## QUALITY OF LIFE IN SOUTH AFRICA:

MEASUREMENT AND ANALYSIS

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## UNIVERSITY OF NATAL

 DURBAN
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## 1. INTRODUCTION

Quality of life studies have an immediate and obvious significance in South Africa. In a society of marked social contrasts, not only as defined by material differences between groups, but also as regards cultural meanings and socio-political perspectives, systematic attempts through research to describe and quantify the depth and patterning of social cleavages are of manifest importance. Since South Africa is also a system undergoing complex and subtle changes, if not in legislation at least in aspects of material circumstances and in public reactions to its structures, there is a particular need for a research approach which can identify the interaction between objective circumstances and subjective responses. Quality of life studies appear to be highly appropriate as a means of assisting in the full understanding of present processes and future possibilities.

These general points have been apposite for a long time. A consideration of the immediate present, however, raises a few important specific issues within the more general context. These issues arise out of particular aspects of the political debate in South Africa.

Protagonists of disinvestment and external economic sanctions on South Africa as a means of coercing the government to abandon apartheid are frequently criticised for being dismissive of the serious negative consequences of their programme on the lives of the majority of blacks in South Africa. (Schlemmer, 1985, among others). One frequent rejoinder is that the suffering of blacks in South Africa is so severe that increased unemployment and deprivation as a result of sanctions would be willingly endured as a means of achieving liberation. While such counter-arguments do not address the problem of whether or not sanctions are likely to be effective in achieving results, the argument reflects a popular belief that very widespread misery exists on such a scale that black people, effectively, have nothing to lose. In other words, blacks' quality of life is and has been so severely depressed that it cannot become worse. Seen in this specific
context, studies of the quality of life may be able to offer highly relevant commentary on very real issues of strategy in present-day South Africa.

A recent series of comparative, albeit perhaps superficial, Gallup International investigations in fact illustrate the complexity of the issue. Using a simple question on whether or not people considered themselves to be "happy", it was established that while blacks in South Africa were less likely to endorse the "very happy" position than whites, the black respondents were nevertheless ahead of a few Western or developed countries such as Italy, France, Spain, Japan, Finland and Germany, for example, in the proportion choosing to describe themselves as happy.

This finding accords generally with previous polling results and suggests that people everywhere tend to adjust to their circumstances. Perceptions of deprivation are relative to circumstances and expectations. This is not to say that political discontent is not highly prevalent among blacks in South Africa or that blacks accept the socio-political and economic system of the country. One cannot assume, however, that the overall or general emotional reactions to a situation among a mass of people will reflect the opinions and perceptions of spokespeople or observers who base their assessments on more abstract analyses of the situation.

An illustration of this is also to be found in the results of a study by Kennedy and Mehra (1985) in which they established for successive Canadian samples that overall perceptions of well-being are "buffered" from the effects of economic cycles by the reactions of people to personal and social circumstances unconnected with the economy.

1. Reported in Daily News, 4/1/86.

In general, it would seem that one may not assume that subjective perceptions of overall quality of life are a reflection of even keynote aspects of socio-political structure in society. Furthermore it is also apparent that subjective quality of life is a complex and subtle phenomenon that requires to be disaggregated into discrete elements if it is to be properly understood. It is this objective which is addressed in the analysis which follows.

As already intimated, superficially, quality of life is a deceptively simple concept. Everyone - social scientists, journalists, politicians and the man in the street can tell you broadly what it means. At this level it is simply the degree of well-being, experienced by individuals or aggregates of people under prevailing personal, social and economic conditions.

This is sufficient as a broad guiding definition. We believe that a more precise definition is impossible at this stage, simply because precision requires a specification of the dimensions of life which are most relevant to overall well-being. Conceptually, all one may say in this regard is that the dimensions are complex and variable from community to community. Therefore, a more precise definition has to be specific to the social group being considered and cannot be stated in more universal terms until many more comparative research findings are available. 2) Once past the problem of definition, however, a host of difficulties and questions arise: These difficulties make it worth discussion in fair detail. Furthermore, questions which one may ask about it relate to some of the central issues in South African society. Because of its relevance to the ongoing debate about change, a need may be said to exist for repeat studies and longitudinal studies as one means of monitoring shifts in reactions to socio-economic and socio-political conditions. In this context an instrument with a sufficient degree of standardisation to allow timecomparisons and inter-group comparisons may have utility.

[^0]This paper is a broad attempt in this direction, set against an analysis of results from a nation-wide quality of life study undertaken in 1983.

## 2. HOW IS QUALITY OF LIFE MEASURED? 3)

The following ways of measuring or assessing quality of life are employed or can be posited:

### 2.1 Objective social indicators

These are measures, usually related to social groups in society, of characteristics 5) like income, life-expectancy, disease rates, housing standards, available educational facilities, and the like. Great practical difficulties can arise in gaining adequate information on which to base such indices, but once arrived at, they are usually fairly obvious in the way they can or should relate to aggregate or group well-being.
3. The approaches developed in the course of the short history of social accounting vary from simple statistical compendia to comprehensive analytical frameworks (an example of the latter is the systematic approach devised by Ellis, 1980). At this point it is particularly important to note that the object of measurement ('what' is being measured) will largely determine which research approach ('how' something is measured) is chosen.
4. In this paper the concepts 'social indicator' and 'socio-economic indicator' are used interchangeably. The designation 'social indicator' was first introduced by the social scientists attached to the so-called social indicator movement as a distinction to the conventional 'economic indicator', which they sought to complement and replace with a more balanced set of social statistics. Some scholars and practitioners in the field of social accounting prefer to speak more correctly of 'socioeconomic' indicators. They reason that social indicators can assume economic significance, whilst economic variables may also be indicative of social conditions. (Cf. Drewnowski, 1974; UNESCO, 1976).
5. Seen superficially, social indicators are indistinguishable from social statistics. It is only the use to which a particular statistic is put, the manner in which it is assessed, interpreted, and related to personal and social well-being, which characterises the social indicator from its 'lookalike'. (Cf. Horn, 1978).

A firm definition is provided in Note 6. typically disaggregated or broken down into their relevant componer: parts along the lines of socio-economic status or class designations, age, sex, and racial or ethnic groupings and so forth. Richer people are assumed to experience greater well-being than the poor, sick people are obviously less happy than the healthy, and educated people are assumed to enjoy a greater sense of achievement than the less wel: educated. A sub-type of the social indicator approach is the sccalled territorial indicators in which the descriptions apply not sc much to groups as to geographic regions. ${ }^{7)}$

Some years ago, however, social scientists started doubting that the more common indices necessarily reflected or implied differentia experience of well-being. Were richer people really happier thar poor people to a degree that wealth differentials would suggest Particularly in affluent societies it began to be felt that the experience of well-being was a much more complex phenomenon thaz material privilege. A broader quality of life was seen as perhaps being a more appropriate stratifier of people than the more established and conventional features class and social status it wealthier societies.
6. One of the most frequently quoted definitions of the sociaindicator is quite clear on thís point: "A social indicator, ... may be defined to be a statistic of direct normative interes which facilitates concise, comprehensive and balanced judgements about the condition of major aspects of a society. It is in all cases a direct measure of welfare and is subject to the interpretation that, if it changes in the 'right' direction. while other things remain equal, things have gotten better, of people are 'better off'". (United States Department of Health, Education and Welfare, 1969, p 97).
7. Territorial indicators are particularly useful in identifyins regional disparities in welfare. In more developed countries these measurements will pinpoint enclaves of poverty in vas: areas of plenty. In materially less developed countries we are more likely to find that a three-dimensional projection of welfare highlights urban peaks of affluence in a plain of poverty. In the case of South Africa, racial and spatia dimensions of welfare are by and large congruent, a situatioz which has led Smith (1977, pp 241-263) to speak of 'race-space: disparities or inequalities.

These considerations led to the emergence of the so-called Quality of Life studies. The differentiating feature was that such studies would not be based on, or not only be based on objective indicators, but would also introduce subjective elements. ${ }^{8)}$
2.2 Subjective social indicators or quality of life studies ${ }^{9)}$

Such studies can either be qualitative or quantitative.

Qualitative. Here the approach would be to obtain open, free-flowing and unstructured accounts from people about the quality of their lives. Wide-ranging depth interviews or even group depth techniques may be employed and results can be poignant and telling. A problem is that such accounts are so varied and can differ so significantly in depth from person to person or group to group that comparisons between groups and over time are made impossible.
8. It is noteworthy that the social indicator researchers who did not abandon the'objective' measures of well-being during this period, nevertheless called for a new set of criteria for developing lobjective' measures which would enable them to measure directly and hence more precisely the impact which societal inputs were making on individual well-being. It was stipulated among other things that social conditions were to be assessed - wherever possible - in non-monetary terms and at the 'output' rather than the 'input', i.e. at the recipient side of development systems. From this point of view, the indicator of the type 'School places available per child of school-going age' is preferable to 'Government expenditure on educational facilities per capita'. (Cf. Rao, 1976; Drewnowski, 1974).
9. To our knowledge the distinction between 'subjective' and 'objective' indicators was first popularised by Sheldon and Land (1972) in their review statement Social Reporting for the 1970 '. Sheldon and Land distinguish between two dimensions of life: objective conditions of society and persons (e.g. conditions of the environment including concern with housing, pollution, recreational resources, and personal attributes such as health, educational achievement, family stability, etc.) and subjective perceptions of life experiences such as frustrations, satisfactions, aspirations and perceptions. According to Sheldon and Land, social well-being depends jointly on the interplay between these two dimensions although correlations may not be very high.

Writing more recently, Andrews and Withey (1976, p 5) wish to play down the division between subjective and objective indicators. They argue that objective indicators involve subjective judgements and conversely many subjective indicators provide rather direct and therefore 'objective' measurements of what they intend to measure.

This problem has been well-illustrated in an extensive "qualitative" study (BBDO, 1976), the results of which were an important source of the basic content for our present interview schedules.

These earlier results were based on a substantial series of in-depth group discussions. The content-analysed data were rich in references to dissatisfactions and frustrations experienced by blacks in South Africa. Despite the wealth and depth of content, however, it seemed impossible to draw any clear-cut conclusions as to either the nature of differences in quality of life between poorer and less-poor respondents or the relative importance of dissatisfactions in the different domains of living.

Quantitative. Here subjective feelings and reactions to the quality of life are measured and quantified either by rudimentary scaling of reactions (e.g. very.satisfied/satisfied/uncertainty/dissatisfied/very dissatisfied) or by classification of responses on the basis of choice between alternative answers. 10) Results can be subjected to more sophisticated measurement and certainly are often given fairly sophisticated statistical treatment after the data have been gathered.

The quantification of the results does not make them any less subjective or feeling-based. It does not make of them objective indices.


The quantification may reduce the richness of data and remove many interesting nuances but it retains its essentially subjective content. ${ }^{12)}$ However, the results can be sufficiently standard to allow comparisons between groups over time.

An example of such studies is the research which we have undertaken in Durban. On the basis of previous studies using essentially unstructured or open-ended methods, (inter alia, BBDO, 1976; Moller et al., 1978) a wide range of statements was generated denoting aspects of the various domains in which quality of life is relevant (family life, work life, political life, economic life, etc.). By making the statements as far as possible utterly comprehensive and by basing them on unstructured studies, dangers of distorting or biasing the distribution of aspects were avoided as far as possible. A method was devised to allow the samples of respondents selected to eliminate the statements (aspects) of lesser relevance in their lives, reducing the final range to thirty or forty aspects which respondents themselves considered to be critical in their existence. For each of these, as well as a small range of issues covering more subtle aspects of people's lives which they would not necessarily recognise overtly to be relevant, a rating of degree of satisfaction was obtained. The issues thus emerging differed for blacks, Indians and whites in our study with some significant overlap, however. The extent of overlap made it possible to compare groups with one another on degree of domain satisfaction as well as on choice of relevant aspects.

[^1]In addition to the statements relating to aspects of life domains, certain criterion statements were also included covering essentially factors important to satisfaction across a variety of domains (examples would be freedom of choice in life, participation in decision-making, ability to achieve goals, etc.). 13)

### 2.3 Public mood opinion polling

Such research comes close to the subjectively-based studies of the quality of life, except that the issues chosen are extremely general. ${ }^{14 \text { ) (How satisfied people are with life at present/with the }}$ economic situation/with leadership/with public services/with the way people are treated by government, etc.) These data can provide short-cut but broad indicators to the subjective quality of life in a community or society.

### 2.4 Basic needs research

Whereas most of the input into quality of life research procedures has come from interest in developed societies, a new emphasis has sprung from concerns about conditions in less-developed countries.
13. In making a distinction between indicators occurring at varying levels of specificity, we are following Andrews and Withey (1976, pp 11-12). According to Andrews and Withey, domain-type indicators refer mainly to satisfaction with places things, activities, people and roles, all of which are frequently represented in social institutions and agencies. Criterion-type indicators, on the other hand, are the means of judging what the various domains of life afford, e.g. they are values, standards, aspirations, goals, etc.
14. The so-called 'happiness surveys' undertaken by Gurin and colleagues (1960) and Bradburn and Caplovitz (1965), to assess global well-being were the forerunners of the later in-depth studies of psychological well-being. The latter were conducted among others by Campbell and co-workers (1976), who also experimented with the use of affective mood indicators in measuring contentment in more specific domains and spheres of life.

In recent years the 'basic needs approach' to development has set a more or less consistent set of criteria for what needs to be done to improve the development status of third world societies. 15) In effect, development for people and improvements in the quality of life in poorer societies are largely synonymous. Therefore research into basic needs like nutrition, health, shelter, clean water, transport, schooling has added precision to quality of life studies as they do or may apply to poorer societies.

Hence we can assume that quality of life research in its broadest sense involves or should try to involve hard objective indicators, assessments of objective basic needs, subjective responses to life in general or in its various domains and very broad reactions to contemporary life.

Looking at this range one can immediately suggest ways in which quality of life research can be broadened even further. Useful additions to the range of ways of assessing quality of life could be studies of public morale, studies of stress and studies of the symptoms in society of breakdowns in the coherence of social processes like crime and violence, suicide, divorce, etc. Race discrimination and inter-group conflict could also perhaps be added to the list.

[^2](1) Personal consumption needs such as food, shelter, and clothing, etc. ; and
(2) Essential pubiic services such as health, sanitation, clean
 International Labour Office, 1977.)

The prospects of adopting a basic needs strategy in the South African situation are discussed among others by Nattrass (1979) and Simkins (1980).

The need for subjective judgement is cardinal in order to retain the initial emphasis on social well-being, otherwise quality of life research could become simply another term for all descriptiveevaluative studies of societies or communities. As will be seen from what follows, the subjective element is central in quality of life research and must always be retained.

## 3. WHAT DOES QUALITY OF LIFE MEAN?

This question is much more difficult to answer than the problems of measurement. In one sense quality of life is self-explanatory, as are its synonyms -- life satisfaction, happiness, need satisfaction or social well-being. One immediately recognises the possibility of contradictory elements. These contradictions are well-represented in popular assessments. Ordinary people will talk of a contented and happy man of poor and barely adequate means in contrast to the possibility of a rich but stressed and worried executive. A contented subordinate can be contrasted with the possibility of an insecure and threatened leader. Quality of life is certainly not a phenomenon based on consistent linear progressions up all of its many dimensions. There is also little agreement on absolutes ${ }^{16 \text { ) and on }}$ zero points ${ }^{17)}$ and saturation thresholds. 18)
16. In this connection it is perhaps interesting to note that the 'absolute' indicators distinguished by Kamrany and Christakis (1970) refer only to those categories of 'scientific' indexes for which a substantial agreement among experts has been reached. In other words normative judgements are always involved in determining scale values in quality of life measurements.
17. With the possible exception of a lower-level threshold described as a 'zero-level', or 'survival with nil need satisfaction' by Drewnowski (1974)'which is associated with a sub-human level of existence. By contrast, a 'human' but minimum level of need satisfaction is only guaranteed when 'basic needs' are met.
18. It is conventional practice not to assign an optimal value to social indicators, perhaps a subtle means of implying that development is open-ended towards the future. Beyond the saturation point, which Drewnowski (1974) refers to as the 'affluence' level, further system inputs directed toward improving well-being in a particular sphere of life may be without increased utility for welfare and may therefore represent a waste of system resources. Once 'affluence' level has been achieved, further system inputs may even result in depressed well-being (for example, excessive intake of calories may harm rather than improve physical and mental health). However, it should be noted that extra inputs may well serve a 'prestige' function.

What is important to bear in mind is that, inasmuch as objective indicators of material welfare and objective indicators of need satisfaction are all relative and subject to judgement, the subjective element of quality of life allows us to begin approximating a standard of evaluation - what people themselves feel. If people are unhappy and feel dissatisfied, then no matter what the objective or hard indicators tell us, they have not achieved what people in this world should have the right to achieve. The subjective component, therefore, is essential and does begin to offer a benchmark.19)

Problems arise immediately from the social sciences themselves. Some social scientists will tell us that no matter how happy or satisfied a worker is, if his product exceeds his reward then he is exploited. If he has little control over the productive process he is alienated, even if he does not want responsiblity in the productive process. Our social scientist will simply say that his well-being arises out of false consciousness. From the other side of the ideological spectrum an equally convinced social scientist will say that no matter how happy and fulfilled, say, a hedonistically oriented individualist is, without firm location in a cultural/ethnic group or without faith and belief in God, he or she is fundamentally estranged. Both the radical and the conservative social scientists alluded to here will produce impressive theoretical propositions to support their judgements. Their differences, however, will never be adequately resolved and for this reason the subjective judgement of the people themselves is crucial. Therefore, quality of life research means that people are given an opportunity of making their own judgements about their social, economic and political condition. For this reason, alone, such research is valuable.

[^3]If the value of quality of life research lies in the anchor for evaluation which the subjective component provides, then a number of important and interesting questions spring from this. Among them are:

- how does subjective satisfaction relate to objective criteria in different domains? At what level of poverty do people experience critical subjective deprivation? To the best of our knowledge issues like these are far from resolved;
- how does subjective satisfaction relate to expectations? Do people experience satisfaction in a linear progression as they become aware of progress or do rising expectations accompanying awareness of progress depress to an extent subjective satisfactions? ${ }^{20)}$ We have some evidence in the Centre for Applied Social Sciences to suggest that over the past five years while material conditions of urban blacks have improved quite considerably, levels of political discontent as expressed in survey-ratings have risen more sharply. In a study in 1981, 78 percent of blacks in Transvaal urban areas declared themselves to be 'unhappy' or 'angry and impatient' with life in South Africa compared with 57 percent in 1977 (identical samples, same interviewing team); 21) and

[^4]21. Research conducted for the Buthelezi Commission (1982, Volume l) by the Centre for Applied Social Sciences.

