Tarczali (2001)	colours of sky, plants and Caucasian skin within and without context	memorising test colours and subsequent adjustment (hue, saturation and lightness) of a test field, which was part of a blurred image	21	hue and chroma were more accurately recalled for colours memorised without context; the same occurred for lightness with the exception that skin colour was recalled more accurately when memorised in context
Seliger (2002)	4 objects (blue sky, green grass, yellow lemon and red traffic light)	an object was named and a monochromator was set to match the typical colour of this object	24	settings for yellow lemon spread least, followed by blue sky and green grass settings for red traffic light were least consistent
Amano et al. (2002)	20 colour images of natural scenes	40 images were shown and observers judged whether an image had been seen before	5	detection of increased contrasts was more difficult than detection of decreased contrasts; detecting changes across colour categories was easier than within
Hurlbert & Ling (2006)	familiar fruit	test objects were presented together with 'contextual' objects; matching by selection paradigm (six alternatives) was used	40	the remembered colour of the test object was influenced by the colour of the 'contextual' object
Tarczali et al. (2006)	6 objects (non-tanned skin, blue sky, green grass, deciduous foliage, banana and orange)	16 colour samples per test object were shown and observers selected the swatch that best represented the typical colour of the test object	23	three objects (blue sky, foliage, banana) were remembered lighter and three (skin, grass, orange) darker than the typical colour; the largest lightness variations occurred for sky
Olkkonen et al. (2008)	8 objects (carrot, lettuce, lemon, grapes, banana, orange, strawberry and courgette), which were shown with varying levels of visual cues to their identity	achromatic and colour (fixed lightness) adjustment of test stimuli	22	colour appearance of natural objects is affected by their typical colours; the more visual cues for their identity are available the stronger the effect

Table 4.4-1. Selection of studies on memory colours for familiar objects.