

Review of: "Why are there different versions of the COM-B model diagram?"

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Potential competing interests: No potential competing interests to declare.

As someone who has made use of the COM-B framework, I found the article useful, and indeed would like to see it extended to deal with variants of the associated "Theoretical Domains Framework" and "Behaviour Change Wheel" (Atkins, L., Francis, J., Islam, R., O'Connor, D., Patey, A. M., Ivers, N. M., . . . Michie, S. (2017). A guide to using the Theoretical Domains Framework of behaviour change to investigate implementation problems. *Implementation Science*, 12(1), Article 77). the only point in the article I initially found unclear was figure 1(d), where it is not intuitively obvious that the arrows from Capability and Opportunity converging from above and below on the arrow from Motivation to Behaviour represent (as the text says) causal interaction, indeed, causal interaction of a specific kind, in which lack of *either* Capability *or* Opportunity can prevent Motivation of any strength leading to Behaviour. This raises the question: can lack of Motivation prevent Behaviour even if Capability and Opportunity are both as favourable to that Behaviour as possible? The answer seems to depend on the Behaviour in question: some behaviours appear to arise simply from habit even contrary to what the "behavior" actually wants (e.g. thoughtlessly following a familiar route even though it takes one away from the current destination). Perhaps a more fine-grained representation of different kinds of interaction between the COM factors is needed - a point which could be mentioned in this paper, even though its purpose is to explain the representations that have already been used in previous papers.