

	Trial Type	
	Oxygenated	Deoxygenated
Face Sex	$F_{1,1495}=4.095$ ; $p=0.043$	$F_{1,1495}=4.870$ ; $p=0.027$
Participant Sex	$F_{1,28.10}=1.533$ ; $p=0.226$	$F_{1,28.07}=1.038$ ; $p=0.317$
Face Sex*Participant Sex	$F_{1,1495}=0.028$ ; $p=0.867$	$F_{1,1495}=0.092$ ; $p=0.762$
Participant ID(Participant sex)	$F_{28,1495}=18.563$ ; $p<0.001$	$F_{28,1495}=24.869$ ; $p<0.001$
L*	$F_{1,1495}=1.506$ ; $p=0.220$	$F_{1,1495}=0.430$ ; $p=0.512$
a*	$F_{1,1495}=222.342$ ; $p<0.001$	$F_{1,1495}=279.296$ ; $p<0.001$
b*	$F_{1,1495}=4.841$ ; $p=0.028$	$F_{1,1495}=20.445$ ; $p<0.001$

**Table S4. Model effects of the analysis of face sex and participant sex on amount of colour change applied.** An effect of participant ID was found for oxygenated and deoxygenated trials, suggesting that participants behave differently from each other. 70% of participants increase deoxygenated blood colouration and 97% of participants increase oxygenated blood colouration in faces to optimise healthy appearance.