- what distinctions in evaluation have to be made between subjective assessments of life quality in different domains? A majority in all groups will respond to the issue of prices and cost of living by reflecting serious dissatisfaction. Is this as 'serious' as a similar level of dissatisfaction in the personal domain, the family domain, political domain or work domain? Some forms of dissatisfaction at a given level may strike to the core of a person's identity or security and hence be much more serious than other forms of dissatisfaction at a similar level. 22) Here again, this question is far from resolved.

Given some of the uncertainty of the implications of quality of life findings, our evaluations are very blunt. We have yet to establish the relationships between the objective and the subjective, between the various domains and the overall effects, and what the implications are of breakdowns of quality of life in different domains.

Despite the welter of unanswered questions, however, our research and other studies in South Africa have shown that the subjective aspects of quality of life can be captured in systematic and comparable form in social surveys and that it is a highly relevant dimension of the social process. For the first time, perhaps, we have what may be a valid indicator of the consequences for people of some of the major features of a deeply-divided society.

### 3.1 Quality of life and race in South Africa

As a society which is manifestly differentiated on the basis of race, South Africa is also most frequently assumed to be a system of racial and ethnic inequality. The issue of inequality in South Africa can be and has been analysed at different levels and within varying paradigms.

[^5]All approaches to the problem, however, accept the fact that the lifechances of the major categories of people, on aggregate, are sharply differentiated. By extension it is commonly accepted that perceptions of quality of life will also differ meaningfully between these major categories.

A quality of life study in South Africa can address the issue of racial inequality at two levels. At the one level it can provide what is hopefully a relatively rigorous measure of the differences between races where they really count; that is in the everyday experience of well-being. At another level it can help to address the relative importance of the underlying structures which create the racial inequity, where it exists. The analysis which follows is intended to assist in accomplishing these two tasks.

## 4. THE STUDY: METHODOLOGICAL APPROACH

The interview schedule on which the results discussed below are based has been discussed in full in previous published work (Moller and Schlemmer, 1983), and in the interests of brevity, the discussion will not be repeated here. This schedule is the result of a long process of development, and is based on the qualitative work on the Witwatersrand (BBDO, 1976) and on the schedule used in an extensive exploratory investigation among blacks, Indians and whites in the Durban area. This earlier schedule and the data arising from its use were considered in some detail and depth by authors Moller and Schlemmer (1983) in preparing a draft final schedule. This schedule was carefully examined and modified by a committee established for the joint project consisting of representatives of the Centre for Applied Social Sciences, the Co-operative Scientific Programmes division of the Council for Scientific and Industrial Research (CSIR), the Intergroup Relations Programme and the Opinion Survey Centre of the Human Sciences Research Council (HSRC).

A list of the items in the schedule which form the basis of the present analysis are given in Appendix 1.

The fieldwork for the survey commenced in late 1982 and continued into 1983. Personal interviews were conducted among whites, coloured people and Indians in both large and small urban areas using census tracts as the basis for sampling. 23) All interviews were conducted by the well-briefed and experienced field teams of the Opinion Survey Centre of the HSRC and in Natal of the Centre for Applied Social Sciences. Interviewer returns were back-checked for honesty and reliability in the normal way.
23. The number of magisterial districts covered in these sub-samples were: whites 43, coloureds 44 and Indians 18.

Sampling procedures among blacks were as follows:

In the urban township areas random samples were drawn from address lists, which were stratified by areas relating to ascertainable socioeconomic differences. In the peri-urban squatter areas and in rural areas a form of systematic sampling was used, based on interviewing points appearing at distances of equal intervals along routes and thoroughfares, with random distance starting points.

The samples among blacks covered the black townships in the cities of the Witwatersrand, Cape Town, Durban, Newcastle, Bloemfontein, and Port Elizabeth, informal peri-urban shack areas around Durban, a range of rural districts in the national states of KwaZulu and Lebowa and blacks residing in the white agricultural areas of the Northern Transvaal and the Natal Midlands.

For reasons of convenience interviews among blacks in the NatalKwaZulu areas were conducted by the field team of the Centre for Applied Social Sciences along identical lines to those used by the HSRC field teams.

In all 5587 interviews were obtained among white (834), Indian (1316), coloured (970) and black (2467) persons. In this analysis a further subdivision is made between urban and rural blacks. The urban group ( $n$ 1621) consists of regular township dwellers ( $n$ 1516) with the addition of a small group of 105 hostel dwellers. The rural subgroup totalling 845 includes blacks residing in the national states (436), on white agricultural land (299) and a smaller category of rural-urban fringe shack dwellers (110).

The interview schedule was fairly comprehensive, requiring interviews of between 40 and 60 minutes in length in urban areas and substantially longer in rural areas. It represents an attempt to cover all aspects of living which can elicit subjective reactions. As already indicated, the basic content for the items measuring subjective responses was derived from extensive qualitative work (BBDO, 1976) and from successive analyses of data derived from an
exploratory investigation in Durban (Moller and Schlemmer, 1983)).

The basic needs items were defined in terms of a comprehensive bundle and included items pertaining to the satisfaction of needs such as nutrition, clothing, housing, sanitation and health services, education, saving capability, access to employment, material consumption needs, household utilities, safety, transport, and opportunities for leisure and recreation. Assessments of needs satisfaction were made in terms of the household, or where appropriate, of the individual level of consumption of goods and services. (The interview schedule appears in Appendix 1 - English version.)

Details of the results of the fieldwork in terms of the basic characteristics of the samples obtained are presented in Appendix 2.

## 5. OVERALL EXPERIENCE OF PERCEIVED LIFE SATISFACTION ACCORDING TO RACE

### 5.1 A simple index of life satisfaction

In the analysis which follows in this section we will make the assumption that subjective scores among the different races have broadly the same subjective value for the different groups as indexes of quality of life. In other words, we assume that the ratings and measures mean the same thing irrespective of race. (This issue will be discussed further in a later section).

This assumption rests on the following. Firstly, the subjective measures used were standard across all groups and were carefully translated into respondents' home languages in such a way as to attempt to retain equivalence of meaning. Secondly, a factor analysis performed on the general indexes of well-being, which form the dependent variables in this study, revealed a very similar basic structure or patterning of responses irrespective of race. (See Appendix 3 for the results of the varimax rotation of factors by race.) Finally, all the measures used (see interview schedule in Appendix 1) have a "face validity" in the sense that they refer to simple and obvious aspects of daily life.

In other words, if one argues that the different races are not comparable in terms of the items used in this analysis, one is arguing, by implication, that if an African says that he or she is "very unhappy" it could mean something different to an Indian or white person saying that he or she is "very unhappy". Such an assumption would take the argument into such realms of subtlety that the analysis would be paralysed. We would argue that the results, because of the points made above, allow comparisons between groups to be made which are sufficiently valid to be useful.

Previous quality of life studies have tended to settle on the use of a few standard items for assessing overall, or general life satisfaction (see for example, Andrews and Withey, 1976 ; Campbell et al., 1976 ; Larson, 1978).

Similar phrasing was used in the present study in one of the overall measures: "Taking all things together, how satisfied are you with your life as a whole these days. On the whole would you say you are very satisfied, satisfied, dissatisfied or very dissatisfied?n The results by race and categories of urbanisation among blacks, appear in Table 1.

TABLE 1
OVERALL ASSESSMENT OF LIFE SATISFACTION ACCORDING TO RACE AND RURAL-URBAN STATUS AMONG BLACKS

|  | $\begin{aligned} & \text { tes } \\ & \% \end{aligned}$ | Indians \% | Coloureds | All <br> blacks \% | Township blacks \% | Rural fringe blacks \% | Homeland rural blacks \% | "White farm" blacks \% | Hoste blacks \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Very satisfied | 30 | 20 | 19 | 9 | 10 | 6 | 9 | 10 | 1 |
| Satisfied | 59 | 69 | 62 | 35 | 38 | 33 | 36 | 26 | 16 |
| Neither satisfied nor dissatisfied | 3 | 3 | 4 | 3 | 4 | 3 | 1 | 2 | 2 |
| Dissatisfied | 5 | 7 | 13 | 30 | 29 | 41 | 29 | 23 | 51 |
| Very dissatisfied | 2 | 1 | 2 | 22 | 18 | 17 | 24 | 38 | 30 |
| DK | 1 | 0 | 1 | 1 | 1 | 0 | - | 1 | 1 |
| N | 834 | 1316 | 970 | 2467 | 1516 | 110 | 436 | 299 | 105 |
| Dissatisfied <br> plus very <br> dissatisfied |  |  |  |  |  |  |  |  |  |
| Note: Difference in percentage totals due to rounding |  |  |  |  |  |  |  |  |  |

In previous research in the USA (Andrews and Withey, 1976) this single Item has been found to be as powerful as many more complex scales and indexes in predicting well-being.

The results make it quite plain that the major qualitative differentiation occurs between black (African) people and others. While coloureds are significantly less satisfied than whites (critical ratio $(C R)=5,45$ on proportion "very satisfied", $\mathrm{p}<0,01$ ) the overall difference is by no means dramatic. In terms of the proportions "very dissatisfied", Indians, coloureds and whites emerge as broadly on a par. It is black people who experience the really critical frustrations.

Taking the categories very dissatisfied and dissatisfied together, there is a distinct hierarchy of quality of life evident. Indians and whites are least discontented, followed by coloureds, then by urban blacks, rural homeland blacks, peri-urban shack-dwellers, blacks in white farming areas and hostel-dwelling migrant workers, who are most dissatisfied of all. All the differences are highly significant.

### 5.2 A composite index of subjective "global" measures of quality of life

Up to now we have assessed overall quality of life in terms of a single general indicator; overall life satisfaction (variable No 7 in Appendix 1). While this has yielded meaningful results and, as will be reported later in the next section (cf. Section 6) has allowed an exploration of the components contributing to quality of life, we have some hesitation in utilising a single indicator as an overall measure. We consider that it is particularly necessary to improve on the single indicator as a basis for any attempt at a ranking of the components of quality of life, which is the topic of the next section.

Three "global" measures of quality of life were included in the interview schedule. These are variable numbers 7, 94, and 113 in Appendix 1. In addition, a large number of slightly more specifically
phrased items were included, some referring to "personal" domains of living while others addressed particular reactions to the environment, such as anger, frustration, positive or negative expectations and mood, etc.

All these items had in common the fact that they do not directly refer to any material circumstances or particular institutional structures in society. In other words, they all relate to over-arching or comprehensive reactions to the environment at either the level of cognitive perception, mood or broad social-interpersonal experience.

These "personal" items; a total of 17 , were subjected to a factor analysis, along with a measure of savings ability, per capita household income and a combined total of the aggregation of all specific domain items. The results on a principal component analysis were inspected and the following emerged.

Among all races, the "general" factor accounted for between 46 and 60 percent of variance. Items with a loading of 0,40 and over on the general factor were variables which we considered could be combined into a composite "index of quality of life". Hence, quality of life, as operationalised, consists of the aggregate score on the variables in Appendix 1 numbered: 7, 113, 67, 72, 75 and 110. The items relating to intimate and personal issues (variables 77-82, 84-87, 8993) were excluded from the composite aggregate because they can be regarded as causally related to quality of life, i.e., independent variables.

We consider that the variables listed above are a sufficiently comprehensive combined index to reflect all salient aspects of subjectively experienced quality of life to serve as the global measure of "well-being" for the study.

### 5.3 A comparison of quality of life indicators according to race

Using the composite index of "global" quality of life allows certain comparisons to be made between quality of life indicators of various
types, as they pattern according to race. In Table 2 below we present a comparison between the following general indicators: per capita household income, a combined index of satisfaction ratings on specific "domains", a combined index of satisfaction ratings in the intimate and personal aspects of living and the composite score of subjective global quality of life.


The results in Table 2 show that none of the subjective ratings of quality of life show as large a gap in circumstances between the races as shown by the one objective indicator of per capita household income, on which the advantages which whites enjoy over blacks is approximately ten to one. The largest racial gaps in subjective rating occur in the apperception of specific domains of living: housing, occupations, services, amenities, etc.

In regard to global subjective assessments of quality of life, then, the effective cleavage is between blacks and all other groups, which is also the case in the personal and intimate sphere of life. The results suggest in regard to the latter measure that the structure of formal differentiation according to race in South African society does not penetrate through to the private sphere of consciousness as far as whites, coloureds and Indians are concerned. Even in this respect, however, blacks emerge as having a suppressed quality of life relative to other groups, although the distinctions are not as large as is the case in the more public domains.

The results also show how consistently the lives of rural blacks are constrained relative to the circumstances of the blacks who live in the major urban areas. In South Africa one cannot only refer to racial cleavages but one must also take account of the spatial inequality which arises out of the division of black society into urban and rural components.

In general terms, however, the wider cleavage between the races on the material indicator than on the subjective indicators illustrates the extent to which perceptions of well-being can be "buffered" by aspects of living not directly connected with social or economic structure.

## 6.THE COMPONENTS OF LIFE SATISFACTION WITHIN POPULATION CATEGORIES

In order to establish the relationship between overall quality of life as measured by the general item presented in Table 1 and satisfaction in regard to specific domains of living a variety of multi-variate inferential techniques were employed. These were multiple regression analysis, discriminant analysis, the analysis based on nominal classifications of data know as "chaid", the coefficient of weak monotonicity, and the smallest space analysis. A brief discussion of the assumptions and methodology employed in regard to each is provided in Appendix 4 drafted by co-author du Toit in consultation with the other authors.

In general a great deal of consistency emerged in the results of the various analytical techniques used. In Table 3 we present the domain variables inserted into the equations by the outcomes of the analyses according to the different methods. In each case (x) represents either the most statistically significant relationships or the strongest relationships emerging, with cut-off points so defined as to identify the most salient approximately 10 to 12 domain variables in each statistical operation.

[^6]| Variable No. | Regression Analysis | Discriminant Analysis | Chaid Anslysis | Coefficient of weak monotonicity | Smallest space analysis | Sum of salient relationships identified |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |



| Rural blacks | RB |
| :--- | :--- |
| Urban blacks | UB |
| Whites | $W$ |
| Coloured people | C |
| Indians | 1 |

The pattern of statistical outcomes in Table 3 suggests that the most consistently salient and "reliable" domain issues in quality of life across all groups are:

```
: ability to provide for family
: health
: quality and quantity of food
: comparisons with other races
: wages and incomes
: personal possessions
: financial security in old age
: dwelling adequacy
: education
: job opportunity
```

As we have already noted, perceived quality of life is most problematic and negative among blacks. In this group the 10 variables found to be most consistently salient, with rural and urban blacks combined, are:

```
: health
: ability to provide for family
: quality and quantity of food
: life compared to other races
: family happiness and peace
: job opportunities
: food prices
: education
: personal possessions
```

In the group in which quality of life is generally assumed to be least problematic, the whites, the most salient domain satisfactions are:
: health
: adequacy of dwelling
: financial security in old age
: personal possessions
: choice of where to live.

## 7. RANKING THE COMPONENTS OF QUALITY OF LIFE

Using the six-item composite index of global quality of life as a dependent variable (see Section 5.2), a number of multiple regression analyses were undertaken in order to broadly quantify the contribution of domain items to overall well-being. One regression was performed on the total sample and four others on each of the different racegroups separately.

In the regression analyses the following types of variables were inserted as independents:

- items referring to subjective satisfaction in particular domains of living; i.e. health, housing, religion, etc., as well as social services and amenities;
- an aggregate of 15 items referring to satisfaction with a range of self-worth and personal issues, i.e. sex life, enjoyment of friends, of recreation, self-confidence, esteem, etc., globally referred to as the "personal" component;
- two indexes of material welfare: the per capita household income in the respondent's home and whether or not the respondent was able to save money over the previous 12 months. It should be noted, however, that certain of the "domain" items referred to above also indicated respondents' assessments of their material circumstances; i.e. personal possessions, wages, and ability to provide for the family;
- the background variables of race, sex, age and educational level (race obviously features only in the combined regression for all groups).

The regression analyses performed were multiple step-wise regressions. The cases for which income data were not available were deleted from
the analysis but on other variables missing observations were assigned to neutral categories. All independent variables were recorded as dichotomous scales, except in the case of per capita household income which was a five-point ratio scale. The composite dependent variable was a five-point ordinal scale.

TABLE 4
RANKING OF THE TOP TEN OUT OF 45 COMPONENTS OF QUALITY OF LIFE AS DETERMINED BY REGRESSION ANALYSES ACCORDING TO RACE AND AREA: 10 VARIABLES WITH THE HIGHEST BETA VALUES


Table 4 continued
Urban blacks
Satisfaction with food
Personal issues
Perceived own/family health
Ability to provide for family
Availability of housing
Lack of respect from children(2
Education status
Medical services
Job security
Female status
15 variables in equation with
P 0,05
Adjusted R square $=0,30$
F $=45,67$ Significance 0,0001

## Rural blacks

(34) Perceived own/family health
a) Ability to provide for family
(25) Lack of religious fulfilment

Size of dwelling
Opportunities of finding work Satisfaction with food
Treatment at work
(46) Personal possessions
(32) Concern with privacy in home Access to facilities

15 variables in equation with p<0,05
Adjusted $R$ square $=0,40$
$\mathrm{F}=37,92$ Significance 0,0001

For this regression the Indian and coloured subsamples were reduced to bring them into rough proportion to the population distribution. Hence the total sample for this equation was 3916 (whites 834, blacks 2467, coloureds 485, Indians 130). After excıusion of cases with no income data and other incomplete cases the total sample was reduced to 3652. It should be noted, however, that rural blacks are underrepresented in the combined results.
a) (items $77-82,84-87,89-93$ )

The detailed results of the regression analyses are given in Appendix 5. Results in summary form are presented Table 4 above.

It is clear from the relatively low contributions to variance of the items included that quality of life is derived from a larger array of factors than those included in our study, which, however, was as comprehensive as any survey investigation of this nature could be. There are obviously many subtse and intangible influences on quality of life which are not encompassed in these regression components. Nevertheless, the variables covered in this investigation are those most relevant to public policy. We will return to the content which is not covered in the regression components in the next section.

The results above are in many respects much as one would anticipate. Quality of food, health, race-group or comparisons with other races, indices of income, family happiness and personal issues are of keynote salience among all groups.

The items which load in an unexpected direction (female status and lack of religious fulfilment among blacks and self-criticism as parent among all groups) are perplexing. As regards female status one would perhaps interpret the result as reflecting lower expectations among people who are accustomed to a lower quality of life in a male- dominated world. The implication of the other two variables is that people who have doubts about their parental and religious roles are more inclined to be satisfied with life than others. A possible explanation is that as overall life satisfaction rises, many people become aware that their role performance as parents could improve or that their spiritual or religious satisfactions could be deeper.

The significance of race in these results is noteworthy. Race and comparisons made with the lives of other races in a regression analysis is independent of the privileges and advantages with which race is correlated in South Africa. This means that race as an intrinsic satisfier or dissatisfier is among the more important components of quality of life. This would indicate that race has a
positive or negative "stigma" which either enhances or oppresses wellbeing in people's lives quite independently of its correlates.

