A comparison a day keeps the doctor away, . . . or does it?

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Making comparisons

When did you last compare yourself with someone? Engaging in social comparisons is an everyday feature of mental life. We are particularly likely to make such comparisons when faced with unfamiliar situations or when we feel threatened. This is often the case if we fall seriously ill: we compare ourselves with others who have also experienced illness or some other misfortune. Further, it is possible that the making of such comparisons in itself has an effect on how we cope with and recover from illness ^{1,2} - and thus contributes to the socio-economic gradient in health.³ This gradient - in which being only slightly less well off than the least deprived is sufficient to incur a comparative deficit in health - is apparent in both mortality and morbidity and in relation to particular causes of death, including myocardial infarction (MI).⁴

Our own research is concerned with recovery rather than with the onset of illness, but our preliminary results suggest that the extent of physical recovery from first acute myocardial infarction also displays a socioeconomic gradient with the two most deprived income groups recovering less well than expected (Figure 1). Could social comparisons account for this stepped gradient in recovery?

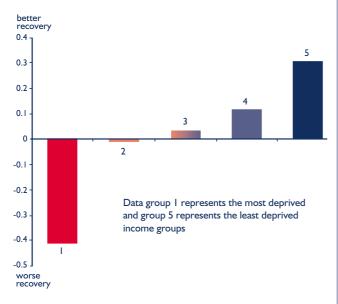


Figure 1: Health gradient in physical recovery from first MI (FLP mean score)

Note: 0 = expected physical recovery given the level of functional limitation 5 weeks post-MI

Much of the psychological research on social comparisons points to the importance of the direction of the comparison being made (i.e., upward - where the comparison is with those who are better-off in some respect, or downward - where the comparison is with those who are worse-off). The direction of comparison, in turn, is often associated with whether we experience positive (downward comparisons) or negative (upward comparisons) feelings about ourselves which, in turn, are related to other psychological factors associated with health (e.g., self-esteem, depression). Clearly, the least deprived have the greatest scope for downward comparisons of wealth and it could be that their health benefits the most from positive feelings generated by such comparisons; as we move down the income groups, the scope for positive affect decreases and the scope for negative affect increases.

Thus, if we consider the possibility that those more deprived in society experience relatively poorer well-being and health because of psychological factors such as negative affect, then social comparisons become a plausible explanatory mechanism for this relationship. However, recent research suggests that the explanation of the socio-economic gradient in recovery may not be as straightforward as this, since the direction of comparison per se may not be the critical factor in determining affect. Rather, it may be how the comparison is interpreted that proves to be the critical factor.⁵ Comparing yourself with, for example, someone who appears to be more seriously ill might make you feel fortunate that you are not as ill as that person (positive interpretation). Alternatively, such a comparison could lead to the realisation that you too might become as ill as that person (negative interpretation). It is possible that the interpretation of wealth comparisons is also more important than the direction of the comparison, although in this case affect and direction may be more closely linked.

Wealth and health comparisons and recovery from illness

In our prospective study of the relationship between deprivation and recovery from MI, we are exploring the extent to which the perception of relative deprivation could provide a component in this relationship.⁶⁸ Two possible pathways are currently being investigated, namely via (i) wealth comparisons, and (ii) health comparisons. Our working hypotheses are that people who make positive wealth comparisons do so in order to establish or maintain a positive social identity (e.g. I'm well-off relative to others) and, as a

consequence, increase self-esteem and lower anxiety. Similarly, perceptions of relative health might also influence recovery. We hypothesise that these kinds of comparison are more likely to be made by those living in areas where there are wide differentials in wealth (e.g. where the individual is wealthier than other residents) and high levels of ill-health (and thus more ill people around).

Our current data-base permits only a partial test of our hypotheses. Having analysed the first 150 patients with completed interviews at both 5 and 15 weeks post-MI, our preliminary results indicate that:

- wealth comparisons are related to individual income (i.e. people who have higher incomes perceive themselves as being better off than those around them), and that these wealth comparisons significantly predict self-esteem which, in turn, predicts recovery;
- health comparisons significantly predict anxiety and self-esteem (i.e., the more ill that patients perceive themselves to be relative to others, the lower their self-esteem and the higher their anxiety). Anxiety and self-esteem, in turn, were found to significantly predict recovery.

Priorities for research and policy

From these preliminary results, it does seems that social comparison processes are implicated in recovery from first-MI and that both comparisons of wealth and comparisons of health have an impact. The next step in the analysis is to examine the relationships between comparison processes and the scope that individuals have for making comparisons - as defined by their own income and health in relation to the wealth and health of their local communities. We already have some evidence that area measures of deprivation and morbidity are predictive of physical recovery for our patients and in the directions we hypothesised.7 We now need to understand better how the comparison dimension, the scope for making comparisons, the direction of comparisons and the interpretation of comparisons are interrelated. If we are right in our hypotheses, the extent to which comparisons facilitate or inhibit recovery from illness may not only be influenced by dimension, direction and interpretation but also by where you live. Should this be the case, policies designed to reduce wealth inequalities at the scale of local communities may prove a successful way of reducing health inequalities in the future.

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References

- 1. MacLeod, M.D. (1999) 'Why did it happen to me? The role of social cognition processes in adjustment and recovery from criminal victimisation and illness' *Current Psychology*, 18, 18-31.
- MacLeod, M.D. (in press) 'The future is always brighter: Temporal orientation and psychological adjustment to trauma' in Violanti, J., Paton, D. & Dunning, C. (eds.), *Alternative Approaches to Debriefing*, Springfield, Illinois: Charles C. Thomas.
- Benzeval, M., Judge, K. & Whitehead, M. (eds.) (1995) *Tackling Inequalities in Health*, London: King's Fund.
- McLaren, G. & Bain, M. (1998) Deprivation and Health in Scotland: Insights from NHS Data, Edinburgh: Information and Statistics Division, National Health Service in Scotland.
- Buunk, B. P., Collins, R., Taylor, S., Dakof, G. & van Yperen, N. (1990) 'The affective consequences of social comparisons: either direction has its ups and downs' *Journal of Personality & Social Psychology*, 59, 1238-1249.
- MacLeod, M.D., Graham, E., Johnston, M., Dibben, C. & Morgan, I. (1998) 'How does relative deprivation affect health?' *Health Variations Newsletter*, 3, 12-13.
- Graham, E., MacLeod, M.D., Johnston, M., Dibben, C., Morgan, I. & Briscoe, S. (2000) 'Individual deprivation, neighbourhood and recovery from illness' in Graham, H. (ed.) *Understanding Health Inequalities*, Buckingham: Open University Press (forthcoming).
- MacLeod, M.D., Graham, E., Johnston, M., Dibben, C., Morgan, I & Briscoe, S. (in press) 'Social deprivation and recovery from Myocardial Infarction: the role of social comparisons' in *Proceedings of the XXIst Congress of the European Society of Cardiology*, Bologna, Italy: Monduzzi Editore.

