DEMOGRAPHIC FACTORS AFFECTING WHITE ATTITUDES TO BLACK ADVANCEMENT IN A SOUTH AFRICAN ORGANIZATION*

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ABSTRACT

An empirical study was undertaken in a South African organization in which white attitudes to black advancement were analyzed in terms of eight demographic variables - home language, sex, age, length of service, education, job grade, department, and geographical location. The scale employed was found to have acceptable psychometric properties in terms of internal consistency and factor structure. Education, language, job grade, department and location showed significant statistical relationships with attitudes to black advancement. No differences were found for sex, age or length of service. These variables accounted for 22% of the variance. The majority of the variance in attitude to black advancement is still unexplained.

OPSOMMING

'n Empirieuse studie is in 'n Suid-Afrikaanse organisasie ondernee waarin die houdings van blankes tot swart ontwikkeling ondersoek is in terme van acht demografiese veranderlikes - huisaaltaal, geslag, ouderdom, dienstjaare, opvoedingspeil, posisie, afdeling en geografiese ligging. Die meetinstrument het aanvaarbare psigometrisee eienskappe vertoon in terme van beide betroubaarheid en faktorsamestelling. Opvoedkundige peil, huisaaltaal, opvoeding, afdeling en ligging het beduidende verbande met houding teenoor swart ontwikkeling getoon. Geen verskille is ten opeigne van geslag, ouderdom en dienstjaar gevind nie. Hierdie veranderlikes het 22% van die variasie verklaar. Die grootste gedeelte van die variasie wat blankes se houding teenoor swart ontwikkeling bepaal, bly nog onverklaar.

Various socio-political and demographic arguments have been offered to support the view that members of race groups other than whites will have to be advanced if the projected higher-level human resources requirements of South African organizations are to be adequately met (Human and Hofmeyr, 1985). The path of black advancement, though short, has not been smooth. Many obstacles, such as deficiencies in the educational background of potential black managers, and the presence of legal, economic, social and organizational barriers likely to impede the development of the black managers which organizations will require, have been identified (Coldwell and Moerdyk, 1981; Moerdyk and Verster, 1981; Godsell 1983; Chalmers, 1983; Smollan, 1986; Charoux, 1986; Erwee, 1986).

White attitudes to black advancement appear to pose a particular obstacle to the upward mobility of other race groups in South African organizations. Despite the fact that black advancement has only recently become a matter of concern, a small body of research-based evidence in this regard has already accumulated (Schlemmer, 1976; Human and Fringle, 1986; Human and Hofmeyr, 1987; Franks, 1987).

Human and Icely (1987) investigated the relationship between certain demographic variables and white attitudes to black advancement. They found relationships between factors such as home language, sex, level of education, occupational stream, salary range, and attitudes held toward the occupational mobility of blacks. Unfortunately, they did not give reliability figures for the scale they used nor did they indicate the proportion of variance explained by the attitudinal factors which they chose to study.

Human and Hofmeyr (1987) investigated the effects of four demographic factors on attitudes to black advancement.

Again, no reliability figures were given for their scale. Although they did not report their figures, they did suggest that home language and level of management best explained the variance found in the data. They usefully related their findings to the problem of attitudinal change and argued for a change strategy in which higher-order attitudes should be approached first.

In this article, demographic influences on white attitudes to black advancement are researched in another South African organization. The proportion of the variance explained by the demographic variables selected for study is presented for the first time.

METHOD

Sample

Data were gathered in the two plants of a South African manufacturing company, hereinafter referred to as the coastal plant and the inland plant respectively. At the time of the survey the coastal work-force numbered 417 and the inland work-force 142 whites respectively. The coastal study was completed first, on a random sample of 169. Temporary and casual workers and people with less than one year's service were not included. The sample was stratified by job grade to ensure that grades would be represented proportionately. At the request of the organization, the study was repeated at the inland plant. A sample of 110 was drawn, also randomly selected and stratified by grade. In Table 1, both samples are depicted in terms of the demographic variables which were investigated.

From Table 1 it can be seen that for the coastal sample, 47% of the respondents were English and 53% Afrikaans-speakers. The male-female ratio was 64% - 36%. Mean age was 39.78 years, mean length of service 11.84 years, and the mean educational qualification was 11.85 years at school, or standard nine. Forty percent were in semiskilled, production, or clerical, 40% in skilled or supervisory, and 20% in managerial positions. While 60% were office workers, 40% had factory jobs. The inland sample was comprised of 85% males, 79% Afrikaans speakers. Mean age was 35.37 years, mean length of service 7.43 years, and mean educational level 11.84 years at school, or standard 9. Semi-skilled, production, or clerical workers constituted 9% of this sample, 69% were in skilled or

* The assistance of Mr D.J.L. Venter with the data processing and the statistical analysis is gratefully acknowledged, while Professor X.C. Birkenbach and Ms J.M. Parfitt assisted greatly by constructing the scale.

