

Math Anxiety in Adults

Summary from Coben et al.'s *Adult numeracy: review of research and related literature* (p. 103-104)

Full text available at http://dera.ioe.ac.uk/22487/1/doc_2802.pdf

Math anxiety appears to have its origins in early schooling, but its effects can still be acutely felt in adulthood.

Bibby (2002) says shame at perceived lack of ability can exacerbate anxiety and prevent adults from seeking help.

Sewell (1981) found 50% of the adult population (in the UK) had negative feelings about the subject, which discouraged them from using mathematics.

A study by Quilter and Harper (1988) attributed mathematics anxiety among 147 adults with university degrees in subjects other than mathematics to feelings that mathematics were irrelevant to real-world experiences and of little interest to them.

Many adults displayed a lack of confidence in their mathematical ability (Osborne et al., 1997) that impeded their capacity for rational thought (Buxton, 1981). Ashcraft and Kirk found that anxiety interfered with people's working memory, rendering it difficult for them to work in a logical, step-by-step way (2001).

Mathematics anxiety has been found to be more closely associated with females studying mathematics than males. In the work of Osborne et al., teachers expected females to be less confident than males and this attitude often resulted in differential treatment in the classroom (1997).

Hodgson (2003) found that more able females performed better when the work they were asked to complete was described as 'problem solving' rather than 'mathematics'.

Jones et al. (1996) discussed the importance of mathematical skills in the workplace and the relationship between mathematics anxiety and course completion rates. It was found that those students who were the most anxious about their ability to cope with course mathematics were more likely to drop out, regardless of their actual ability.

A 'modified numeracy' approach involving relaxation training and other psychological techniques, plus self-directed mastery learning, was found to have positive effects on arithmetic (Torgerson, Brooks, Porthouse, & Burton, 2003).