

**Title:** Students' learning experience in a diversified academic environment

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**Context and setting:** Since 1994 South African tertiary education has undergone diversification. In our institution an increasing number of students from previously disadvantaged communities has been admitted in recent years. However, the failure and exclusion rates of these students remain higher than those of students from more advantaged communities.

**Why the idea was necessary:** A situated perspective of learning suggests that the educational context contributes significantly to learning potential. A previous study indicated that socio-cultural factors in our learning environment may alienate some students and restrict engagement with institutional, academic and professional cultures.

**What was done:** A mixed methods approach was used to collect data from the 2009 MBBCCh IV class. All students were invited to complete the Dundee Ready Educational Environment Measurement ("DREEM") questionnaire, a validated instrument widely used to investigate perceptions of the learning environment. The questionnaire consists of five subscales: academic self-perceptions, social self-perceptions and perceptions of the teaching, teachers and institutional atmosphere. Items are scored on a Likert scale of 0 to 4, with reversal of scores for negatively phrased items. The results were analysed using a repeated measures multivariate analysis (RM-MANOVA) with the five subscales as dependent variables and demographic profiles of age, gender, route of entry to the programme, ethnic identity, language preference and academic record as independent variables. For the qualitative investigation ten students representing the demographic mix in the cohort participated in individual, semi-structured interviews which were audio-recorded, transcribed and analyzed for emergent themes.

**Evaluation of results and impact:** The questionnaire return rate was 131 (60%), of which 106 (80%) were complete. Respondent distribution of major ethnic groups was 39% White, 32% Black and 24% Indian. Regarding entry route, 32% were graduates and 68% school leavers. The coefficient alpha for internal consistency was 0.91. Multivariate analysis showed statistically significant differences in mean subscale scores based on ethnic group ( $F_{15,293}=3.09$ ,  $p=0.00$ ) and entry route ( $F_{5,106}=1.77$ ,  $p=0.05$ ). There was no significant relationship between scores and the other variables. Univariate analysis of these two variables in relation to the different subscales showed that for ethnic group there was a statistically significant difference for academic self-perception ( $F_{3,110}=4.22$ ,  $p=0.01$ ), with Black and White students more positive than Indian students. The difference between ethnic groups was also statistically significant for social self-perceptions ( $F_{3,110}=3.25$ ,  $p=0.03$ ), with Black students having the least positive attitudes. For entry route, graduate students recorded more positive perceptions than school entrants in the atmosphere subscale ( $F_{1,110}=4.52$ ,  $p=0.04$ ).

Interview data showed that students regarded good lecturers and clinical teachers as the most positive aspect of the learning environment. White students emphasised the importance of access to good resources, efficient organisation and opportunities to apply factual knowledge, and found

the academic environment conducive to studying. Black students appreciated the social interactions in small group learning but found the medical school environment stressful. These findings confirm differences between social groups in how they experience the medical school environment. The findings also provide an opportunity to address students' specific concerns and better support their learning.

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