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supervisory, and 21% in managerial positions. Forty-seven percent were office and 53% were factory workers.

The analysis that follows was performed on the data obtained from the coastal plant. To include the factor of geographical location, the responses of the 169 workers at the coastal plant were compared with those of the 110 workers randomly sampled on the same questionnaire at the organization's inland plant. The older coastal plant is located in an established industrial area, with a considerable industrial relations history. The inland plant was established 17 years ago in an area where whites are still characterized by their conservative political and racial views. At both plants, the company has introduced non-racial policies and shared facilities.

Instrument

Data was obtained by means of a 19-item questionnaire designed to measure employee attitudes to black advancement. The items were all presented in Likert-scale format. Each item consisted of a positive or negative statement, followed by five graded response options (strongly agree, agree, undecided, disagree, strongly disagree), one of which had to be selected. To score each item, response options were credited 5, 4, 3, 2, or 1 from the favourable to the unfavourable end. For example, "strongly agree" with a favourable statement, would receive a score of 5, as would "strongly disagree" with an unfavourable statement. The sum of the item credits for the scale represented the individual's score on the scale. The scoring system was so designed that a higher score would indicate a more positive attitude and a lower score a more negative attitude to the concept of black advancement.

Questionnaires were completed anonymously. Each questionnaire provided demographic data on sex, race, age, length of service, education, home language, department, plant location, and job grade only, the independent variables in terms of which the data were analyzed.

Every item was firstly correlated with the scale score minus that particular item. Items with low item scale correlations were rejected. Six items were retained, the revised intercorrelation matrix showing only one correlation below 0.50 (0.41). The items with their item-scale correlations shown in brackets, were: 1) If blacks and coloureds are promoted to more senior positions, whites will lose out in their jobs (0.51); 2) I am prepared to work in close cooperation with blacks in the world situation (0.56); 3) This company is going to need blacks and coloureds in high positions in the future (0.51); 4) This company should provide more opportunities for social mixing between white, black and coloured employees (0.41); 5) I would not mind working for a black boss (0.70); 6) I would not mind working for a coloured boss (0.71).

The Black Advancement Scale score (the dependent variable in terms of which the various demographic groups were compared), was simply the sum of the six item scores, and could range from 6 to 30.

Differences between the demographic groups being compared were tested for significance using t-tests. The responses on the six scale items were inter-correlated and factor analyzed. A stepwise regression analysis was performed to determine the relative contributions of the demographic factors. The BMDP statistical package was used for these computations. The reliability of the scale was investigated by means of Cronbach's coefficient alpha.

**RESULTS**

Internal Consistency

The Black Advancement Scale showed a coefficient alpha of 0.80. The principal component analysis with varimax rotation produced one factor with eigen value greater than unity. The factor loadings after orthogonal rotation of the axes are shown
in Table 2. The row has been rearranged so that factor loadings appear in descending order. 51.35% of the total variance is explained by the single factor, which can be described as a general attitude of willingness to work with blacks.

### TABLE 2
**SORTED ROTATED FACTOR LOADINGS**

<table>
<thead>
<tr>
<th>ITEM</th>
<th>FACTOR 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would not mind working for a coloured boss</td>
<td>0.841</td>
</tr>
<tr>
<td>I would not mind working for a black boss</td>
<td>0.837</td>
</tr>
<tr>
<td>I am prepared to work in close co-operation with blacks in the work situation</td>
<td>0.715</td>
</tr>
<tr>
<td>If blacks and coloureds are promoted to more senior positions in this company whites will lose out in their jobs</td>
<td>0.665</td>
</tr>
<tr>
<td>This company is going to need blacks and coloureds in high positions in the future</td>
<td>0.646</td>
</tr>
<tr>
<td>This company should provide more opportunities for social mixing between white, black and coloured employees</td>
<td>0.551</td>
</tr>
<tr>
<td>% of Total Variance</td>
<td>51.35</td>
</tr>
</tbody>
</table>

Demographic variables
The responses obtained from the various demographic groupings are compared in Tables 3 and 4. The figures in the tables are the groups' Black Advancement Scale scores, the sum of their six item scores. The higher score reflects a more positive attitude to black advancement in each case.

Findings obtained for language, department, and location groupings are shown in Table 3.