Generally speaking the results emphasise the very great significance of the private, personal and family domains of life among all but the most disadvantaged group, the rural blacks. Material circumstances are obviously also critical, particularly among blacks and this is no surprise.

Of all the very specific issues, family health and personal health are of cardinal importance. Among black people and coloureds the size of the home (or privacy in the home, which amounts to the same thing) are very salient. This is only to be expected if one considers the stressful effect of large numbers of people in the typically very small homes which rank-and-file coloureds occupy in urban areas. Size of dwelling is salient mainly among rural blacks (it does not feature in the top ten items among urban blacks). This is surprising because of the fact that one normally assumes that rural blacks and urban fringe squatters can enlarge the size of their homes relatively easily. Possibly the large and complex families in rural homesteads impose space-related stresses which are not readily solved. This would be particularly true in the white rural areas where employers of black labour may restrict the number of structures per household. The response regarding size of the dwelling among rural blacks may be a surrogate for dissatisfaction about the type and quality of the home.

Among urban blacks educational status is positively correlated with quality of life. This tends to counter the hypothesis that bettereducated people have a higher degree of "relative" deprivation, and hence, greater feelings of dissatisfaction. Since education in a regression analysis is independent of its usual correlates, one must assume that higher education is a satisfier in itself, contributing to feelings of personal status and self-esteem.

## 8. THE ANATOMY OF QUALITY OF LIFE

It will be recalled that the regression analyses have revealed a relatively low overall contribution to variance by the individual components on the "global" dependent variable. We have alluded to the possibility that there are aspects of overall well-being which are not a product of accumulated or aggregate satisfaction or otherwise on individual domain issues.

In order to explore this vital feature more carefully we performed factor analyses on all the relevant variables assessed hitherto, bringing both the "global" and the specific domain issues into the equation. This operation was performed in order to see whether or not the general or "global" factors constitute an intrinsic component of quality of life in their own right. If this were the case then one may expect a low contribution by individual domain components to overall variance in a regression analysis. The factor analysis also assists in understanding the structure of subjective quality of life in other ways as well.

In Table 5 we present abridged results of the factor analyses and in Appendix 6 the full results with factor loadings are given.


Table 5 continued

| Civi | privileges and community serv | Non-blacks |  | Blacks |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | F2 | F10 | F14 | F13 | F10 |
| (48) | Government/municipal services | 0,388 | 0,468 | * | 0,389 | * |
| (50) | Roads | 0,334 | 0,305 | * | 0,431 | * |
| 60 | Police services | 0,708 |  | * | 0,403 | 0,388 |
| 65 | Safety from crime | 0,636 | 0.463 | , 250 | * | 0,608 |
| $(44)$ | Access to services | * | 0,483 | 0,252 | * | $\stackrel{*}{*}$ |
| (46) | Health services | * | 0,379 | 0,258 | * | * |
| (62) | Voting rights | 0,521 |  | 0,220 | * | 0,201 |
| (55) | Freedom of movement | 0,430 | * |  | * | 0,390 |
| Race | relations |  | F9 | F5 |  |  |
|  | Respect shown by other races Race relations |  | $\begin{aligned} & 0,671 \\ & 0,623 \end{aligned}$ | $\begin{aligned} & 0,695 \\ & 0,719 \end{aligned}$ |  |  |
| Hous | ing |  | F5 | F3 |  |  |
|  | Your dwelling |  | 0,655 | 0,525 |  |  |
|  | Availability of housing |  | 0,410 | 0,616 |  |  |
|  | Size of house |  | 0,660 | 0,661 |  |  |
| (59) | Choice of where to live |  | 0,474 | 0,341 |  |  |
| Fami |  |  | F7 | F8 |  |  |
|  | Respect from children |  | 0,778 | 0,584 |  |  |
|  | Parent role |  | 0,738 |  |  |  |
| Inti | mate relations |  | F6 | F12 |  |  |
| (81) Safety and security of marriage <br> (85) Closest relationship with a woman/man <br> (89) Sex life |  |  |  |  |  |  |
|  |  |  | 0,597 | 0,569 |  |  |
|  |  |  | 0,757 | 0,398 |  |  |
| Transport |  |  | F11 | F11 |  |  |
| (51) Transport costs |  |  | 0,524 | 0,539 |  |  |
|  |  |  | 0,327 | 0,587 |  |  |
| Food |  |  | F13 | F15 |  |  |
| (34) Food |  |  | 0,353 | 0,373 |  |  |

The results of the factor analysis are remarkably similar for blacks and no -blacks. A convenient presentation of the two sets of factors would be as follows, showing the high degree of correspondence in the structure of quality of life across race groups:

| Dimensions: | $\frac{\text { Non-blacks }}{\text { Factors: }}$ | $\frac{\text { Blacks }}{\text { Factors: }}$ |
| :--- | :---: | :---: |
| General well-being | 4 | 4,7 |
| Occupation | 1 | 1 |
| Material resources (including education | 8 | 2 |
| in the case of blacks) | 8 | 6,9 |
| Social integration and self-concept | 3 | $10,13,14$ |
| Civic privileges and community services | 2,10 | 5 |
| Race relations | 9 | 3 |
| Housing | 5 | 8 |
| Family | 7 | 12 |
| Intimate relations | 6 | 11 |
| Transport | 11 | 15 |
| Food | 13 |  |

We note from both sets of results that the "global" variables constitute factors in their own right, which we have termed "general well-being". In the light of this pattern it is not surprising that the regression analyses in the previous section revealed that the domain components together do not account for nearly the whole of quality of life as subjectively apperceived.

It is also apparent that there is considerable correspondence between the domain structure of quality of life as it emerges in the factor analysis and that which was posited a-priori in the design of the rating instrument. The classification of items into domains as defined beforehand appears in the next section in Table 6.

Differences between the a-priori classification and that revealed by the factor analyses are that in the latter religious life and health do not emerge as distinctly separate components, despite some importance in their contribution to overall quality of life. Sex life, according to the factor analyses, also appears as a fairly distinct component within the "intimate, private and social" domain in the prior classification.

While the factor breakdown for blacks and non-blacks clearly reveals results which are either similar, factor by factor, or reconcilable if factors are combined in one of the two groups, there are some interesting differences between the races. These differences do not reflect any meaningful disjunctive in modes of apperceiving day to day life between groups but relate rather to the levels of need satisfaction. In other words the divergences are rooted in socioeconomic patterns rather than deep cultural differences.

For example, "voting rights" is salient in our "civic" factor among non- blacks but as one would expect, among blacks with no local suffrage at the time of the study, it is a more marginal component in the factor. Then again, among non-blacks "ability to reach goals" is very, salient in the context of social life and self concepts, whereas among blacks it relates more to material survival, loading more strongly on the "material resources" factor.

The clearest example is in the "material resources" factor, in which education costs and opportunities to further education are salient among blacks, but among non-blacks, educational issues do not feature as salient because presumably their educational levels are high enough not to be an issue of material survival.

Another clear example is that in the "general well-being" factor health is salient among blacks but marginal among non-blacks, for whom health problems are not so serious as to generally affect overall life quality.

With these considerations in mind we turn to a more detailed inspection of the results of the individual item probes in the next section.

### 8.1 The domains of life quality

A full impression of the texture of differences between groups in South African society can only be obtained if one assesses reactions to the specific domains of living. The analysis in the previous section has shown that certain domain indicators make a substantial contribution to overall quality of life as experienced by people, while the majority of domains either singly or in combination form do not appear to have a substantial comprehensive effect on people's lives.

Nevertheless, the reactions to particular domains are very important in drawing attention to the specific ways in which the conditions and circumstances of life for different races are differentiated. In Table 6 a complete presentation is given of levels of satisfaction in specific domains according to race, classified in objective terms. The results must therefore be read in conjunction with the results of the factor analysis in the previous section.

## TABLE 6 LEVELS OF SATISFACTION IN SPECIFIC DOMAINS OF LIVING

## ACCORDING TO RACE

| Domains of living | Percentages perceiving themselves to |
| :--- | :---: |
| (Variable No) | be "satisfied" or "very satisfied" |

Whites Indians Coloureds Blacks
$\%$ \% \%

Health

| - Own and family health | (25) | 91 | 90 | 52 | 62 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| o Health and medical services | $(46)$ | 89 | 86 | 84 | 61 |

Housing

| O Own present dwelling | $(41)$ | 93 | 82 | 73 | 61 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| o Size of dwelling | $(49)$ | 89 | 74 | 64 | 32 |
| o Privacy in home | $(56)$ | 97 | 89 | 82 | 57 |
| O Availability of housing | $(43)$ | 65 | 57 | 43 | 38 |
| O Choice of where to live | $(59)$ | 89 | 69 | 57 | 48 |
| O Security of tenure | $(63)$ | 90 | 71 | 57 | 49 |
| O Housing costs | $(36)$ | 77 | 58 | 67 | 34 |

Community facilities

| - Govt./Municipal Services | (48) | 80 | 68 | 55 | 35 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| - Access to facilities | (47) | 87 | 94 | 84 | 63 |
| - Roads and streets | (50) | 85 | 67 | 60 | 34 |
| - Transport | (57) | 93 | 75 | 74 | 46 |
| - Transport costs | (51) | 63 | 37 | 44 | 20 |
| - Safety from crime | (65) | 77 | 50 | 41 | 34 |
| - Police services | (60) | 80 | 38 | 39 | 34 |
| - Water for daily needs | (44) | 95 | 97 | 96 | 61 |
| Family Life |  |  |  |  |  |
| - Family happiness and peace <br> - Parent role <br> - Respect from children | $(28)$ $(33)$ $(29)$ | 93 92 95 | 94 94 96 | 92 94 96 | 84 76 87 |
| Education |  |  |  |  |  |
| - Opportunity for further <br> education <br> - Education costs | $\begin{aligned} & (26) \\ & (30) \end{aligned}$ | 71 74 | 65 66 | 52 72 | 34 33 |
| Occupations |  |  |  |  |  |
| - Job availability | (39) |  |  |  |  |
| - Progress in work | (35) | 88 | 85 | 86 |  |
| - Independence at work | (88) | 92 | 88 | 87 | 61 |
| - Job security | (32) | 88 | 78 | 81 | 54 |
| - Treatment at work | (64) | 92 91 | 89 91 | 86 88 | 59 59 |
| Religious Life |  |  |  |  |  |
| - Your religious life | (31) | 88 | 96 | 94 | 80 |

TABLE 6 continued
Domains of living
(Variable No)

Percentages perceiving themselves to be "satisfied" or "very satisfied"

Whites Indians Coloureds Blacks
\% \%

Income

| - Wages and salaries | (27) | 70 | 55 | 57 | 24 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| - Ability to provide for family | (40) | 87 | 83 | 77 | 46 |
| - Insurance against sickness /death | (42) | 83 | 51 | 53 | 14 |
| - Income in old age | (45) | 73 | 47 | 47 | 12 |
| - Possessions | (58) | 92 | 86 | 85 | 44 |

## Food

| - The food you eat | (34) | 94 | 96 | 94 | 59 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| - Food prices | (38) | 67 | 14 | 14 | 8 |
| Socio Political Issues |  |  |  |  |  |
| - Voting rights | (6' ) | 90 | 31 | 20 | 27 |
| - Life compared with other races | (37) | 84 | 68 | 50 | 26 |
| - Respect from other races | (61) | 85 | 73 | 59 | 36 |
| - Relations with other races | (66) | 90 | 80 | 80 | 38 |
| - Freedom of movement | (55) | 96 | 76 | 68 | 48 |

Intimate, Private and Social Life
o Self confidence

- Yourself as a person (92)
- Peace of mind
- Trust in neighbours
- Trust in colleagues
- Respect in community
- Closeness and loyalty of friends
o Peer group adjustment
o Closest relationship with a woman/man
- Sex life
- Safety and security of marriage
- Spare time activity
c Fun in life
- Ability to reach goals
o Expectations of future
(79)
(80)
(78)
(93)
(86)
(82)
(84)
(85)
(89)
(81)
(90)
(91)
(87)
(77)

[^7]89

95
95
91
90
61
61
88
84
7654

An inspection of the results in the table shows that race is a differentiating variable in almost all domains. It is only in the areas of family life, religious life, self-concept, sexual and social relations that the results reveal a broad similarity of subjective life experience between the races.

We summarise the results below by identifying those issues where there is evidence of a serious problem, in the form of clear minority satisfaction in some group or another and where there appear to be statistically significant differences between the races. Percentage endorsements of satisfaction appear in brackets. Where two or more race groups have given similar results these are averaged for the presentation below:

- food prices (whites (67\%) vs all others (11\%), CR ${ }^{25}$ ) $=37,8$ )
- income security in old age (blacks (14\%) vs all others (60\%), CR $=34,9)$
- wages and salaries (blacks (24\%) vs all others ( $60 \%$ ), $C R=26,9$ )
- job availability whites ( $66 \%$ ) vs Indians and coloureds (41\%), CR $=12,4$, vs blacks ( $18 \%$ ), $\mathrm{CR}=17,4$ )
- voting rights (whites (90\%) vs all others ( $27 \%$ ), CR $=34,9$ - the fieldwork was conducted before the voting for the new tricameral parli ment - how the latter would affect results cannot be assessed)
- relations with other races (blacks (38\%) vs all others (83\%), CR $=34,6)$
- opportunity for further education (whites and Indians (67\%) vs coloureds ( $52 \%$ ), $C R=8,0$, vs blacks ( $34 \%$ ), $C R=9,7$ )
- education costs (blacks (33\%) vs all others (70\%), $\mathrm{CR}=27,5$ )
- safety from crime and police services (whites (79\%) vs all others ( $38 \%$ ), $C R=22,0$ )
- state services and roads (blacks (34\%) vs all others (69\%), CR = 26,0 )
- tr nsport costs (whites (63\%) vs Indians and colourds (40\%), CR = 11,4 , vs (blacks ( $20 \%$ ), $C R=15,1$ )
- housing costs (blacks (34\%) vs all others ( $66 \%$ ), $\mathrm{CR}=23,8$ )
- size of dwelling (blacks (32\%) vs all others (75\%), CR $=32,2$ )
- availability of housing (blacks and coloureds (39\%) vs Indians and whites ( $60 \%$ ), $C R=15,3$ )
- insurance against sickness and death (whites (83\%) vs Indians and coloureds ( $52 \%$ ), $C R=15,7$, vs blacks ( $14 \%$ ), $C R=28,0$ )
- life compared with other races (whites and Indians (74\%) vs coloureds ( $50 \%$ ), $C R=13,2$, vs blacks ( $26 \%$ ), CR 13,5)
- respect from other races (whites and Indians (78\%) vs coloureds (59\%), $C R=11,0$, vs blacks $(36 \%), C R=12,3)$

These results make it clear that whites, generally spea ing, have no serious problems in regard to perceived quality of life. Indians and coloured people experience(d) deprivation in regard to the franchise, food quality, crime and police services in their neighbourhoods and housing availability (coloureds). Blacks, however, appear to experience critical deprivation across a wide range of domains, including income, food, material security in old age, insurance against sickness and death, job availability, housing costs and availability, education costs, government services, the franchise and relations with other races. Blacks are the group among whom racediscrimination (i.e. relative deprivation) and absolute deprivation is very clearly perceived.
25. As can be seen from the critical ratio ( $C R$ ) all differences are significant; any critical ratio of more than 2,6 denotes a significance of $p<0,01$.

## 9. DEMOGRAPHIC VARIables AND QUALITY OF LIFE

Up to now the analysis has concentrated on differences according to race and rural-urban status. Other basic variables are also differentiating features in regard to quality of life in some instances. Detailed results of cross-tabulations according to income, age, sex and education are presented in Appendix 7.

A perusal of these results shows that among whites there are very few su_groups in which perceived deprivation becomes a critical issue. Only the following subgroups appear to have levels of satisfaction which are significantly and meaningfully lower than average on specific issues (percentage satisfaction in brackets):

| less than Std $7:$ | job availability (44\%) <br>  <br> food prices (17\%) |
| :--- | :--- |
| lowest income group: | job availability (57\%) |
| women | food prices (24\%) |

Among Indians significantly and meaningfully lower levels of satisfaction than average apply to the following subgroups:

males $\quad$ : voting rights ( $30 \%$ )
Among coloured people very similar patterns apply as is the case among
Indians, with the following subgroups evincing substantially lower
levels of satisfaction:

```
post matric : housing availability (34%)
    choice of where to live (39%)
    government services (39%)
    safety from crime (28%)
    police services (28%)
    voting rights (12%)
    freedom of movement (48%)
under 29 years :. respect from other races (52%)
lower income group : insurance against sickness and death (35%)
    income in old age (35%)
upper income group : safety from crime (33%)
    police services (29%)
    voting rights (15%)
    freedom of movement (52%)
```

The pattern of lower level satisfactions consistently applies also in the case of the black group. Here the rural-urban division adds a further dimension to the polarisation of subgroups whose satisfactions are significantly lower than others:

```
post matric/township blacks: housing availability ( \(28 \%\) )
roads and streets (25\%)
post matric and matric/
township blacks : police services (24\%)
more than Std 8/
rural blacks : roads and streets (25\%)
less than Std 7 : opportunity for further
    education (35\%)
    education costs (32\%)
    job availability (18\%)
    wages (22\%)
```

```
less than Std 7/rural blacks : health (53%)
    job security (49%)
    treatment at work (51%)
    ability to provide
    for family (39%)
    possessions (35%)
    food (46%)
    peace of mind (53%)
    ability to reach goals (44%)
males : government/municipal
    services (32%)
over 45 years/rural blacks : health (45%)
    transport (36%)
highest income group/
townsh
two lowest income groups
lowest income group/
rural blacks : possessions (32%)
```


## 10. CONCLUSIONS

A major general comment arising out of the results given above is that the social divisions between races in South Africa cannot be explained in terms of any single dimension of causality. Inequality in the life experience of typical members of the formally defined groups in South Africa results from a combination of social and economic factors.

Prominent among the factors are the dimensions which one has come to expect on the basis of both popular wisdom and scholarly analyses. These include material conditions, and the level of services and facilities, notably health and education services, but they also include the more subtle associations between racial status and social and personal esteem. Race clearly has elements in its configuration in South Africa which operate to oppress or enhance popular consciousness quite independently of the factors with which racial status is associated.

If results among blacks had yielded a completely uniform pattern of a lower degree of satisfaction than other groups we would have suspected that some form of "complaining ethic" or a culturally-derived tendency to cynicism and negativism had influenced the results. In Table 6, however, there are examples of items on which blacks give as high a satisfaction rating as other groups. There does not appear to be a "response set" which could explain our results. (See, for example, results in Table 6 on "self-confidence", "yourself as a person" and the general pattern of results on family life and sex life, where the levels of satisfaction in results for blacks are very high even though they are not quite as high as among other groups.)

