A preliminary investigation of the relationship between team racial heterogeneity and team performance in college basketball

MICHAEL G. AAMODT¹, WILSON W. KIMBROUGH² and CRAIG J. ALEXANDER²

¹Department of Psychology, Radford University, Radford, VA 24142, USA
²Department of Psychology, University of Arkansas, Fayetteville, AR 72701, USA

Accepted 11 August 1983

Abstract

The purpose of this investigation was to study group performance among basketball teams working together for an extended period and having differing degrees of racial heterogeneity. Participants were the starting members of 202 NCAA basketball teams. Teams were divided on their degree of racial heterogeneity into homogeneous, slightly heterogeneous and heavily heterogeneous groups. The slightly heterogeneous teams performed significantly better in terms of percentage games won in one season than the other two categories. Though the effect was significant, only a relatively small amount of variance was accounted for.

Keywords: Basketball, racial heterogeneity, small groups.

Introduction

Various research workers have studied the effects of racial heterogeneity on the performance of athletic teams. Jones (1974) and Klein and Christiansen (1969) found heterogeneous basketball teams to be superior while Vander Velden (1971) found homogeneous basketball teams to be superior. If heterogeneity leads to creativity and conflict while homogeneity generates cohesiveness, attractiveness and freedom from conflict (Bass and Rytband, 1979), then homogeneous teams might be desired in co-acting sports where performance is dependent upon cohesiveness of group members performing identical tasks. However, heterogeneous teams might be desired in sports where performance is based upon group members independently performing many dissimilar tasks. In an interacting sport such as basketball where team performance revolves around the ability of group members to perform cohesively a sequence of different tasks, it is not clear which type of group would be the most effective. Possibly, slightly
heterogeneous groups would perform best because of the balance between creativity, conflict and cohesiveness.

The purpose of the present study was to study group performance among basketball teams that have been working together for an extended period of time and have differing degrees of racial heterogeneity. It was expected that slightly heterogeneous teams would perform the best due to the reasons postulated above.

Method

Subjects and procedures

The participants were the starting members of 202 NCAA basketball teams which represent about 80% of all Division I teams. Information about the racial composition of each team was obtained via letters sent to Sports Information Directors and by repeated observations of teams on cable television sport stations. Table 1 shows the racial composition of the 202 teams in the current sample. It should be noted that there were more homogeneous black teams than homogeneous white teams.

<table>
<thead>
<tr>
<th>Number of white players</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>49</td>
<td>24.3</td>
</tr>
<tr>
<td>1</td>
<td>66</td>
<td>32.7</td>
</tr>
<tr>
<td>2</td>
<td>43</td>
<td>21.3</td>
</tr>
<tr>
<td>3</td>
<td>30</td>
<td>14.9</td>
</tr>
<tr>
<td>4</td>
<td>10</td>
<td>4.9</td>
</tr>
<tr>
<td>5</td>
<td>4</td>
<td>1.9</td>
</tr>
</tbody>
</table>

Information about the wins and losses for the teams was obtained from a local newspaper at the completion of the 1981–82 regular season. The mean number of games played by each team was 27.39 with a standard deviation of 1.32 and a range of 25 to 32. The mean winning percentage for all groups was greater than 50 due to Division I teams beating easier Division II schools more often than not.

Results and discussion

The data were analysed by segmenting the teams on their degree of racial heterogeneity: homogeneous (all white or all black, $N = 53$), slightly heterogeneous (four black and one white or four white and one black, $N = 76$) and heavily heterogeneous (three whites and two blacks or three blacks and two whites, $N = 73$).
Team heterogeneity

The percentage of games won during one season served as the dependent measure. A one-way ANOVA revealed a significant group effect, \( F(2, 199) = 2.99, P < 0.05 \). A least significant difference test indicated that the slightly heterogeneous teams (\( \bar{X} = 59.5 \), s.e. = 2.1\%) performed significantly better (\( P < 0.05 \)) than both the homogeneous teams (\( \bar{X} = 53.4 \), s.e. = 2.6\%) and the heavily heterogeneous teams (\( \bar{X} = 52.5 \), s.e. = 2.2\%). While the effect is significant, it accounts for a relatively small amount of variance. This small effect can, in part, be attributed to variables such as athletic skill, coaching ability, schedule etc. which could not be controlled and served to operate against the hypothesis that there will be group differences (Eitzen, 1973). The homogeneous and heavily heterogeneous groups did not significantly differ from one another. Overall, analysis of the winning percentages revealed no significant differences between predominantly white and predominantly black teams (\( P > 0.05 \)). The stability of this finding is tentative because of the relatively small number of predominantly white teams.

The finding that slightly heterogeneous groups won a higher percentage of their games than did heavily heterogeneous or homogeneous groups is consistent with our hypothesis but raises the question of why this was so. Race was used as the group difference variable only because the information was obtainable, was a convenient way to look at the relationship between group composition and team effectiveness, and is often used as a criterion for social differentiation (Eitzen, 1973). It is unlikely that race alone would lead to such differences. Thus, it would seem important to investigate the actual variables masked by race that might have caused the differences. The most obvious factor is the differences between black and white athletes’ social class and environment during adolescence. Moreover, research has shown that the two races differ on personality traits (Gynther, 1972) and attitudes toward school (Stoll et al., 1968). Further research is needed in other sports and situations to confirm our findings. If race is used as the group difference variable, one should attempt, if possible, to control for some of the factors outlined above.

References