### TABLE 3
**RELATIONSHIPS BETWEEN HOME LANGUAGE, DEPARTMENT, LOCATION, AND ATTITUDES TOWARDS BLACK ADVANCEMENT**

<table>
<thead>
<tr>
<th>HOME LANGUAGE</th>
<th>DEPARTMENT</th>
<th>LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afrikaans</td>
<td>English</td>
<td>Speakers</td>
</tr>
<tr>
<td>BLACK ADVANCEMENT SCALE SCORE</td>
<td>18.90</td>
<td>21.80</td>
</tr>
</tbody>
</table>

* p < 0.05
** p < 0.01

Language
There were significant differences between Afrikaans and English-speakers, Afrikaans-speakers expressing the more negative attitude toward black advancement.

Department
Factory and office whites differed significantly, factory whites being more negative toward black advancement than office whites.

### TABLE 4
**RELATIONSHIP BETWEEN EDUCATIONAL QUALIFICATIONS, JOB GRADE, AND ATTITUDES TOWARDS BLACK ADVANCEMENT**

<table>
<thead>
<tr>
<th>EDUCATIONAL QUALIFICATION</th>
<th>JOB GRADE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Non-Matriculants</td>
<td>1. Semi-skilled</td>
</tr>
<tr>
<td>2. Matriculants</td>
<td>2. Skilled</td>
</tr>
<tr>
<td>Significance</td>
<td>23.12</td>
</tr>
</tbody>
</table>

BLACK ADVANCEMENT SCALE SCORE 19.22 19.77 23.19 1.3 ** 19.33 19.75 23.12 1.3 **

** p < 0.01
Location
Inland and coastal whites showed significant differences. The company's inland whites were less positive towards black advancement than its coastal whites.

Findings for job grade and educational qualification are shown in Table 4.

Job grade
There were significant differences regarding job grade. While semi-skilled and skilled groups did not show any differences, the managerial group's expressed attitudes were significantly more positive than those of both the semi-skilled and the skilled groups.

Education
While there was no difference between the attitudes expressed by non-matriculants and matriculants, the group with post-matriculation qualifications expressed significantly more favourable attitudes to black advancement than did both these groups.

Sex
There was no significant difference between the attitudes of the men and the women in the sample.

Age
There were no significant attitude differences between any of the age groups.

Length of service
There was no significant differences between groups with varying lengths of service.

Regression analysis
In order to investigate the relative effect of the demographic variables on the attitudes expressed toward black advancement, a stepwise regression analysis was performed. In order to study the possible effect of geographical location, both the inland and coastal samples were used. Results appear in Table 5.

### Table 5
**Stepwise Regression Analysis: Attitudes Towards Black Advancement Against Demographic Variables**

<table>
<thead>
<tr>
<th>STEP</th>
<th>DEMOGRAPHIC VARIABLE ENTERED</th>
<th>r</th>
<th>r²</th>
<th>CHANGE IN r²</th>
<th>F</th>
<th>NUMBER OF VARIABLES INCLUDED</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Job Grade</td>
<td>0.3259</td>
<td>0.1245</td>
<td>0.1245</td>
<td>37.26</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Language</td>
<td>0.4134</td>
<td>0.1709</td>
<td>0.0464</td>
<td>14.61</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Location</td>
<td>0.4313</td>
<td>0.1861</td>
<td>0.0151</td>
<td>4.83</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>Educational Qualification</td>
<td>0.4533</td>
<td>0.2055</td>
<td>0.0194</td>
<td>6.34</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>Sex</td>
<td>0.4668</td>
<td>0.2179</td>
<td>0.0124</td>
<td>4.10</td>
<td>5</td>
</tr>
</tbody>
</table>

From Table 5 it can be seen that five of the demographic variables accounted for 21.79% of the variation in attitudes elicited by the six scale items. Job grade made the largest single contribution (12.45%), followed by language (4.64%), location (1.51%), education (1.94%), and sex (1.24%). There were no significant interactive effects.

### SUMMARY AND CONCLUSION
This article aims to extend the knowledge base regarding the relationship between demographic factors and attitudes to black advancement.

The pattern which emerged was that Afrikaans-speakers in the sample expressed less positive attitudes to black advancement than did English-speakers; factory workers were less positive than office workers; the company's inland employees were less positive than coastal employees; employees with post-matriculation educational qualifications and employees in higher job grades were more positive towards black advancement. There were no differences in attitude related to age, sex, or length of service.

The findings relate positively to conclusions that have been drawn by other researchers in the field. The trend reported by Human and Pringle (1986) and Human and Icely (1987), that liberality increases with level of education, is confirmed. In this case, the experience of tertiary education seems to be the differentiating factor. The finding regarding the effect of language supports the results of both Human and Hofmeyr (1987) and Icely (1987), as well as the Human and Hof-
despite the confirmation of previous research which this study provides, it adds the perspective that the demographic variables which were investigated only explain a small proportion of the variance reflected in the attitudes expressed to black advancement. The larger proportion of the variance remains unexplained.

Acknowledgement

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REFERENCES