Broadly speaking, however, the results also show that the felt inequality in South Africa is not quite as great as it could be if the experience of well-being was closedly linked only to material circumstances. There are a variety of social factors which serve to soften the experience of inequality.

This comment should not be interpreted to mean that the problems of racial inequality in South Africa are less serious than they are normally taken to be. The results in general show a remarkably pervasive and widespread experience of disadvantage across all domains of living which extends even into the more intimate and personal spheres of living. Clearly the need for social change and programmes of reform which will address these inequalities are very urgent indeed.

Nothing in the results we have reviewed in earlier sections suggests that the basic structure of subjective perceptions of quality of life is dissimilar for whites and blacks. We refer specifically to the factor analysis analysed in Section 8, in which there is a very surprising near-uniformity of factor structure between blacks and nonblacks. In terms of the basic mode of apperception of quality of life, all races in South Africa appear very largely to form part of the same psycho-social population. This enables us to proceed to the identification of items for a proposed instrument for systematic monitoring of quality of Iife across all communities in South Africa. It is to this issue which we now turn.

## 11. COMPILATION OF AN INSTRUMENT FOR THE MEASUREMENT OF QUALITY OF LIFE

Before proceeding to a selection of items for the instrument a few general points must be made. In the first place, every aspect of our analysis has suggested that the basic way in which the different races responded to the survey items was much more similar than dissimilar. This is reflected particularly in the ease with which the outcomes of the factor analyses could be reconciled for blacks and non-blacks. We are satisfied, therefore, that an instrument can be standard for all race groups provided that the relatively minor variations between groups are accommodated by the inclusion of a few specific items relevant to a particular population category.

A second general point is that a unified scale of items; i.e., a single dimension index, cannot be constructed. The results of our regression analyses have revealed consistent low contributions to overall variance on a composite "general" index of well-bei g. In other words, overall well-being or quality of life is not simply an aggregate of satisfactions in different domains of living. The factor analyses bear this out. A factor emerged which was dominantly composed of non-specific items. Therefore, overall well-being is a perception which to a substantial degree stands apart from specific grievances or satisfactions in everyday life. There is no quality of life which is the sum total of specific satisfactions.

This differentiation of general and domain satisfactions means that our intention of compiling a short but comprehensive index of quality of life has been effectively frustrated. We have to proceed by identifying both a general index and a series of domain indexes. We have to add to this, eparate "objective" measures of essential basic need fulfilment since conveniences and services like running water or housing are essential if health and social problems are to be avoided.

In selecting items for the index which is specified in Schedule I below we have employed the following criteria:
a) we have eliminated items which in a random split-half comparison revealed a non-identical distribution for both halves of the sample, on the grounds that their reliability is suspect;
2) we have selected items with the highest correlations on an itemwhole comparison, using the summed scores on each separate domain as the index for the "clusters" which appear in Table 5;
3) in addition we have consulted a very similar set of results, namely the factor loadings of each item on the $d$ main factor or factor combinations which emerged from a varimax rotation exercise (see Table 5);
4) in selecting items for the overall quality of life or the "general well-being" factor in Table 5, we have also consulted the results of our regression analyses (see Table 4) and the multi-method identification of items which related most closely to overall life satisfaction (see Appendix 4). We have also inspected a separate factor analysis of general items performed in order to arrive at our composite overall indicator of quality of life for use as a dependent variable in the regresion analyses (see Appendix 3);
5) finally we have had to use judgement in the inclusion of certain additional items to ensure that the instrument covers all issues which may be relevant to social policy or to a complete picture of the responses of people to their daily lives.

Schedule I includes the 33 items for the assessment of subjectively perceived quality of life in South Africa. Certain comments are necessary, although the major criteria for the inclusion of these items have been outlined.

Selection criteria:

|  | A |  |  | B |  |  |  | c |  |  |  | D |  |  |  | E |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| W | I | C | B | W | I | C | B | W | I | C | B | W | I | C | B | NB | B |
| , 00 | , 04 | ,00 | , 00 | , 51 | , 50 | ,52 | ,62 | , 39* | ,42* | . 46 | ,59" | n/a | n/a | n/a | n/a | , 48 | ,56 |
| , 00 | ,00 | , 02 | ,02 | , 59 | , 52 | , 56 | ,60 | , 49* | , 45* | ,53" | ,59" | n/a | n/a | n/a | n/a | ,53 | ,55 |
| , 01 | , 05 | ,00 | , 02 | . 67 | , 70 | . 69 | ,58 | ,66 | ,70 | ,68 | ,65 | n/a | n/a | n/a | n/a | , 50 | , 52 |
| , 02 | , 01 | , 00 | , 01 | ,60 | , 66 | ,65 | ,65 | ,59 | ,68 | ,64 | ,69. | n/a | n/a | n/a | n/a | , 43 | ,61 |
| , 02 | ,01 | , 02 | ,00 | , 35 | , 48 | ,29 | , 55 | , 14 | ,26 | , 08 | , 37 |  | , 12 |  | , 17 | ,23 | ,45 |
| , 03 | , 03 | , 01 | , 01 | , 67 | . 62 | .62 | , 62 | ,36 | ,38 | , 39 | , 40 | n/a | n/a | n/a | n/a | , 44 | ,28 |
| ,00 | , 01 | ,03 | , 02 | ,35* | , 36* | , 32* | ,21* | ,26 | ,24 | ,23 | , 10 | ,13 | , 12 |  |  | , 28 | , 13 |
| s,00 | , 02 | ,04 | , 01 | ,24* | ,28* | ,24* | . $33 \times$ | , 18 | ,20 | , 22 | ,28 | , 10 | , 12 |  |  | , 16 | , 20 |

## GENERAL HELLLBEING

| 7) | Core items |  |  |  |  |  |  |  |  |  |  | 46* |  |  |  |  |  |  | 56 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (113) | Global happin | , 00 | , 00 | , 02 | , 02 | , 59 | , 52 | , 56 | , 60 | , 49 | , 45* | , 53 " | , $59{ }^{\text {* }}$ | n/a | n/a | n/a | n/a | ,53 | , 55 |
| (72) | Rewarding/frustrating life | , 01 | , 05 | , 00 | , 02 | . 67 | , 70 | . 69 | , 58 | ,66 | ,70 | ,68 | ,65 | n/a | n/a | n/a | n/a | . 50 | , 52 |
| (75) | Life getting better/worse ${ }^{\text {a }}$ | ,02 | , 01 | ,00 | ,01 | ,60 | ,66 | , 65 | ,65 | , 59 | ,68 | ,64 | ,69. | n/a | n/a | n/a | n/a | , 43 | ,61 |
| 1.2 | Related issues |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (25) | Own or family, health | , 02 | , 01 | . 02 | , 00 | , 35 | , 48 | ,29 | , 55 | , 14 | ,26 | , 08 | , 37 |  | , 12 |  | , 17 | , 23 | , 45 |
| (91) | Fun in life | ,03 | . 03 | , 01 | , 01 | . 67 | . 62 | . 62 | . 62 | , 36 | , 38 | , 39 | . 40 | n/a | n/a | n/a | n/a | , 44 | , 28 |
| (28) | Family happiness and peace | ,00 | . 01 | , 03 | , 02 | , 35* | , 36 " | , 32* | ,21" | , 26 | , 24 | , 23 | , 10 | , 13 | , 12 |  |  | , 28 | , 13 |
| 37) | Life compared with other races | 00 | , 02 | , 04 | . 01 | ,24* | ,28* | ,24* | .33* | , 18 | ,20 | , 22 | ,28 | , 10 | , 12 |  |  | , 16 | ,20 |

## DOMAINS

2. Occupation

| (88) | Independence at work | , 01 | , 04 | , 06 | , 01 | , 86 | ,89 | ,87 | , 84 | , 10 | , 17 | , 13 | , 22 |  |  |  |  | , 77 | , 72 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (64) | Manner treated at work | ,03 | , 01 | , 01 | ,02 | ,88 | ,85 | ,88 | , 86 | , 16 | , 19 | , 13 | , 21 |  |  | . | . 06 | , 75 | ,77 |
| 3. | Material resosurces |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (40) | Ability to provide for family | , 04 | . 03 | ,02 | ,02 | ,66 | ,58 | ,61 | , 70 | , 18 | ,29 | , 30 | ,42 |  |  | , 10 | , 15 | . 42 | ,51 |
| (42) | Family income in case of gickness/death | , 02 | . 01 | . 01 | . 01 | ,61 | , 65 | , 73 | , 56 | , 16 | ,23 | ,28 | ,23 |  | , 07 |  |  | . 62 | 48 |
| (45) | Old age income | , 00 | , 01 | , 05 | ,00 | , 59 | ,65 | ,69 | , 58 | ,19 | , 21 | , 25 | , 21 |  |  |  |  | , 58 | , 54 |
| (27) | Salaries and wages | ,08 | , 01 | , 02 | ,04 | . 39 * | , 40 | , 38* | ,32* | ,17 | ,24 | ,20 | , 17 | , 07 |  |  |  | ,22 | . 33 |
| (39) | Opportunities for finding work | . 03 | , 08 | , 02 | , 00 | .40* | ,31* | , 35* | , 38* | , 14 | , 16 | , 18 | , 32 | . 07 |  |  | ,06 | , 10 | , 24 |
| 4. | Social integration and self-concept |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (86) | Respect in community | , 02 | , 02 | , 03 | ,01 | ,49 | ,51 | ,60 | ,51 | , 15 | , 11 | ,26 | , 17 |  |  |  |  | , 47 | , 45 |
| (84) | Peer group adjustment | . 05 | . 02 | . 01 | . 01 | , 59 | , 49 | , 55 | , 52 | , 24 | , 19 | , 20 | , 14 |  |  |  |  | , 44 | , 56 |
| (82) | Closeness/loyalty of friends | , 02 | , 03 | . 02 | , 02 | , 55 | , 51 | , 46 | , 49 | , 21 | ,23 | ,20 | , 04 |  |  |  |  | , 41 | , 47 |
| (90) | Spare time activities | , 03 | . 01 | , 02 | ,00 | ,60 | . 61 | . 57 | , 57 | , 24 | ,28 | ,24 | , 24 |  |  |  |  | , 44 | , 30 |
| (92) | Yourself as a person | , 01 | , 01 | . 03 | , 02 | ,59 | ,61 | , 57 | ,53 | ,22 | ,24 | , 20 | , 31 |  |  |  |  | , 47 | ,58 |
| 5. | Civic privileges and comurity services |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (48) | Government/municipal services | , 01 | , 02 | , 00 | ,00 | , 52 | ,67 | .68 | ,61 | ,09 | , 17 | , 06 | ,20 |  |  |  |  | , 47 | , 39 |
| (65) | Safety from crime | , 03 | , 02 | , 03 | ,00 | , 51 | , 57 | ,68 | ,63 | , 08 | , 18 | , 18 | , 19 |  |  |  |  | , 64 | . 61 |
| (62) | Voting rights | , 01 | , 02 | , 04 | , 01 | , 50 | , 45 | , 47 | , 41 | , 15 | , 10 | , 08 | , 06 |  |  |  |  | , 52 | , 22 |
| (55) | Freedom of movement | , 03 | , 04 | . 05 | . 03 | , 47 | ,49 | , 57 | ,65 | , 14 | , 21 | ,23 | . 33 |  | , 09 |  |  | , 43 | , 32 |
| 6. | Race relations |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (61) | Respect from other races | , 03 | , 04 | , 01 | , 02 | , 88 | , 89 | , 92 | . 92 | , 15 | , 15 | , 16 | , 19 |  |  |  |  | , 67 | , 70 |
| (66) | Race relations | , 04 | . 03 | , 00 | ,01 | ,81 | ,80 | , 83 | , 91 | , 14 | , 21 | , 20 | , 20 |  |  |  |  | , 62 | , |

Selection criteria:

|  |  | A |  |  |  | B |  |  |  | C |  |  |  | D |  |  | E |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| W | I | c | B | W | I | c | B | H | I | C | B | H | I | c | B | NB | B |
| . 01 | , 01 | . 04 | . 01 | . 67 | . 67 | , 74 | . 69 | , 19 | , 20 | , 26 | , 25 |  |  |  |  | ,66 | , 53 |
| , 01 | , 04 | , 04 | , 01 | , 65 | , 75 | , 69 | , 73 | , 10 | , 13 | , 16 | , 22 |  |  |  |  | , 41 | , 62 |
| , 05 | , 04 | , 04 | , 03 | , 67 | . 72 | ,77 | . 68 | , 14 | , 16 | , 18 | , 15 |  |  |  | , 06 | , 66 | ,66 |
| . 01 | , 01 | , 04 | , 01 | . 68 | , 72 | , 70 | ,62 | , 22 | , 20 | , 18 | , 23 |  | , 09 |  |  | , 47 | . 34 |
| , 02 | ,02 | , 01 | ,03 | , 81 | , 72 | , 84 | . 75 | , 23 | , 17 | , 22 | , 11 |  |  |  |  | , 60 | , 57 |
| . 04 | , 02 | ,02 | , 01 | , 89 | , 87 | , 88 | . 73 | , 11 | , 21 | , 16 | , 17* |  |  |  |  | , 52 | , 54 |
| , 07 | , 01 | . 04 | , 00 | 1,00 | 1,00 | 1,00 | 1,00 | ,23 | , 18 | ,23 | , 34 | , 12 |  | , 16 | , 16 | , 35 | , 37 |

## 7. Housing

(41) Your dwelling
(43) Availability of housing
(49) Size of house
(59) Choice of where to live
8. Intimate relations
(85) Closest relationship with a man/woman
9. Transport
(51) Transport costs
10. Food
(34) Food

All values are rounded

## W Whites

I Indians
C Coloureds
B Blacks
N Non-blacks
Selection criteria:
A Split-half reliability comparison: Kendall's Tau, not applicable cases omitted. Absolute values (1.e. negative signs omitted)

B Correlation between item and factor (domain) aggregate on varimax rotation: Spearman's Rho, not applicable cases in neutral category, $n=857$ for all groups with random elimination of cases unless otherwise indicated.

C Correlation between item and composite index of overall well-being: Spearman's Rho, not applicable cases in neutral category, $n=760$ for all groups with random elimination of cases unless otherwise indicated.

D Beta coefficients in multiple regression equation with composite index of overall well-being as dependent, highest ten coefficients only selected.

E Loading on individual factors (similar factors grouped with highest loading taken) derived from varimax rotation.

- $n=W 834$, I 1316, C 970, B 2467.
a) These items were aggregated to form the dependent composite index of overall well-being in the regression analysis Hence no values are avallable on D.
b) Although this item was not entered individually into the aggression analyses, it formed part of an aggregate of "personal issues" which revealed high loadings on general well-being. "Fun in life" also emerged in a factor analysis of these personal issues to have among the highest loadings on an unrotated general factor. Hence it is closely aligned with the personal concerns which are part of overall well-being.

The global dimension, or general well-being is subdivided into the core items and a few related issues which did not form part of factors in earlier factor analyses but which were found in the regression and multi-variate exercises (Section 6: Table 3 and Appendix 4) to contribute meaningfully to overall well-being. These comprise own and family health, family happiness and peace, fun in life and life compared with other races.

No clear statistical factors emerged in three domains which we had originally postulated on objective grounds. Two family items relating to parental role and respect from children emerged as a factor but curiously revealed an inverse relationship to overall quality of life and hence had to be omitted from Schedule $I$. The item "family happiness and peace" does not constitute a factor in distinction to other issues but instead is aligned to general wellbeing as a contributing concern. Therefore it appears under global quality of life.

Similarly health concerns are not identifiable as a distinctive sphere of concern in the statistical analysis but the term "own and family health" contributed to global quality of life in the regression analysis and is included under this heading. "Life compared with other races" (as distinct from the factor of race relations) was also not a separate factor but has been included under the global factor in response to its contribution to variance in the regression analysis. A reason for this was that comparisons between races are conceptually distinct from race relations as such.

The item "fun in life, as note b) in the schedule implies, is the central item in a cluster of personal concerns which, as an aggregate contributed meaningfully to global quality of life in the regression analyses. Hence it too is included as an issue related to general well-being.

Under the domain of material resources, two items "salaries and wages" and "opportunities for finding work" have been included despite not quite meeting the criteria set for the other terms. This is
because they are such vitally important issues in this sphere and also were among the higher-loading items on the regression analysis against the dependent variable of general well-being. It will be noted that the item referring to opportunities for finding work has been rephrased for the final instrument with a view to overcoming the shortcomings of the original item.

There are some noteworthy omissions from the list of items in Schedule I. Religious satisfaction revealed a negative relationship to general well-being on the regression analysis among blacks, and a positive relationship among whites. It is therefore a highly ambiguous issue in quality of life. It also did not prove to be a factor on its own in our factor analyses - in fact it combined with the family items which produced the curious results referred to above. On empirical grounds, therefore, it has been omitted.

Education is a_so omitted in Schedule I. Our education items were not reliable among blacks because they may not have applied to mature-age adults. Among blacks, furthermore, the education items seem to have a largely material significance, as demonstrated by the factor analyses, while among non-blacks they form a very weak education factor. Nevertheless, because of the policy significance of this issue we have formulated a modified item for inclusion in the final instrument ("your education" is the suggested working.

In the suggested interview schedule resulting from these analyses and statistical exercises, given below, we have also included major "objective" issues like inco e, age, sex, level of education, population category, etc., as well as items relating to the fundamental basic needs. Per capita household income, in any event proved to contribute to general well-being in our regression analyses.

