

Further explorations of enhancing creative problem solving via structured thinking techniques

Ian Hocking (with David Vernon)

Creative problem solving (CPS) can be enhanced through training programmes and coaching on individual techniques (e.g. Scott, Leritz & Mumford, 2004), though not much is known about which techniques work under what circumstances. Vernon and Hocking (2014) recently investigated the 'six hats' technique of Edward de Bono (where each hat represents a perspective; e.g., the red hat indicates 'feelings') as well as a technique called the 'six men' (the open-ended question words 'who, what, why, when, where and how'). Both techniques showed an improvement in creative fluency and originality for a verbal problem finding scenario. This was followed up with evidence that each technique boosts creative performance relative to a placebo group (Vernon & Hocking, 2016). So far, the data are consistent with the importance of structure and perspective taking in CPS (Kuhn & Dean, 2004), but we can't yet be sure what it is about each technique that boosts performance. As a first step, we looked at the order of elements: is there a 'golden path' leading to optimum performance? In a mixed design (N = 128), we tested three independent groups of 'technique' (six hats, six men and control) and two repeated groups manipulating 'order' (forward and reversed elements), looking at problem solutions in two problem scenarios taken from Paletz and Peng (2009; e.g. 'You are a scientist who is studying monkey behaviour in Africa. You see some of the monkeys eating dirt. Usually they just eat leaves and fruit'). Our creativity measures were fluency, quality, flexibility and originality (the latter three rated by independent judges). While initial analysis shows no effect of order, we once more see the impact of structured thinking.