

# MATHEMATICS, POPULAR CULTURE AND INCLUSION: SOME FINDINGS AND METHODOLOGICAL ISSUES

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Recent policies on lifelong learning, in the UK and in Scandinavian countries, argue for a substantial return to learning by adults, notably in mathematics and numeracy, to help eliminate inequalities (Parsons & Bynner, 2002). Yet the success of such policies depends on adults' motivation to sign up, and not to resist. Recent studies emphasise the importance of beliefs, attitudes and emotions – for motivations both to learn mathematics, and to use it critically in adult life (Evans, 2000). These affective responses reflect discourses on mathematics, and on people doing mathematics, in popular culture products such as advertisements and films. Initially, using a very small sample, I conjectured that recent films portray the professional mathematician as a 'genius', but who also is susceptible to madness (*Good Will Hunting, Pi, Enigma, A Beautiful Mind*). My sample of adverts portrayed mathematics as something to be disliked, feared and mistrusted; however, it was somewhat dated.

Several methodological questions arise that are relevant to many types of research:

- The findings were based on my *readings* of the data as to the meanings of adverts and films; these are provisional and debatable, and could be interpreted otherwise.
- Initially the samples were 'opportunistic' – but there is scope both for systematic sampling and for 'theoretical sampling'.
- The provisional conclusion explains differences in the portrayal (positive vs. negative) of mathematics and mathematicians by the type of document (advertisements vs. films) – a difference that may, however, be *confounded* with other differences – such as the time period (1985-95 for the adverts vs. 1995-2005 for the films).

The paper will discuss responses to these methodological issues, and consequent developments in the study. Findings from the second phase of the study will be presented.

## References

- Evans J. (2000), *Adults' Mathematical Thinking and Emotions: a Study of Numerate Practices*, London: RoutledgeFalmer.
- Parsons S. & Bynner J. (2002), *Basic Skills and Social Exclusion*, London: Basic Skills Agency.