## an instrument for the measurement of quality of life in south africa

## SUBJECTIVE INDICATORS

(1) Taking all things together how satisfied are you with your life as a whole these days? On the whole would you say you are very satisfied, satisfied, dissatisfied, or very dissatisfied?
(Coded in the following response categories: Very satisfied/satisfied/dissatisfied/very dissatisfied/ neither satisfied nor dissatisfied/ don't know)
(2) Taking all things together in your life, how would you say things are these days? Hould you say you are very happy, fairly happy, fairly unhappy, or very unhappy these days?
(Coded in the following response categories: Very happy, fairly happy/ fairly unhappy/ very unhappy/ neither happy nor unhappy/ don't know)

I'm going to give you some pairs of words which could describe how your life is at present. Would you tell me which one word in each pair of words best describes the life you are leading now?
(INTERVIEWER: READ OUT EACH PAIR OF WORDS IN A NEUTRAL TONE OF VOICE OBTAINING SPONTANEOUS REACTIONS. CIRCLE THE WORD IN EACH PAIR WHICH THE RESPONDENT PICKS.)

| (3) Rewarding | or | frustrating |
| :--- | :--- | :--- |
| (4) Getting worse | or | getting better |

(Coded in the following response categories: Rewarding; getting better/frustrating; getting worsel in between the two/ don't know)

```
I will read to you a number of aspects/parts of people's lives. I would like you to tell me how satisfied you are with each aspect/ part.
You should tell me whether you are:
```

- very satisfied
- satisfied but not very satisfied
- dissatisfied but not very dissatisfied
- very dissatisfied

If the part I mention is not important enough to be concerned about, say

- not important.
(INTERVIEWER: WITH SOME RESPONDENTS SOME ITEMS WILL BE NOT APPLICABLE - IF THE RESPONDENT INDICATES THIS IS THE CASE MARK "NOT APPLICABLE")
(Coded in the following response categories: very satisfied/satisfied/dissatisfied/very dissatisfied/neither satisfied nor dissatisfied/don't know/not important/ not applicable)
(Note: the following items should be randomly ordered in a questionnaire schedule. The order given here is only for a good overview of the range of aspects covered.)
(5) Your health or your family's health
(6) The fun you get out of life
(7) Your family's happiness and peace
(8) Your life compared with other races
(9) The independence you have at work
(10) The way you are treated at work
(11) The way you are able to provide for your family
(12) Your family's income if you are sick or die
(13) Your income when you are old
(14) Your education
(15) Your salary/wages
(16) Hork opportunities for people who need it
(17) The respect you get in your community
(18) How you fit in with your age group
(19) The closeness and loyalty of your friends
(20) Your spare time activities
(21) Yourself as a person
(22) Government and/or municipal services in your community
(23) Your safety from crime
(24) Your voting rights
(25) Your freedom of movement
(26) The respect shown to you by other races
(27) The way you get on with other races
(28) Your dwelling here
(29) The housing available for people like you
(30) The size of your house
(31) Your choice of where to live
(32) Your closest relationship with a man/woman
(33) Your transport costs
(34) The food you eat

MINIMUM OBJECTIVE INDICATORS AND BACKGROUND VARIABLES
(Phrasing dependent upon particular investigation)

1) Age
2) $\operatorname{Sex}$
3) Marital status
4) Population category
5) Home language
6) Level of education
7) Employment status

- employment
- voluntary unemployment
- involuntary unemployment

8) Type of employment

- formal
- informal

9) Occupational level
10) Own income
11) Household income
12) Household size
13) Per capita household income derived from 11) and 12)
14) Urban-rural domicile

- urban
- peri-urban
- Pural

15) Security of tenure

- legal (including traditional tenure)
- informal
- illegal

16) Homeownership

- owner
- renter

17) Type of housing

- house (including townhouse, maisonette, semi-detached dwelling)
- apartment/tenement flat
- room
- hostel/compound
- shack
- traditional rural homestead

18) Availability of formal services: (excluding tribal areas)
a) piped water
b) sewerage
c) electricity

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## APPENDIX 1

## .INTERVIEW SCHEDULE

Item numbers referred to in the main text are given in brackets in the margin.


HUMAN SCIENCES RESEARCH COUNCIL


## OPINION SURVEY CENTRE

## A SURVEY CONCERNING QUALITY OF LIFE: 1982

The Human Sciences Research Council, the Council for Scientific and Industrial Research, and certain universities are making a study of the problems and satisfactions in people's lives. This study is being undertaken amongst all population groups in South Africa. We are going to publish a report on the resuits. We hope that industry, commerce, the government and the general public will read this report and will be infomed as to how people live. We intend to repeat this survey in approximately a year.

The answers you give will be completely confidential. We are not interested in your name and we will not keep your address after the study is over. All the answers given by individual people like you are added together on a computer and results are given for groups like younger people, older people, urban people, rural people, etc.

## Co-worker's No.

Card No.


## THE RESPONDENT'S HOUSEHOLD

1 Number of people who belong to this household - that is all the people who cook and eat together. (Please include people who are temporarily away from home - at school or working - and exclude visitors who are here for less than one month.)

2 Number of people 18 years and older in this household:

3 Number of children under 11 years of age.

4 Number of people lodging with family - that is paying lodgings and eating in this household.

5 Number of people temporarily sleeping away; at school, in the army, working or visiting elsewhere, etc.

## LIFE SATISFACTION

6 Taking all things together, how satisfied are you with your life as whole these days? On the whole would you say you are very satisfied, satisfied, dissatisfied, or very dissatisfied?
$\left.\begin{array}{|c|c|c|c|c|c|}\hline \text { Very satisfied } & \text { Satisfied } & \text { Dissatisfied } & \begin{array}{l}\text { Very dissatis- } \\ \text { fied }\end{array} & \begin{array}{l}\text { Neither satisfied } \\ \text { nor dissatisfied }\end{array} & \text { Don't know }\end{array}\right\}$

* Tell me how important each of the following is to you in your life generally?

|  | Of very great importance | Of some importance but not of very great importance | Of lesser importance |  |
| :---: | :---: | :---: | :---: | :---: |
| Your religious beliefs | 1 | 2 | 3 | 24 |
| Your income | 1 | 2 | 3 | 25 |
| Political affairs | 1 | 2 | 3 | 26 |
| Your friendships with people | 1 | 2 | 3 | 27 |
| Your education or knowledge | 1 | 2 | 3 | 28 |
| Your status in your community | 1 | 2 | 3 | 29 |
| Your work or career | 1 | 2 | 3 | 30 |
| Your own group's language and customs | 1 | 2 | 3 | 31 |
| Your marriage or love relationship | 1 | 2 | 3 | 32 |
| Your spare time and leisure interests | 1 | 2 | 3 | 33 |
| Your children's future | 1 | 2 | 3 | 34 |
| Your house or land, and what is in it | 1 | 2 | 3 | 35 |
| Your relationships with other races | 1 | 2 | 3 | 36 |

8 Think of your life - all parts of it. Which two parts of your life are best - the two parts which make you feel most happy or satisfied?

9 Which two parts of your life are worst - the two parts which make you feel most unhappy or dissatisfied?
(1) $\qquad$
$\qquad$
(2) $\qquad$
$\qquad$
$\square$

- 10 I will read to you a number of aspects/parts of people's lives. I would like you to tell me how satisfied you are with each aspect/part.

You should tell me whether you are:

- very satisfied
- satisfied but not very satisfied
- dissatisfied but not very dissatisfied
- very dissatisfied.

If the part I mention is not important enough to be concerned about, say:

- not important.
(INTERVIEWER: HITH SOME RESPONDENTS SOME ITEMS WILL BE NOT APPLICABLE - IN THESE CASES MARK "NOT APPLICABLE")

17) 

| - | Very satisfied | Satisfied | Dissatisfied | Very <br> dissatis- <br> fied | Neither satisfied nor dissatisfied | Don't <br> know | Not important | Not applicable |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Your health or your family's health | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 45 |
| Opportunities for furthering your education | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 46 |
| Your wages | 1 | $\cdot 2$ | 3 | 4 | 5 | 6 | 7 | 8 | 47 |
| Your family's happiness and peace | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 48 |
| Your children's respect for you | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 49 |
| The costs of education for yourself or your family | $\dagger$ | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 50 |
| Your religious life | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 51 |
| Your job security | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 52 |
| How good a parent you are | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 53 |
| The food you eat | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 54 |
| The progress you are making in your work | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 55 |
| The rent you pay | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 56 |
| Your life compared with other races | 9 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 57 |
| Food prices | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 58 |
| Opportunities for finding work | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 59 |

- 11 I have some further questions I wish to ask. Could you tell me how satisfied you are with other aspects/parts of your life? Are you:
- very satisfied
- satisfied but not very satisfied
- dissatisfied but nat very dissatisfied
- very dissatisfied.

| - very dissatisfied. | Very satisfied | Satisfied | Dissatisfied | Very dissatisfied | Neither satisfied nor dissatisfied | Don't know | Not <br> important | Not applicable |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| The way you are able to provide for your family | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 60 |
| Your dwelling here | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 61 |
| Your family's income if you are sick or die | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 62 |
| The housing available for people like you | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 63 |
| Water for your daily needs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 64 |
| Your income when you are old | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 65 |
| Health and medical services | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 66 |
| The distance of shops, schools, transport and other services | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 67 |
| Government and/or municipal services in your community | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 68 |
| The size of your house | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 69 |
| The roads in your neighbourhood | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 70 |
| Your transport costs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 71 |

(41)
(42)
(43)
(44)
(45)
(47)
(48)
(49)
(50)
(51)
(55)
(56)
(57)
(58)

|  | Very satisfied | Satisfied | Dissatisfied | Very <br> dissatis- <br> fied | Neither <br> satis- <br> fied nor dissatisfied | Don't <br> know | Not important | Not applicable |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Your freedom of movement | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 2 |
| The privacy in your house | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 3 |
| The transport you use most | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 4 |
| Your personal possessions things you have been able to buy | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 5 |
| Your choice of where to live | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 6 |
| Police services in your neighbourhood | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 7 |
| The respect shown to you by pther races | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 8 |
| your voting rights | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Your security of tenure where you live | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 10 |
| The way you are treated at work | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 11 |
| Your safety from crime | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 12 |
| The way you get on with other races | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 13 |

12 I'm going to give you some pairs of words which could describe how your life is at present. Would you tell me which one word in each pair of words best describes the life you are leading now?
(INTERVIEWER: READ OUT EACH PAIR OF WORDS IN QUICK SUCCESSION IN A NEUTRAL TONE OF VOICE OBTAINING SPONTANEOUS REACTIONS. CIRCLE THE WORD IN EACH PAIR WHICH THE RESPONDENT PICKS.)

|  |  |  | "In between" the two | Don't know |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 |  | 2 | 3 | 4 |  |
| Miserable | or | happy | 3 | 4 | 14 |
| Fun | or | dull | 3 | 4 | 15 |
| Unfriendly people | or | friendly people | 3 | 4 | 16 |
| Safe and secure | or | insecure | 3 | 4 | 17 |
| Lonely | or | not lonely | 3 | 4 | 18 |
| Rewarding | or | frustrating | 3 | 4 | 19 |
| Not free | or | free | 3 | 4 | 20 |
| Relaxing | or | tiring | 3 | 4 | 21 |
| Getting worse | or | getting better | 3 | 4 | 22 |
| Interesting | or | boring | 3 | 4 | 23 |

* 13 I will read to you a number of things which people have told us are important to them. I would like you to tell me how satisfied you are that your life has these advantages. You should tell me whether you are:
- very satisfied
- satisfied but not very satisfied
- dissatisfied but not very dissatisfied
- very dissatisfied.

How satisfied are you with:

|  | Very satisfied | Satisfied | Dissatis- <br> fied | Very <br> dissatis- <br> fied | Neither satisfied nor dissatisfied | Don't know | Not import ant | Not <br> applic- <br> able |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| your expectations for the future? | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 24 |
| the trust you have in people around you where you live? | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 25 |
| your self-confidence? | 1 | 2 | 3 | 4 | 5 | 6 | 7 | B | 26 |
| your peace of mind? | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 27 |
| the safety and security of your marriage? | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 28 |
| the closeness and loyalty of your friends? | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 29 |
| the respect you get from your superiors at work? | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 30 |
| how you fit in with your age group? | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 34 |
| your closest relationship with e man/woman? | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 32 |
| the respect you get in your community? | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 33 |
| your ability to reach your goals if you try? | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 34 |
| the independence you have at work? | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 35 |
| your sex life? | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 36 |
| your spare time activities? | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 37 |
| the fun you get out of life? | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 38 |
| yourself as a person? | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 39 |
| the trust you have in people where you work? | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 40 |

* 14 Here are some statements of how (Black/Indian/Coloured/White) people like you could feel about life for (Blacks/Indians/Coloureds/Whites) in South Africa.

Which statement shows how you feel about life in South Africa?

| Very happy | Fairly happy but <br> not very happy | Unhappy | Angry and <br> impatient | Nef ther happy <br> nor unhappy | Don't know |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 | 6 |

seldom or never feel ...

|  | Often | Some- <br> times | Seldom | Never | Don't <br> know |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| restless, fidgety or tense? | 1 | 2 | 3 | 4 | 5 | 42 |
| boiling inside with anger? | 1 | 2 | 3 | 4 | 5 | 43 |
| proud because others compliment you on things you do? | 1 | 2 | 3 | 4 | 5 | 44 |
| frustrated about not being able to do something you need to do? | 1 | 2 | 3 | 4 | 5 | 45 |
| very excited and interested in something? | 1 | 2 | 3 | 4 | 5 | 46 |
| tired in the mornings before you start the day? | 1 | 2 | 3 | 4 | 5 | 47 |
| bored with life? | 1 | 2 | 3 | 4 | 5 | 48 |
| unhappy and almost tearful? | 1 | 2 | 3 | 4 | 5 | 49 |
| pleased that things are going your way? | 1 | 2 | 3 | 4 | 5 | 50 |
| worried or a little frightened about something you can't describe? | 1 | 2 | 3 | 4 | 5 | 51 |
| very lonely or feel far away from other people? | 1 | 2 | 3 | 4 | 5 | 52 |
| pleased about having accomplished something? | 1 | 2 | 3 | 4 | 5 | 53 |
| impatient? | 1 | 2 | 3 | 4 | 5 | 54 |
| upset because people criticise you? | 1 | 2 | 3 | 4 | 5 | 55 |
| angry because you feel you are treated badly? | 1 | 2 | 3 | 4 | 5 | 56 |
| that life is very good? | 1 | 2 | 3 | 4 | 5 | 57 |
| in despair that things will never improve? | 1 | 2 | 3 | 4 | 5 | 58 |
| that there is no one you can rely on for help and support? | 1 | 2 | 3 | 4 | 5 | 59 |

Taking all things together in your life, how would you say things are these days? Would you say you are very happy, fairly happy, fairly unhappy, or very unhappy these days?

| Very happy | Fairly happy | Fairly un- <br> happy | Very unhappy | Neither happy <br> nor unhappy | Don't know |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 | 6 |

## NUTRITION

17 During the past month, how often have you eaten/drunk:

$(122,123)$
$(124,125)$
$(126,127)$

|  | Number new Number second-hand | Number second-hand |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Trousers/skirt/frock or equivalent |  |  |  |  |
|  |  |  | 2-3 | 4-5 |
| Jacket/coat |  |  |  |  |
|  |  |  | E-7 | 8-9 |
| Shoes |  |  |  |  |
|  |  |  | 10-11 | 12-13 |

## MOUSING (Present accommodation of respondent)

(INTERVIEWER: DESCRIBE OR ASK QUESTIONS IF NECESSARY)

19 Type of dwelling of respondent.

| Detached | 01 |
| :---: | :---: |
| Semi-detached or terraced | 02 |
| Flat or maisonette | 03 |
| Flat in high-rise apartment block | 04 |
| Outhouse or garage | 05 |
| Shack | 06 |
| Hut | 07 |
| Rented room in house | 08 |
|  |  |

(a) Is dwelling occupied by househoid owned or rented?

## SANITATION AND HEALTH (Interviewer describe or ask)

## Type of toilet used at residence.

 household allocated?How long does it take you to get there?

| Owned (has deed or certificate) - fully paid | 1 |
| :--- | :---: |
| Owned (has deed or certificate) - paying off | 2 |
| Rented | 3 |



(b) In respect of Blacks only: By whom was the stand/dwelling occupied by your

| Not applicable | By chief/headman | By someone else |
| :---: | :---: | :---: |
| 0 | 1 | 2 |

How do you normally get to your doctor/the nearest health clinic/hospital?

| On foot | 1 |
| :---: | :---: |
| By bicycle | 2 |
| By train/bus | 3 |
| By private car/motor cycle | 4 |
|  |  |



| Less than 15 minutes | $15-29$ minutes | $30-59$ minutes | $1-2$ hours | More than 2 hours |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 |

Does your doctor/the health clinic/the hospital accept patients every day of the week?

| Yes, every day | Only 2-3 times <br> per week | Only once <br> a week | Less often than once <br> a week |
| :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 |

27 How does/do the child/ren in this household normally get to the school which is farthest away?

Is this a primary, secondary or higher level school?

| Not applicable | Primary | Secondary | Higher level school | 26 |
| :---: | :---: | :---: | :---: | :--- |
| 0 | 1 | 2 | 3 |  |

29 How long does it take the child/children to get to this school?

| Not <br> applicable | Less than <br> 15 minutes | $15-29$ minutes | $30-59$ minutes | $1-2$ hours | More than <br> 2 hours |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 3 | 4 | 5 | 27 Are any children of school-going age (i.e. between 7 and 16 years) not attending school?


| Not applicable | Yes | No |
| :---: | :---: | :---: |
| 0 | 1 | 2 |

What are the reasons for these children not attending school?


32 (a) Are you paying rent/an instalment for your dwelling? (149)
(b) Have you been able to save money over the past year?
(c) Do you have any hire purchase/debt repayments per month?

Which of the following things do you or your household have?


34


## UNEMPLOYMENT

35 How many persons in this household are unemployed and have been actively seeking work for: (Please tell me first for men and then for women.)

## HOUSEHOLD UTILITIES

(INTERVIEWER: DESCRIBE OR ASK QUESTIONS)

36 Water supply to the respondent's dwelling.
(172)

(173-175)
(176-178)
(179-181)
(182-184)
(185-187)
(188-190)
(191-193)
(194-196)

38 If wood is used, how is it obtained?
(197)

| Bought | 1 |
| :--- | :---: |
| Collected nearby | 2 |
| Collected more than 30 minutes' walk away | 3 |
| Not applicable | 4 |

SAFETY
(INTERVIEWER: OBSERVE OR ASK QUESTIONS)

39
Is there street lighting in the area where the respondent lives?

| On street where the respondent lives | 1 |
| :--- | ---: |
| Not on respondent's street but on other streets <br> in the area | 2 |
| No street lighting in the area | 3 |

TYPE OF GMPLOMAENT

40
The respondent is/has:
(199)

TRANSPORT

| day worker/day shift worker | 1 |
| :--- | ---: |
| nightshift worker | 2 |
| alternatively day and night shift worker | 3 |
| no fixed place of work | 4 |
| working from/at home | 5 |
| unemployed | 6 |

41 What is your usual type of transport?
(200)

42 (a) If the respondent is working:
(2) What are the costs of transport to and from work per week?
(203) (b) If respondent is unemployed:
(1) What are the number of hours spent travelling to seek work per week?
(204)
(1) What are the number of hours spent travelling to and from work per day? (FIELDHORKER: Include time spent waiting for transport. If less than an hour, Code 00, if not applicable, Code 99.)

| Halking | 1 |
| :--- | ---: |
| Bicycle | 2 |
| Public transport (bus, train, etc.) | 3 |
| Taxi | 4 |
| Rely on lifts | 5 |
| Private car | 6 |

(2) What are the costs of transport to seek work per week?


