Effects of pathogen priming on judgements of face and voice attractiveness and health

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It has been shown (e.g. Wells et al., 2011) that whilst individuals can use both face and voice quality to make judgements of perceived attractiveness and health, in face-voice compounds, face quality typically overshadows (dominates) the judgement. It has also been shown that priming about environmental pathogen load can have a significant effect on a range judgements and behaviours (e.g. Dunn & Chambers, 2011; Little et al., 2011). Here we report on two experiments (Exp. 1 & Exp. 2), in which we explored the effects of implicit pathogen priming on face/voice attractiveness ratings (Exp. 1) and voice health ratings (Exp 2). In Exp. 1 we show that although average attractiveness ratings for component (face or voice) and compound (face-voice) targets do not significantly change, following priming, the amount of variance accounted for by the component voice ratings in relation to the compound face-voice ratings, significantly increased, thereby removing face overshadowing. In Exp. 2 we show that whilst priming significantly shifts voice health judgements, relative to baseline, there is also a significant difference between priming the past environment (time of target stimulus collection) or the present environment (time of rating). The difference was such that priming the past produced a significantly smaller shift in voice ratings than priming the present. The findings from both experiments demonstrate that personal preference changes when pathogen load is perceived to be high, and that temporal information mediates this influence. These findings are consistent with a behavioural immune system hypothesis (e.g. Schaller & Duncan 2007).