



## RACE

## Anatomists' attitudes towards the concept of race

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We assessed the attitudes of South African anatomists towards the concept of race. The results suggest that there is no consensus on 'race' and that misconceptions abound in this group. We therefore recommend the incorporation of competent teaching of human variation in the anatomy syllabus.

### Background

The concept of race has been frequently and widely discussed in recent years and remains a controversial topic in anthropological circles. 'Race' was a core concept in human variation research until the mid-twentieth century, but has since lost favour as researchers have started to question its scientific validity and social implications. Anthropologists appear to remain divided on the topic. Recent research by questionnaire<sup>1,2</sup> or article review<sup>3,4</sup> shows that there are differences with regard to acceptance of the concept depending on various theoretical, ideological and professional factors relating to the scientist.

However, it is not only in anthropology that the concept of 'race' is contentious. In other disciplines, including medicine, it is widely used, but it is being questioned by some researchers. Recent publications have raised the question of the relevance of using racial categories in medical research in South Africa.<sup>5,6</sup> Although the significance of these categories is still under discussion, a recent survey seems to suggest that they are used more frequently in South African medical literature than in that of certain other countries.<sup>5</sup>

Often future medical practitioners and researchers are first exposed to the problems of human variation in the basic medical sciences. Therefore the attitudes of anatomists were investigated as they are in a position to influence these students in the first few years of their medical education.

### What was done

The attitudes of anatomists towards the concept of race were assessed by questionnaire. Respondents were asked if they

agreed with the statement: 'There are biological races within the species *Homo sapiens*'. Three answers were offered: 'yes', 'no' and 'cannot answer'. This question was first used by Lieberman *et al.*<sup>7</sup> in their survey of American physical and cultural anthropologists, and subsequently in several similar studies.<sup>1,2</sup> Respondents were also asked to detail their age, gender, level of education, and field of specialisation, and space was allotted on the questionnaire for comment. The questionnaire was distributed to anatomists attending the Annual Conference of the Anatomical Society of Southern Africa in April 2003. A further four questionnaires were received from university anatomists after the conference.

The chi-squared test was employed to test any differences in the results according to gender, age (grouped from 21 to 40 and from 41 to 60 years), educational background (highest degree and institution from which it was obtained) and field of specialisation (gross anatomy, histology, embryology, physical anthropology, medicine and surgery).

### What was found

Seventy-eight per cent of the 72 delegates at the conference responded to the questionnaire. They were all currently employed by South African institutions. Their presence at the conference suggests that they constitute the most active and influential part of the Anatomical Society of Southern Africa, in terms of teaching and research.

Of the 56 respondents, 29 (51.8%) agreed with the statement, 17 (30.4%) disagreed and 10 (17.9%) could not answer. These differences were statistically significant ( $p < 0.01$ ). Although the majority of respondents support the concept of race, when only the 'yes' and 'no' answers were compared there was no statistical difference between them (using Yates' correction).

There were no significant differences among replies in terms of gender and age. However, the sample was too small to establish any conclusion regarding educational background or speciality.

### Discussion

The facts that there is no significant difference between those agreeing and disagreeing with the statement that there are biological races among the species *Homo sapiens* and that a large number of respondents could not answer the question indicate that there is little agreement on the concept of race among anatomists.

Goran Štrkalj is a physical anthropologist and Tracey Wilkinson is a medical doctor and biomechanist. Both are lecturers at Wits University, while Stacey Ramsey is a BSc Honours student in human biology. All three share a research interest in human variation and 'race' issues.



The lack of significant difference between answers given by the two age groups suggests that there has been no shift away from the racial paradigm. This shift has been demonstrated among physical anthropologists in some countries.<sup>1,2,7</sup>

Some comments on the questionnaires suggest that the lack of consensus on the race concept may be due to ignorance or disinterest in the subject. This is further supported by a recent survey of the abstracts of the annual meetings of the Anatomical Society of Southern Africa.<sup>8</sup> These abstracts reveal that South African anatomical research still displays many misconceptions concerning biological variation and the concept of race. These include confusing socio-political with biological categories, using small samples to generalise about larger populations, and categorising unnecessarily.<sup>8</sup>

## Conclusion

The results of research on the attitudes of South African anatomists towards the concept of race indicate that it would be profitable to incorporate the study of biological variation in the study of anatomy. A first step towards this might be to distribute a set of instructions concerning human variation, such as those dealing with the use of racial and ethnic terminology devised by Morris.<sup>8</sup> A possible long-term solution would be the involvement of physical anthropologists in teaching anatomy. Thus the misconceptions and misunderstandings present in anatomical and medical research in general in South Africa,<sup>5,6,8</sup> although unlikely to be eliminated, may be significantly reduced by a small change in the curriculum.

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## Comment

It is not surprising that scientific misconceptions about race endure. Race was, until recently, the ideological cornerstone and organising principle of South African society.

Research by the Institute for Justice and Reconciliation confirms that race groups continue to view one another with some measure of suspicion. The democratic elections began a renewal process, but did not eradicate racism, racial tension or misapprehension. This ongoing, but subtle, racial tension among South Africans seems to suggest that we need to track the racial reconciliation progress in all sectors of society.

Misconceptions regarding race operate, of course, at emotive and cognitive levels. Education about race is therefore best dealt with in a combination of theoretical and experiential teaching, with the Institute being extensively involved in experiential education regarding race. Its courses have involved hundreds of tertiary and secondary students. It is clear from impact studies undertaken on these courses that a profound need for education on race exists in educational institutions across the country.

Integration represents a step forward, but increased levels of contact do not automatically result in reduction of stereotypes or racial misconceptions. Attitudinal adjustment at this level requires systematic education, both at formal, conceptual level and in informal, experiential 'workshop-type' settings. For it to have long-term effect, educational initiatives will have to focus on both students and educators.

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