## LEISURE AND RECREATION

43 What is the average number of hours you work per week? (Not applicable, Code 99)

44 During the past month, how many times have you been:


45 Please tell me of how many groups; clubs or organizations, including religious groups, you are a member?
MEMBERSHIP OF GROUPS, CLUBS, ORGANIZATIONS

Number of memberships:


## PERSONAL CHARACTERISTICS

46 Can you tell me your age?
Age in years: $\qquad$

What standard of education have you completed and passed?

| None | Sub- <br> standards | Std 1-2 | Std 3-5 | Std 6-7 | Std 8-9 | Std 10, <br> matric | Post-matric certi- <br> ficate or diploma | University <br> degree |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

49 What is your home language? (If respondent speaks more than one language at home, indicate the one spoken most.)

| Afrikaans | 01 | Tamil | 09 | Swazi | 17 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| English | 02 | Hindi | 10 | Southern Ndebele | 18 |
| Dutch | 03 | Telegu | 11 | Northern Ndebele | 19 |
| German | 04 | Gujarati | 12 | Northern Sotho | 20 |
| Greek | 05 | Urdu | 13 | Southern Sotho | 21 |
| Italian | 06 | Chinese | 14 | Tswana | 22 |
| Portugese | 07 | Xhosa | 15 | Changaan | 23 |
| French | 08 | Zulu | 16 | Venda | 24 |

What is your religious denomination?

| Dutch Reformed Church | 01 | Pentecostal Church | 47 |
| :---: | :---: | :---: | :---: |
| Gereformeerde Kerk | 02 | Salvation Army | 18 |
| Nederduits Hervormde Kerk | 03 | Seventh Day Adventists | 19 |
| Anglican Church/Church of the Province of S.A. 1 Church of England in S.A. | 04 | South African General Mission | 20 |
| Methodist Church of S.A. | 05 | Swiss Church | 21 |
| Presbyterian Church of Southern Africa | 06 | Assemblies of God | 22 |
| United Congregational Church of Southern Africa | 07 | Zion Christian Church (ZCC) | 23 |
| Lutheran Church | 08 | Other Black independent churches | 24 |
| Roman Catholic Church | 09 | Other Christian churches | 25 |
| Apostolic Faith Misston of S.A. | 10 | Jewish/Hebrew | 25 |
| Other Apostolic churches | 11 | Buddhaist | 27 |
| Baptist Church | 12 | Confucian | 28 |
| Christian Scientist | 13 | Hindu | 29 |
| Full Gospel Church | 14 | Islam | 30 |
| Greek Orthodox | 15 | Other (specify): ... |  |
| Mormons (Latter Day Saints) | 16 | No religion | 31 |

Are you:

| Employed by an organization - full time (30 hours or more per week) | 01 |
| :--- | :---: |
| Employed by an organization - part time (less than 30 hours per week) | 02 |
| Self-employed - full time (30 hours or more per week) | 03 |
| Self-employed - part time (less than 30 hours per week) | 04 |
| Unemployed and looking for work | 05 |
| Unemployed and resting | 06 |
| Retired, pensioned | 07 |
| Housewife not otherwise employed/not looking for work | 08 |
| linfit for employment | 09 |
| Student at school | 10 |
| Student at college/university | 11 |

Are you the chief wage earner in the household?

Record No.
Project No.
Card No.

(a) What is/was your occupation? (Describe: ...................................................

| Professional A |  |
| :---: | :---: |
| Advocate, judge, attorney, chartered accountant, physician, architect, quantity surveyor, pharmacist, veterinary surgeon, etc. | 01 |
| Professional B |  |
| Natural or human scientist, medical ancillary services, teacher, lecturer, minister of religion, magistrate, artist, author, draughtsman, social worker, etc. |  |
| Administrative, executive and managerial worker | 03 |
| Director, working owner, senior public service personnel R13000+ per annum), etc. |  |
| Clerical worker <br> Clerk, bookkeeper, cashier, accountant, junior public service personnel, etc. <br> 04 |  |
|  |  |
| Sales worker <br> Insurance and estate agent, commercial traveller, shop assistant, etc. |  |
|  |  |
| Farmer and fisherman <br> Farmer, farm manager, forester, sorter and grader |  |
|  |  |
| Mine, quarry and related worker <br> Mine captain, mineworker, shift boss, shaft worker, reduction worker, digger, quarry worker, etc. |  |
|  |  |
| Transport and communication worker <br> Engine driver, taxi driver, lorry driver, navigator, conductor, telephonist, radio operator, fireman |  |
|  |  |
| Skilled artisan <br> Persons who have undergone apprenticeship and obtained appropriate qualifications such as painters, bricklayers, electricians, plumbers, etc. |  |
|  |  |
| $\frac{\text { Semi-skilled worker }}{\text { Operator, apprentice }}$ |  |
|  | 10 |
| $\frac{\text { Unskilled worker }}{\text { Labourer }}$ | 11 |
| Service workers (Defence Force, etc.) <br> Police, prisons and defence force personnel |  |
|  |  |
| Other service workers <br> Waiter, professional sportsman, guide, political organizer, entertairment worker, funeral undertaker, hairdresser, caretaker, etc. |  |
|  | 13 |
| Not applicable - have never been employed | 14 |

(b) In what kind of organization/finm/profession do you/did you work?

| Government or provincial services (excluding education) | 01 |
| :--- | :---: |
| Municipal services | 02 |
| Education | 03 |
| Semi-government organizations | 04 |
| Manufacturing | 05 |
| Conmerce | 06 |
| Banks/building societies/finance | 07 |
| Construction | 08 |
| Transport, private services and farming | 09 |
| Other | 10 |
| Not applicable - have never been employed | 11 |

your salary per month before deductions?

Could you tell me what is the total monthly income of your household from all sources (this includes income from pensions, grants, money sent to the household by people working elsewhere, rent and lodgings paid to the household, etc.)

| O - R124 per month | 01 | R1 250 - R1 499 per month | 07 |
| :---: | :---: | :---: | :---: |
| R125-R249 per month | 02 | R1 500-R1 999 per month | 08 |
| R250 - R499 per month | 03 | R2 000 - R2 499 per month | 09 |
| R500 - R749 per month | 04 | R2 500-R2 999 per month | 10 |
| R750 - R999 per month | 05 | R3 000 - R3 999 per month | 11 |
| R1 000 - R1 249 per month | 06 | R4 000 - R4 999 per month | 12 |
|  |  | R5 000 or more per month | 13 |

(INTERVIEWER: FILL IN FURTHER DETAILS):

57 Population group:
(227)

58
Sex:
(228)

59

- 9) 

Province:

Community size: (INTERVIENER NOTE: Cities are: Johannesburg, Pretoria, Cape Town and envirans; Durban and environs, Pietermaritzburg, Bloemfontein, Welkom, Virginia, East Rand towns, Kimberley, Port Elizabeth, East London, Hest Rand towns.)


## APPENDIX 2

SAMPLE CHARACTERISTICS

Percentages may not always add up to $100 \%$ due to rounding.

| Race | N |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| White | 834 |  |  |  |
| Indian | 1316 | . |  |  |
| Coloured | 970 |  |  |  |
| Black | 2467 |  |  |  |
|  | 5587 |  |  |  |
| Age | Whites | Indians | Coloureds | Blacks |
|  | \% | \% | \% | \% |
| -29 years | 25 | 35 | 29 | 39 |
| 30-44 years | 31 | 40 | 38 | 34 |
| $45+$ years | 44 | $\underline{25}$ | 33 | $\underline{27}$ |
|  | 100 | 100 | 100 | 100 |
| N | 822 | 1295 | 970 | 2454 |
| Sex | \% | \% | \% | \% |
| Male | 45 | 45 | 38 | 42 |
| Female | 55 | 55 | 62 | 58 |
|  | 100 | 100 | 100 | 100 |
| N | 833 | 1310 | 970 | 2425 |
| Marital status | \% | \% | \% | \% |
| Married | 74,2 | 72,1 | 63,9 | 50,4 |
| Never married | 10,3 | 17,7 | 22,4 | 35,9 |
| Separated/divorced | 4,7 | 1,8 | 3,5 | 3,1 |
| Widowed | 10,3 | 8,1 | 9,4 | 7,2 |
| Living together | 0,5 | 0,3 | 0,8 | 3,4 |
|  | 100,0 | 100,0 | 100,0 | 100,0 |
| N | 832 | 1313 | 970 | 2459 |

## Whites Indians Coloureds Blacks

Home language
Afrikaans
English
Other European
Chinese
Tamil
Hindi
Gujarati
Urdu
Telegu
Zulu
Xhosa
Northern Sotho
Southern Sotho
Tswana
Other African

N

## \%

\%
\%
\%

| 58,8 | 2,0 |
| ---: | ---: |
| 37,3 | 78,0 |
| 3,6 |  |
| 0,2 |  |

7,2
4,6
4,1
3,3
0,6
74,
0,1
25,1
0,1
0,2
,
46,3
19,0
18,2
6,8
5,7
3,6
$\square \quad 10,3$

|  | $\underline{3,6}$ |
| :--- | ---: |
| 100,0 | 100,0 |
| 970 | 2461 |

Urban-rural domicile

| $\%$ | $\%$ | $\%$ | $\%$ |
| ---: | :---: | ---: | ---: |
| 70,6 | 85,5 | 64,4 | 38,5 |
| 26,6 | 12,9 | 28,1 | 27,5 |
| 2,3 | 1,6 | 3,9 | 2,1 |
| $\underline{0,5}$ | - | $\underline{3,6}$ | $\underline{31,8}$ |
| 100,0 | 100,0 | 100,0 | 100,0 |
| 831 | 1315 | 969 | 2449 |

Province
Transvaal
Natal
Orange Free State Cape
\%

| 49,3 |
| ---: |
| 17,0 |
| 5,9 |
| 27,8 |
| 100,0 |
| 834 |

\%

N
\%
8.9

3,2
0,8
87,1
100,0
970

35,3
43,0
6,1
15,6
100,0
\%

2456

| Education | White | Indian | Coloured | Black | Urbana; <br> black | $\begin{aligned} & \text { Rural } \\ & \text { black; } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | \% | \% | \% | \% | \% |
| None | 0,1 | 5,4 | 4,1 | 14,7 | 6,9 | 29,5 |
| Substandards | - | 1,1 | 2,0 | 2,7 | 1,9 | 4,3 |
| Standards 1-2 | 0,4 | 5,0 | 5,9 | 8,3 | 5,5 | 13,7 |
| Standards 3-5 | 1,1 | 16,8 | 28,0 | 2,4 | 22,1 | 23,0 |
| Standards 6-7 | 15,9 | 26,6 | 28,8 | 23,2 | 28,4 | 13,3 |
| Standards 8-9 | 24,7 | 23,2 | 19,4 | 18,9 | 22,7 | 11,7 |
| Standard 10, matric | 32,3 | 15,4 | 6,9 | 7,5 | 9,7 | 3,4 |
| Post-matric certificate or |  |  |  |  |  |  |
| diploma | 14,2 | 4,0 | 3,5 | 1,6 | 2,1 | 0,7 |
| University degree | 11,2 | 2,4 | 1,4 | 0,6 | 0,7 | 0,4 |
|  | 100,0 | 100,0 | 100,0 | 100,0 | 100,0 | 100,0 |
| N | 829 | 1308 | 970 | 2456 | 1611 | 844 |


| Employment status | White | Indian | Coloured | Blacks |
| :---: | :---: | :---: | :---: | :---: |
|  | \% | \% | \% | \% |
| Employed - full time | 53,0 | 45,2 | 53,7 | 49,1 |
| Employed - part time | 4,0 | 1,2 | 3,2 | 3,0 |
| Self-employed - |  |  |  |  |
| full time | 4,4 | 5,6 | 0,7 | 2,1 |
| Self-employed - |  |  |  |  |
| part time | 1,0 | 0,6 | 1,0 | 1,4 |
| Workseeker | 1,2 | 3,9 | 4,5 | 12,9 |
| Unemployed | 1,8 | 0,8 | 3,0 | 7,2 |
| Retired, pensioned | 11,0 | 3,6 | 5,5 | 4,1 |
| Housewife | 20,9 | 33,0 | 23,1 | 10,3 |
| Unfit for emloyment | 1,0 | 2,3 | 2,1 | 3,3 |
| Student at school | 0,4 | 1,7 | 1,9 | 5,7 |
| Student at university. college | / 1,4 | 2,1 | 1,3 | 0,8 |
|  | 100,0 | 100,0 | 100,0 | 100,0 |
| N | 834 | 1315 | 970 | 2467 |


| Chief wage earner | \% | \% | \% | \% |
| :---: | :---: | :---: | :---: | :---: |
| in household |  |  |  |  |
| Yes | 54,6 | 34,1 | 37,2 | 32,5 |
| N | 821 | 1226 | 960 | 2407 |


| Occupational status Wh | Whites | Indians | Coloureds | Blacks |
| :---: | :---: | :---: | :---: | :---: |
|  | \% | \% | \% | \% |
| Professional | 19,3 | 8,6 | 11,6 | 8,8 |
| Administrative, executive and |  |  |  |  |
| managerial | 12,6 | 7,6 | 0,5 | 0,5 |
| Clerical | 33,8 | 24,6 | 14,3 | 5,4 |
| Sales | 8,1 | 10,4 | 3,8 | 4,9 |
| Farmer and fisherman | 0,7 | 1,0 | 0,3 | 1,0 |
| Mine, quarry and |  |  |  |  |
| Transport and communication | 4,2 | 5,9 | 4,5 | 5,5 |
| Skilled artisan | 10,1 | 6,7 | 10,9 | 5,0 |
| Semi-skilled | 1,7 | 15,3 | 16.3 | 11.1 |
| Unskilled | 1,3 | 8,9 | 24,1 | 42,9 |
| Service (police, | - |  |  |  |
| prison, defence force) | ) 1,4 | 1,7 | 1,1 | 1,7 |
| Other service | 4,6 | 7,2 | 11,9 | 11,2 |
| Not applicable (never been employed) | 0,1 | 1,4 | $=$ | 1,4 |
|  | 100,0 | 100,0 | 100,0 | 100,0 |
| N | 715 | 776 | 754 | 1752 |
| Household income | \% | \% | \% | \% |
| per month |  |  |  |  |
| - R124 | 3,0 | 3,9 | 11,9 | 27,8 |
| R125-R249 | 3,1 | 12,0 | 23,7 | 28,6 |
| R250-R499 | 9,7 | 32,5 | 28,1 | 28,8 |
| R500-R749 | 11,5 | 18,9 | 17,5 | 10,3 |
| R750-R999 | 15,2 | 11,5 | 7,3 | 2,6 |
| R1000-R1249 | 11,2 | 9,8 | 4,8 | 0,5 |
| R1250-R1499 | 11,0 | 3,5 | 2,9 | 0,5 |
| R1500-R1999 | 13,7 | 3,0 | 1,9 | 0,5 |
| R2000-R2499 | 8,6 | 3,1 | 1,0 | 0,3 |
| R2500-R2999 | 3,3 | 1,0 | 0,8 | 0,0 |
| R3000-R3999 | 5,8 | 0,6 | - | - |
| R4000-R4999 | 1,1 | 0,2 | - | - |
| R5000 or more | 2,8 | - | 0,1 | 0,0 |
|  | 100,0 | 100,0 | 100,0 | 100,0 |
| N | 794 | 1262 | 928 | 2340 |

## APPENDIX

FACTOR ANALYSIS OF ITEMS
MEASURING GENERAL WELL-BEING

Varimax rotated factor solutions for white ( $n=834$ ), Indian ( $n=1316$ ), coloured ( $n=970$ ) and black ( $n=2467$ ) samples

## Notes:

Domain: aggregate index of items v25 through v66
Personal: aggregate index of items v77 to v93
Pcinc/wh/ind/col/bl: Per capita household income

| Whites | FACTOR 1 | FACTOR 2 | FACTOR 3 | FACTOR 4 | FACTOR 5 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| V7 | . 51285 | . 16444 | . 04692 | . 20918 | 1 |
| V94 | - 34109 | . 14094 | -.04387 | -.05245 | -. 14669 |
| V113 | -60348 | -18948 | . 35403 | . 06965 | -. 12497 |
| $\checkmark 67$ | . 50710 | . 13234 | - 10467 | - 20581 | . 29947 |
| $\vee 72$ | . 40086 | -19056 | -13216 | -16011 | -08761 |
| $\checkmark 75$ | .41040 | . 03435 | -10448 | - 05534 | . 04181 |
| $v 96$ | . 09514 | - 58444 | -. 03513 | -. 07904 | . 06100 |
| $\checkmark 102$ | . 28940 | . 47240 | . 16787 | . 02687 | . 11644 |
| $\checkmark 103$ | . 13097 | . 07590 | . 65585 | -10220 | - 16630 |
| V109 | . 09023 | - 59044 | . 10738 | . 05638 | . 07658 |
| $\checkmark 110$ | - 18887 | - 12674 | . 70410 | . 00857 | -00036 |
| V111 | - 28411 | . 42574 | . 14124 | . 15522 | . 02782 |
| V151 | -14131 | -. 00280 | -. 02287 | .40617 | -. 04392 |
| DOMAIN | -. 02161 | -. 05499 | -. 02576 | . 05697 | -. 19548 |
| PERSONAL | . 55637 | .13483 | . 10263 | .06841 | . 37330 |
| PCINCWH | .04405 | . 03163 | . 14681 | .49309 | -. 04715 |
| Indians | FACTOR 1 | FACTOR 2 | FACTOR 3 | FACTOR 4 | FACTOR 5 |
| $\checkmark 7$ | . 32327 | . 06600 | - 31352 | . 15082 | . 10655 |
| $\vee 94$ | -09995 | .08086 | - 55967 | . 06998 | -. 12816 |
| V113 | . 21821 | -16481 | . 56062 | - 20031 | . 19110 |
| $\checkmark 67$ | .43771 | -15748 | - 19144 | -18491 | . 11062 |
| $\checkmark 72$ | . 58592 | -13857 | - 07440 | -18501 | . 09268 |
| $\checkmark 75$ | - 56986 | . 15257 | -10680 | . 02242 | . 07918 |
| $\vee 96$ | . 02806 | - 54880 | - 08397 | . 06869 | -. 02071 |
| $\checkmark 102$ | . 16395 | . 58352 | . 03527 | . 07646 | . 19557 |
| $\checkmark 103$ | . 23027 | -. 00773 | - 17038 | . 44135 | -18502 |
| $\checkmark 109$ | -10860 | -57129 | -13380. | . 05912 | . 02198 |
| V110 | -15920 | -12622 | . 17334 | . 71913 | . 11822 |
| $\checkmark 111$ | - 22071 | . 41128 | - 01791 | -. 071393 | -17906 |
| v151 | . 05422 | . 12370 | - 05588 | -11084 | . 45824 |
| DOMAIN | . 05617 | . 01319 | - 03193 | - 00789 | . 06037 |
| PERSONAL | . 33142 | . 08586 | . 30971 | . 16867 | $.04620$ |
| PCINCIND | . 09866 | .04197 | -. 08684 | . 08402 | . 58105 |
| Coloureds | FACTOR 1 | FACTOR 2 | FACTOR 3 | FACTOR 4 | FACTOR 5 |
| V7 | . 23457 | . 12632 | . 50350 | .01474 | . 12491 |
| $694$ | .11025 | -18568 | - 33523 | -. 17120 | -00684 |
| V113 | - 24523 | . 23934 | $\begin{array}{r} 56633 \\ 17050 \end{array}$ | . 08212 | - 21389 |
| $\vee 67$ | - 52208 | -15940 | -17959 | -02547 | -15743 |
| $\vee 72$ | . 58933 | -16603 | $\begin{array}{r} 12593 \\ -1410 \end{array}$ | $\begin{array}{r} 05559 \\ 05070 \end{array}$ | -10539 |
| $\vee 75$ | - 52034 | - 09416 | $\text { - } 11010$ | $\begin{array}{r} .05079 \\ -07473 \end{array}$ | -13480 |
| $v 96$ | -08280 | $.59551$ | -04142 | -. 02473 | -13413 |
| V102 | - 12715 | . 46042 | . 09316 | -12672 | - 08425 |
| $v 103$ | -18863 | - 08154 | - 13542 | -12761 | - 39036 |
| v109 | -14372 | - 59763 | -10027 | . 04097 | - 02206 |
| V110 | -17171 | -18181 | - 15846 | -04555 | . 64940 |
| V111 | . 08569 | - 37369 | -. 5884 | - 03195 | . 06092 |
| V151 | $.13712$ | $\text { - } 00993$ | $-10278$ | $.34002$ | $\begin{array}{r} 10857 \\ -10165 \end{array}$ |
| DOMAIN | $.00285$ | $-03621$ | $\text { - } 01865$ | $\begin{array}{r} -06776 \\ -15932 \end{array}$ | $.00165$ |
| PERSONAL | $.41794$ | $.08562$ | . 30429 -02255 | . 15932 | $.17275$ |
| PCINCCOL | . 06085 | -. 01101 | -. 02255 | . 80659 | . 06887 |
| Blacks | FACTOR 1 | FACTOR 2 | FACTOR 3 | FACTOR 4 | FACTOR 5 |
| $v 7$ | . 53274 | . 25411 | . 06148 | . 22300 | . 09753 |
| V94 | - 76407 | - 08915 | - 11840 | . 11364 | . 01087 |
| V113 | - 73753 | .19427 | -13746 | -19743 | . 05165 |
| $\vee 67$ | - 23032 | -67684 | - 18437 | - 09082 | -13571 |
| $\vee 72$ | - 08547 | . 44920 | - 26795 | -18181 | -10227 |
| $\vee 75$ | $.13148$ | $\text { - } 03919$ | $.07600$ | $-15833$ | $.02557$ |
| $v 96$ | $.03138$ | $.05501$ | $\text { - } 54301$ | $-.07163$ | $\text { - } 02160$ |
| V102 | $.00775$ | $.15644$ | $.51179$ | $.12270$ | $.07414$ |
| $v 103$ | $.11592$ | $-24400$ | $.11268$ | $\text { - } 50428$ | $.13058$ |
| V109 | -10534 | . 00878 | - 48853 | . 04808 | $\text { - } 07911$ |
| V110 | -14524 | - 29128 | . 16434 | - 37142 | . 11283 |
| V111 | - 08628 | . 18306 | - 26887 | . 00035 | -10953 |
| V151 | . 06259 | . 06701 | . 09643 | -15490 | . 37690 |
| DOMAIN | . 04991 | $.01732$ | -. 02352 | . 13734 | $-.00972$ |
| PERSONAL | - 34.777 | . 06544 | . 25910 | . 36703 | . 12351 |
| PCINCBL | . 02027 | . 08240 | . 08204 | -. 04599 | . 62962 |

## APPENDIX 4

BRIEF DISCUSSION OF STATISTICAL PROCEDURES UTILISED IN COMPILING RESULTS PRESENTED IN TABLE 3 IN THE TEXT

## 1. CORRESPONDENCE ANALYSIS

Assume n data points are classified according to two factors, A and B , to form a contingency table. Such a contingency table usually contains too much information to be absorbed at once. The structural relationships between row categories and column categories as well as the interactions between them, are difficult to determine merely by looking at them. However, if the information contained in the contingency table can be graphically represented in one, two, or three dimensions, the human eye is usually capable of observing structural relationships with the aid of geometrical distances between row and column points. This simplifying process is known as multidimensional scaling. The following is a schematic representation of a twodimensional scaling of a contingency table.


Correspondence analysis (DuToit, Steyn and Stumpf, 1984; Greenacre, 1984) is a technique for simultaneously representing the rows and columns of a two-way classification table. In order to apply this technique the categories of the row and column variables do not have to be mutually exclusive. It can further be shown that a symmetric relationship exists between the co-ordinates of the row and column points.

In order to establish the relationships between the overall life satisfaction item (v7) and the 39 domain satisfaction it ms (v25 to v66) (see Appendix 1), a two-way classification table can be obtained in the following manner:

Column categories
$5 x 5=25$ column categories were obtained by combining the 5 population groups and 5 possible outcomes of overall life satisfaction as follows:

| Description | Category <br> number | Symbol used in <br> the graphical <br> display |
| :--- | :--- | :--- |
| Urban blacks, very satisfied | 1 | UBL1 |
| Urban blacks, satisfied | 2 | UBL2 |
| Urban blacks, neutral | 3 | UBL3 |
| Urban blacks, dissatisfied | 4 | UBL4 |
| Urban blacks, very dissatisfied | 5 | UBL5 |
| Rural blacks, very satisfied | 6 | RBL1 |
| Rusal blacks, satisfied | 7 | RBL2 |
| Rural blacks, neutral | 8 | RBL3 |
| Rural blacks, dissatisfied | 9 | RBL4 |
| Rural blacks, very dissatisfied | 10 | RBL5 |
| Whites, very satisfied | 11 | WHI1 |
| Whites, satisfied | 12 | WHI2 |
| Whites, neutral | 13 | WHI3 |
| Whites, dissatisfied | 25 | WHI4 |
| Whites, very dissatisfied | 14 | WHI5 |
| Coloureds, very satisfied | 15 | COL1 |
| Coloureds, satisfied | 16 | COL2 |
| Coloureds, neutral | 23 | COL3 |
| Coloureds, dissatisfied | 17 | COL4 |
| Coloureds, very dissatisfied | 18 | IND5 |
| Indians, very satisfied | 21 | IND2 |
| Indians, satisfied | 19 | Indians, very dissatisfied |

$39 \times 6=234$ row categories were obtained by combining the 39 domain satisfaction items and 6 possible outcomes for each item as follows:

| Description | Category number | Symbol used in the graphical display |
| :---: | :---: | :---: |
| Item 1, very satisfied | 1 | 1A |
| Item 1, satisfied | 2 | 1B |
| Item 1, neutral | 3 | 1 C |
| Item 1, dissatisfied | 4 | 1D |
| Item 1, very dissatisfied | 5 | 1E |
| Item 1, no response to this item | 6 | 1M |
| Item 2, very satisfied | 7 | 2A |
| Item 2, satisfied | 8 | 2 B |
| Item 2, neutral | 9 | 2 C |
| Item 2, dissatisfied | 10 | 2D |
| Item 2, very dissatisfied | 11 | 2 E |
| Item 2, no response to this item | 12 | 2M |
| Item 39, very satisfied | 229 | 39A |
| Item 39, satisfied | 230 | 39B |
| Item 39, neutral | 231 | 39 C |
| Item 39, dissatisfied | 232 | 39D |
| Item 39, very dissatisfied | 233 | 39 E |
| Item 39, ho response to this item | 234 | 39M |

A schematical representation of the contingency table is given below.
columns
UBL1 UBL2 UBL3 UBL4 UBL5 . . . IND5


In the above representation $\mathrm{f}_{1,3} \mathrm{e} . \mathrm{g}$. denotes the number of urban blacks who have indicated a "neutral" response to overall life satisfaction and a "very satisfied" response to the first domain satisfaction item.

The correspondence analysis programme incorporates an option whereby the user can obtain the following graphical representations:
(a) a simultaneous plot of the row and column points
(b) a separate plot of the column points
(c) a separate plot of the row points

The actual two-dimensional representation of the $234 \times 25$ contingency table provided a goodness of fit of $74,9 \%$ ( $56,4 \%$ along axis 1 (factor 1) and $18,5 \%$ along axis 2$)$.

Below is a simplified version of the actual computer output.
(i) Plot of column points only ( $234 \times 5$ table)

(ii) Plot of row points only (234 $\times 25$ table)

Axis 1

$\mathrm{A}=$ Very satisfied
B = Satisfied
D = Dissatisfied
$E=$ Very dissatisfied

The $C(=$ neutral category) and $M(=$ missing data category) points predominantly coincided with the $D$ and E points. Note that for the sake of simplicity all items and their numbers are not given in the above display.

The distribution of row points along axis 1 indicated that one could possibly combine specific categories of the 39 domain satisfaction items without disturbing the symmetric relationship between the 234 row and 25 column points.

Subsequently a $156 \times 25$ contingency table was obtained by defining the row points as follows:
Description Category number Symbol

| Item 1, satisfied or very satisfied | 1 | 1 A |
| :--- | :--- | :--- |
| Item 1, neutral | 2 | 1 B |
| Item 1, dissatisfied or very dissatisfied | 3 | 1 C |
| Item 1, no response to this item | 4 | 1 M |
|  |  |  |
| Item 39, satisfied or very satisfied | 153 | 39 A |
| Item 39, neutral | 154 | 39 B |
| Item 39, dissatisfied or very dissatisfied | 155 | 39 C |
| Item 39, no response to this item | 156 | 39 M |

The plot of the column points only yielded virtually the same graphical representation as the one obtained from the $234 \times 25$ contingency table. Due to the symmetric relationship between row and column points, this implies that very little information is lost in describing the variation in the overall life satisfaction item if specific categories of the domain satisfaction items are combined. A simplified plot of the row points only is given below. The goodness of fit of the two-dimensional scaling $=80 \%$.

## Plot of row points only ( $156 \times 25$ table)

Axis 1


The above representation indicated that one could reduce the categories of the 39 domain satisfaction items to two categories, namely a satisfied or very satisfied category and a category consisting of neutral, no response, dissatisfied and very dissatisfied. As a check on the above, a $78 \times 25$ contingency table was finally derived by defining the row points as follows:

Description Category number Symbol

| Item 1, satisfied or very satisfied | 1 | $1 S^{*}$ |
| :--- | :--- | :--- |
| Item 1, other choice | 2 | 10 |
| Item 2, satisfied or very satisfied | 3 | 2 S |
| Item 2, other choice | 4 | 20 |
|  |  |  |
| Item 39, satisfied or very satisfied | 77 |  |
| Item 39, other choice | 78 |  |
|  |  |  |
| * Satisfied |  |  |
| O Other |  |  |

Since the graphical representation of the column points (overall life satisfaction) yielded essentially the same configuration as the one obtained from the $234 \times 25$ table, justification is provided for the following statement:

Not much information is lost if the variation in the overall life satisfaction item is to be described by the 39 domain satisfaction items using only the two categories decribed above instead of the original six. (Goodness of fit $=90 \%$ )

This fact enables one to carry out regression as well as discriminant analyses employing items 1 to 39 as dichotomous (dummy) variables. In order to perform these analyses, the domain satisfaction items were recorded as follows:

```
Item i if respondent chose the very satisfied or
                        satisfied category
    = 0 otherwise, i = 1, 2, \ldots..39
```

Note that the correspondence analysis could also be used to form clusters of variables which are mutually highly associated.

## 2. REGRESSION ANALYSIS

The correspondence analysis showed that the categories of the overall life satisfaction item are ordered in such a way that one may regard outcomes of these categories as interval data, provided that values are assigned to the categories as follows:

| Category | Value |
| :--- | :---: |
| Very satisfied | 1 |
| Satisfied | 2 |
| Neutral | 3 |
| Dissatisfied | 4 |
| Very dissatisfied | 5 |

A simple linear regression was performed on the data with overall life satisfaction (v7) the dependent variable, items 1 to 39 (domain satisfactions v25 to v66) dichotomous explanatory variables as well as dummy variables for the 5 population groups. The dummy (D1 to D4) variables were defined as follows:

$$
\text { D1 D2 D3 } \begin{array}{llll}
\text { D } 4
\end{array}
$$

| Urban blacks | 1 | 0 | 0 | 0 |
| :--- | ---: | ---: | ---: | ---: |
| Rural blacks | 0 | 1 | 0 | 0 |
| Whites | 0 | 0 | 1 | 0 |
| Coloureds | 0 | 0 | 0 | 1 |
| Indians | -1 | -1 | -1 | -1 |

Denoting the variable overall life satisfaction as LS and the 39 item domain satisfaction variables as A1 to A39 one can write the regression model as:
$L S=a+B_{1} D_{1}+B_{2} D_{2}+B_{3} D_{3}+B_{4} D_{4}+B_{5} A_{1} \ldots+B_{43} A_{39}+E$

Where $E$ denotes an error term, "a" denotes the intercept and the B's denote regression coefficients. The regression coefficient for the Indians are obtained as $-\left(B_{1}+B_{2}+B_{3}+B_{4}\right)$. Suppose that $B_{5}=-$ 0,5. This will indicate that for all other variables held constant, changing $A_{1}$ from 0 to +1 , will reduce the value of LS by 0,5 units. Since low values of LS are associated with satisfied and vice versa for high values of LS, the above implies that those respondents who chose the very satisfied or satisfied category of item 1 are on average more satisfied with regard to the issue raised by the life satisfaction item than those that chose otherwise. The results of the linear regression analysis are given in Table R.1.


From Table R. 1 it follows that the following variables are highly significant; The dummy variables for the various population groups, A1 (v25), A10 (v34), A16. (v40), A14 (v38), A28 (v55), A2 (v26), A3 (v27), A29 (v56) and A31 (v58) (see Appendix 1 and Table 3 in the main text). The regression coefficients of all the significant item variables are negative hence showing that a satisfied reply to these questions is associated with a lower value for LS. Since there are clearly differences between population groups with regard to the way they respond to LS, stepwise regression analyses (using the MAXRimprovement criterion) was subsequently performed for each population group. The detailed results for the best subset of 10 variables are given in Tables R. 2 to R.7. A summary is provided in Table 3 in the main text.

TABLE R.2: ALL GROUPS : CONTRIBUTION OF DOMAIN VARIABLES TO VARIANCE IN OVERALL QUALITY OF LIFE: REGRESSION ANALYSIS
$R$ square, 0,38 : Contribution to variance in dependent : satisfaction with "life as a whole"

|  | B Value |  | F | Probability |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
| Health | $+0,561$ | 246,85 | 0,0001 |  |
| Quality and quantity of food | $+0,419$ | 118,18 | 0,0001 |  |
| Urban black status | $-0,260$ | 95,07 | 0,0001 |  |
| Rural black status | $-0,315$ | 86,94 | 0,0001 |  |
| Freedom of movement | $+0,206$ | 41,30 | 0,0001 |  |
| Ability to provide for family | $+0,192$ | 36,40 | 0,0001 |  |
| White status | $+0,197$ | 34,97 | 0,0001 |  |
| Life compared to other races | $+0,193$ | 34,15 | 0,0001 |  |
| Being a good parent | $-0,159$ | 27,27 | 0,0001 |  |
| Coloured status | $+0,147$ | 25,24 | 0,0001 |  |
| Privacy in the home | $+0,166$ | 23,25 | 0,0001 |  |
| Wages and income | $+0,153$ | 22,58 | 0,0001 |  |
| Respect from other races | $+0,128$ | 15,85 | 0,0001 |  |
| Education | $+0,114$ | 15,63 | 0,0001 |  |
| Personal material possessions | $+0,129$ | 13,85 | 0,0002 |  |

Note: Indian status was not entered into the analysis for technical reasons.

TABLE R.3: WHITES : CONTRIBUTION OF DOMAIN VARIABLES TO VARIANCE IN OVERAL REGRESSION ANALYSIS
$R$ square, 0,21 : Contribution to variance in dependent : satisfaction with "life as a whole"

|  | B Value | $F$ | Probability |
| :--- | :--- | :--- | :--- |
| Life compared to other races | $+0,353$ | 24,62 | 0,0001 |
| Religious Life | $+0,310$ | 16,39 | 0,0001 |
| Job opportunities | $+0,208$ | 15,13 | 0,0001 |
| Income in old age | $+0,228$ | 14,70 | 0,0001 |
| Happiness in the family | $+0,295$ | 10,96 | 0,0010 |
| Adequacy of dwelling | $+0,300$ | 10,67 | 0,0011 |
| Being a good parent | $-0,190$ | 9,43 | 0,0022 |
| Health | $+0,259$ | 8,27 | 0,0041 |
| Personal material possessions | $+0,270$ | 7,57 | 0,0061 |
| Type of transport used | $+0,253$ | 7,09 | 0,0079 |
| Availability of housing | $+0,144$ | 6,66 | 0,0100 |

TABLE R.4: COLOURED PEOPLE : CONTRIBUTION OF DOMAIN VARIABLES TO VARIANCE IN OVERALL QUALITY OF LIFE: REGRESSION ANALYSIS
$R$ square, 0,15 : Contribution to variance in dependent : satisfaction with "life as a whole"

|  | B Value | F |  | Probability |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
| Progress achieved in work | $+0,659$ | 30,99 | 0,0001 |  |
| Health | $+0,271$ | 7,36 | 0,0068 |  |
| Privacy in the home | $+0,213$ | 7,07 | 0,0080 |  |
| Safety from crime | $+0,167$ | 7,06 | 0,0080 |  |
| Being a good parent | $-0,173$ | 6,05 | 0,0141 |  |
| Adequacy of dwelling | $+0,168$ | 5,55 | 0,0187 |  |
| Ability to provide for family | $+0,139$ | 3,95 | 0,0471 |  |
| Government and municipal |  |  |  |  |
| services | $+0,117$ | 3,83 | 0,0507 |  |
| Life compared to other races | $+0,718$ | 3,80 | 0,0516 |  |
| Religious life | $+0,205$ | 3,25 | 0,0719 (ns) |  |
| Wages and incomes | $+0,104$ | 3,13 | 0,0771 (ns) |  |

ns not significant

## TABLE R.5: INDIANS : CONTRIBUTION OF DOMAIN VARIABLES TO VARIANCE IN OVERALL QUALITY OF LIFE: REGRESSION ANALYSIS

$R$ square, 0,18 : Contribution to variance in dependent : satisfaction with "life as a whole"

|  | B Value | F | Probability |
| :--- | :--- | :--- | :--- |
| Happiness in the family | $+0,421$ | 27,67 | 0,0001 |
| Education | $+0,175$ | 18,16 | 0,0001 |
| Roads in neighbourhood | $+0,186$ | 18,13 | 0,0001 |
| Freedom of movement | $+0,170$ | 12,60 | 0,0004 |
| Life compared to other races | $+0,144$ | 11,24 | 0,0008 |
| Wages and incomes | $+0,144$ | 10,54 | 0,0012 |
| Respect from children | $-0,153$ | 9,86 | 0,0017 |
| Health | $+0,206$ | 9,65 | 0,0019 |
| Adequacy of dwelling | $+0,153$ | 8,49 | 0,0036 |
| Ability to provide for family | $+0,124$ | 6,44 | 0,0113 |
| Transport costs | $+0,091$ | 4,58 | 0,0326 |

TABLE R.6: RURAL BLACKS : CONTRIBUTION OF DOMAIN VARIABLES TO VARIANCE IN OVERALL QUALITY OF LIFE: REGRESSION ANALYSIS

R square, 0,41 : Contribution to variance in dependent : satisfaction with "life as a whole"

|  | B Value | F | Probability |
| :---: | :---: | :---: | :---: |
| Health | +0,889 | 104,75 | 0,0001 |
| Quality and quantity of food | +0,460 | 29,00 | 0,0001 |
| Ability to provide for your family | +0,376 | 17,52 | 0,0001 |
| Security of tenure | -0,270 | 11,76 | 0,0006 |
| Education | +0,298 | 10,14 | 0,0015 |
| Manner in which treated at work | +0,257 | 8,69 | 0,0033 |
| Access to shops, schools, etc | +0,211 | 7,47 | 0,0064 |
| Respect from other races | +0,223 | 6,85 | 0,0090 |
| Freedom of movement | +0,197 | 5,19 | 0,0229 |
| Choice of where to live | +0,186 | 4,87 | 0,0277 |
| Access to water | +0,179 | 4,98 | 0,0259 |

## TABLE R.7: URBAN BLACKS : CONTRIBUTION OF DOMAIN VARIABLES T0 VARIANCE IN OVERALL QUALITY OF LIFE: REGRESSION ANALYSIS

R square, 0,19 : Contribution to variance in dependent : satisfaction with "life as a whole"

|  | B Value | F | Probability |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |
| Health | $+0,590$ | 78,73 | 0,0001 |
| Quality and quantity of food | $+0,382$ | 32,19 | 0,0001 |
| Respect from children | $-0,253$ | 14,60 | 0,0001 |
| Ability to provide for family | $+0,219$ | 10,48 | 0,0012 |
| Respect from other races | $+0,218$ | 9,31 | 0,0023 |
| Life compared to other races | $+0,226$ | 8,63 | 0,0034 |
| Rents | $+0,163$ | 5,30 | 0,0215 |
| Privacy in the home | $+0,146$ | 5,26 | 0,0219 |
| Food prices | $+0,263$ | 5,03 | 0,0251 |
| Health services | $+0,746$ | 4,91 | 0,0268 |
| Religious life | $-0,746$ | 3,66 | 0,0559 |

## 3.DISCRIMINANT ANALYSIS

From the previous analyses it appears that the main issue in the variable overall life satisfaction is whether a person is satisfied with his or her quality of life or otherwise. The respondents may therefore be subdivided into two mutually exclusive groups as follows:

```
Group = 1 Very satisfied or satisfied category of the overall
        life satisfaction item.
    = 2 All other categories.
```

A stepwise discriminant analysis was conducted for each population group using the dichotomous variables A1 to A39 (domain satisfaction items, see previous sections). This was done in order to establish which subset of variables had the highest discriminatory power for classifying the person as being satisfied or not with his or her quality of life. The results of the discriminant analyses are summarised in Table 3 in the main text.

A chaid analysis (cf. du Toit et al., 1984, pp 187-194) was applied to the survey data. The categorical dependent variables was overall life satisfaction (v7) with 5 categories: 1 very satisfied, 2 satisfied, 3 neutral, 4 dissatisfied, 5 very dissatisfied.

The 39 domain satisfaction items and population group were chosen as the independent variables (predictors). Each of the 39 items had 6 categories these being: 1 very satisfied, 2 satisfied, 3 neutral, 4 dissatisfied, 5 very dissatisfied, 6 no response. Population group was categorised as follows: 1 urban blacks, 2 rural blacks, 3 whites, 4 coloureds, 5 Indians.

On the first level of partitioning variable A1 emerged as the most significant predictor (compare with the regression analysis results) followed by population group as the second most significant predictor. It was subsequently decided to force CHAID to split on population group first. The results of the dendrograms of the CHAID analysis for each population group are summarised in Table 3 in the text. It
is interesting to note that the CHAID analysis produced results which are generally consistent with those of the regression and discriminant analyses.

## 5. SMALLEST SPACE ANALYSIS

A matrix of association coefficients may be represented in two (or more) dimensional space by a set of points. A non-metric scaling aims to represent the variables in such a way that for any three variables, the two that have the highest association would be plotted nearest. Smallest space analysis (Guttman and Levy, 1982, p 169) was used to perform non-metric scaling on the overall life satisfaction variable together with the 39 domain satisfaction items.

Guttman's coefficients of weak monotonicity were calculated with respect of the 40 variables mentioned above. (Missing values were omitted.) The absolute values of these coefficients are generally higher than the corresponding Spearman product-moment coefficients.

Three dimensional solutions of the smallest space analysis programme are plots of axis 1 versus axis 2. Points lying close to each other indicate a cluster of variables which are mutually highly associated. The domain items clustering nearest to the dependent overall life satisfaction variable on the two dimensional solution are listed in Table 3 in the main text.

## APPENDIX 5

## REGRESSION ANALYSIS OF THE COMPONENTS OF THE COMPOSITE INDEX OF GLOBAL QUALITY OF LIFE

Solutions of the stepwise multiple regression analysis for seven samples: all races, whites, Indians, coloureds, all blacks, urban blacks, rural blacks.

Notes:
Personal: aggregate index of items v77-v82, v84 - v87, and v 89 to v 93.

Pcinc/wh/ind/col/bl: Per capita household income

All races（weighted sample $n=3652$ ）

| VARİ̇L三 | － | $\geq 5$ | $2 E T A$ | T | SI：T |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\checkmark 34$. | －3ヶ0こ7 | －コミミジ | ．154き | 1）．45 | ． 3 ว 2 |
| $\checkmark 253$ | ． $17 \times 0$ | －0255 | －．68557 | －4．751 | － 0 |
| $\checkmark 25$ | － 3 こど | － 32178 | ．12117 | 9.301 | － 000 |
| V40 ${ }^{\text {PRSSAL }}$ | －${ }^{\text {¢ }}$ | －${ }^{2}$ | －11300 | 7．473 | ． 9390 |
| $\checkmark 5 \times$ cral | － $15{ }^{\text {cos }}$ | －0マ17＝ | － －$_{\text {－}}^{\text {－}}$ | $5: 970$ | －${ }^{\text {－}}$ |
| $\checkmark 37$ | ． $130 \times 4$ | － 3 3， | －6さミイ |  | ． 003 C |
| $\checkmark \geq 10$ | － 35 － 5 | － $1-7$ ？ | － 5 － 71 | 3.543 | ．0031 |
| $\checkmark 55$ |  | － $\mathrm{Sc}^{5}$ | －1：5？1 | 2．41 $=$ | ． 0038 |
| $\checkmark$ 29 | －0332 | ． 3297 | －¢ ¢901 | 2.713 | ． 7067 |
| $\checkmark 40$ | －0จ121 | －02304 | － 542007 | ？．041 | ． 202 |
| V151 | － 29505 | －02：1 | － 0 ¢ ${ }^{\text {¢ }}$ | 3．304 | － 0057 |
| $\checkmark 2$ | －15こ5 | － 3373 | － $0544^{2}$ | 4.1 － | ． 0000 |
| $\checkmark 32$ | －．19403 | － 2382 | －．043？ | $-3.702$ | ． 0002 |
| $\mathrm{V}_{4} 5$ |  | － 02792 | ． 1.1498 | 3.209 | ． 0014 |
| $\vee 4$. | － 2951 ？ | － 02129 | ． 04265 | 2.040 | － 0.122 |
| $\checkmark 27$ | －．03395 | －「ご吅 | －． 0235 | 2．${ }^{2}$ 2 | ． 0117 |
|  | －．0ヶ7＝e？ |  | －：cisu？ | － 2.58 | ． 0098 |
| $\checkmark$ ¢ 4 | － 07 年ご | －520 | － 398 | 3.035 | －00¢5 |
| $\checkmark 220$ | － 3000 | ． 9007 | －0302 |  | －0201 |
| VOS | － 35 フ7？ |  | －02\％95 | 2．3？ | ． 0435 |
| （CONSTANT） | ．23073 | ． 17574 |  | 1.193 | ． 2329 |

Whites（ $n=782$ ）

| VARIAELE | 3 | Ste | こ三TA | $T$ | SIE T |
| :---: | :---: | :---: | :---: | :---: | :---: |
| P三RSONAL | －Sc？0？ | －15こてご | ． 15092 | 5.041 | 2\％J］ |
| PCINCWH | －3才1つ？ | － 1195. | ． 17158 | 5.257 | ． 0030 |
| $\checkmark 28$ | －${ }^{-11}$ | －07341 | ．13333 | 7：101 | ． 0000 |
| $\checkmark 58$ | － 23154 | －づこご | ． 11259 | $3.4 ? ?$ | －1007 |
| $\checkmark 31$ | － $213 \pm 2$ | －-2459 | ． $1093 ?$ | $3.3 \times 0$ | ． 0005 |
| $\checkmark 46$ | －24553 | ． 07171 | .11114 | 2．424 | ． 0000 |
| $\vee 34$ | － 3380 | ． 29109 | －1229？ | 3.719 | － 0002 |
| $\checkmark 37$ | ． 17979 | ． 0596 | .09743 | 3.014 | － 0027 |
| $\vee 39$ | －07909 | ． 24475 | －07E05 | 2.214 | － 0271 |
| $\checkmark 27$ | －リアブ3 | － 24573 | .07099 | 2． $1 \div 1$ | ． 9326 |
| （CONSTANT） | －． 49103 | ． 24507 |  | －1．423 | .1551 |

Indians（ $n=1227$ ）

| variadle | $z$ | $5 E=$ | QETA | $T$ | SIG T |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\checkmark 25$ | －71：5 | ． $3004{ }^{2}$ | ． 11 cts | $4.4 ら 3$ | ． 0000 |
| $\checkmark 42$ | －1つこの | －j4072 | －6す5？ | 2.515 | － 010 |
| $\checkmark 37$ | －1首14 | － 07975 | ． 11 ¢E | 4.563 | .0000 |
| $\checkmark 151$ | －17こう | － 24013 | ． 107 ² | 4.252 | －000 |
| $\checkmark$ ¢5 | －1495？ | － 3.454 | －jo75こ | 3.359 | ． 3002 |
| $\checkmark 25$ | ． 33435 | ．J72 ${ }^{\text {a }}$ | － 12002 | 4.59 | －0000 |
| $\checkmark 25$ | －14217 | －〕こき14 | － 0757 | $3.7 \leq 4$ | ． 0002 |
| $\checkmark 59$ | －13戓1 | －341さ＊ | －0u7ç | 3.317 | .0009 |
| PCINCINO | －－2＝J | － 3139 c | ． 1.105 | 3.759 | －000？ |
| $\checkmark 51$ | －jo | － 15947 | ．05367 | 2.469 | .0137 |
| PERSONAL | $\because-1+13$ | －12942 | ．07975 | 3.290 | .0014 |
| $\vee 27$ | －9519 | ． 74079 | ． 01023 2 | 2.334 | ． 0192 |
| $\checkmark 214$ | －こうこう | ． 21944 | －．05676 | －1．79．5 | .0403 |
| $\checkmark 47$ | － $5 \times 42$ | －U4 ה－ | －C5E | 2．95 | ． 0398 |
| $\checkmark 40$ | ． 13295 | － $3+032$ | － 1.245 | 2．092 | －0039 |
| $\checkmark 34$ | － 3 37と | － 07227 | －心方59 | 2.577 | .0151 |
| $\checkmark 50$ | － 5 － 51 | －-125 | － $0.6 \leq 4$ | 2．325 | .0197 |
| $\checkmark 29$ | －． 1119. | － 3505 | －．0555 | －2．235 | － 0255 |
| （CONSTAMT） | －シこ？2 | －3172 |  | －1．033 | .3017 |

Coloureds（ $n=928$ ）

| VARIAGLE | E | $5 \pm 5$ | －̇TA | 7 | SIG T |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\checkmark 56$ | －32319 | ． 05752 | .1702 | 5.007 | .0000 |
| PERSONAL | ． 70134 | ． 12179 | －18683 | 0． 255 | ． 0030 |
| V34 | － $472+3$ | － $2595 ?$ | ． 15616 | 5． 26. | ． 00.0 |
| $v 40$ | －15こ73 | .04437 | －17cく0 | 3.094 | ． 2020 |
| V39 | －24752 | －うe 3 先 | ． 11392 | 3．7．7 | ． 0001 |
| $\checkmark 151$ | －12250 | － 74550 | －1095？ | 2．72 | ． 2002 |
| $\vee 63$ | －13171 | －104544 | －5984 |  | ． 0230 |
| $\checkmark 58$ | ． 10501 | － 92375 | －Оフヂs | 2.605 | － 30 \％ |
| （CONSTANT） | －． 34.17 | －23． 7 J |  | －．339 | ． 7 ？47 |

Blacks（ $n=2286$ ）

| VARIAjLE | 3 | $S E S$ | こET2 | T | $5 I G T$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| V25 | －ころのご号 | ．05 020 | ．16735 | $8.06 ?$ | .0000 |
| $\checkmark 40$ | － 3 35－1 | － 24 C＝ 5 | －152年 | 7． 12 | ． 3005 |
| $\vee 34$ | － 31232 | － 3 Ee0 | ．157\％ | y．15 | ． .000 |
| PERSUNAL | ． 24034 | － $2+751$ | －07655 | $5 \cdot 227$ | ． 000 |
| V39 | －15132 | － 95076 | ． 05541 | 2.9 1 | ． 0029 |
| $\checkmark 58$ | －113ご | － $3=0$ | －0572？ | 2．913 | $.003 t$ |
| $\checkmark 46$ | －112＋ | － C － 54 | －055\％ | 3.074 | .0021 |
| $\checkmark 31$ | －． 174 ¢ 2 | －0ヶ1三？ | －．07457 | －4．1－9 | ． 0000 |
| $\checkmark 64$ | ．12352 |  | －06225 | 3.24 | .0012 |
| V 210 | －$-5+1$ \％ | － 2550 | ． 04642 | 2.511 | .0121 |
| $\checkmark 49$ | －1こさ1 |  | －C61．9 | ミ・•？ | － 000 or |
| V44 | －0ys？1 | －O2 26 | － 04025 | － 0.74 | －1031 |
| $\checkmark 55$ | －14151 | － 5 ¢ 14 | .05157 | 2．6く2 | －J077 |
| PCINCal | ．0297？ | －01き2？ | .04307 | 2． 24 \％ | ． 0247 |
| $\checkmark 228$ | － 3150 | －\％5 令 | ．04533 | 2．54． | .3110 |
| $\checkmark 33$ | －． 0 y 7 e | －こうくらッ | －．04792 | －2．54 | － 3.92 |
| $\checkmark 28$ | －137 ${ }^{\text {¢ }}$ | －心4750 | .04093 | 2.52 | －93 ${ }^{\text {－}}$ |
| $\checkmark 37$ | －ソリン | －1442 5 | －C4401 | 2．きコ゚ | j19\％ |
| $\checkmark 151$ |  |  | － $3+109$ | 2．17\％ | 1295 |
| （CONSTANT） | ．010 51 | ．16502 |  | －U0 | ．9480 |

Urban blacks（ $n=1562$ ）

| variable | $=$ | j5＝ | DETA | T | SES T |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\checkmark 34$ | ．42134 | ． 14724 | －こ J \％${ }^{\text {a }}$ | $\times .813$ | 0） 000 |
| $\checkmark 25$ | － $25-43$ | －J +4 | －13ころ | 5.653 | － 3.930 |
| PERSONAL | ． 37104 | －こ ¢ ¢－ | －1407 | 6．1？ | ．$) 300$ |
| $\checkmark 40$ | － 2 ¢ 4 ¢ | － 0.545 | －12506 | － 1 方 | － 9000 |
| $\checkmark 43$ | －151ヒ7 | －347ヶ7 | － $0^{1} 544$ | \％．73． | － 2732 |
| $\checkmark 210$ | －〕 $\ddagger 347$ | －02－5 | － 072 2 | 3.255 | － .011 |
| $\checkmark 40$ | .15022 | － 04.13 | －0？ 051 | 3．320 | － 20 |
| $\checkmark 29$ | －．18119 | －J4c ${ }^{\text {c }} 7$ | －． 05548 | －5．aイt | － 301 |
| $\checkmark 32$ | .15110 | － $047 \times 2$ | －こ フミこっ | 3．15y | － 0 － 15 |
| $\checkmark 223$ | .13454 |  | －¢073 | 3.070 | － 202 ？ |
| PCINCBU | ． 34011 | － 11 こマ？ | ． 05379 | 2．817 | 504 |
| $\checkmark 55$ | ． 10175 | －シムジア | ． 05141 | 5.223 | j2e3 |
| $\checkmark 28$ | ．15075 | －¢5ごここ | ． 05551 | 2.051 | －Jon |
| $\checkmark 44$ | －11こき1 | －ず何 | －15 519 | 2．4．3 | .1140 |
| $\vee 58$ | ． $59 \leq 52$ | － 02573 | －1］ 38 C | 2．103 | － 0252 |
| （CONSTANT） | －．30304 | ．22431 | －+36 | －1．775 | .3705 |



## APPENDIX 6

## FACTOR ANALYSIS OF SPECIFIC AND

GLOBAL LIFE SATISFACTION INDICATORS

Varimax rotated factor solutions for non-black ( $n=3121$ ) and black ( $n=2467$ ) samples.

Notes:
Specific satisfactions: items v25 to v93
Global indicators of life satisfaction: item v7 to v113 at the bottom of the list.

FACTOR 1 FACTOR ,
FACTOR 5

[^8]
 factor 4




FACTOR 6 FACTOR 7 FACTOR 3 FACTOR 9 FACTOR 10








Non-blacks
FACTOR 11
GACTOR 12
FACTOR 13
FACTOR 14




-.09317
.01788
.01637
-1148
-10286
-0109
.0109
.1047

- 0

0395
0137
0753

- 0257
-. 0178
.0934
.0199
-. 01874
- 02
. 0505
-. 0
.00088
.09209
- 0389

0548
.1077
-1210
-12
-107
$-\quad 10$
-. 2075
$-0$
-03
-.05
-.05
-05
-04
-.33
-03
.0200
-. 0782
$\cdot 27$
.02
.1159
-0335
$=-0571$
$=-057$
.0595
.1479
.00210
.0219
02194
-039
-. 0
05234
.25559
.25558
.01036
02794
.0409

- 0796
.0455
.0409
.1093


FACTVR 4 FACTVк

FACTOR 6 FACTCR 7



FACTOR 11

FACTOR 1
1111010

$\prime \prime \prime$
FACTOR 14

## APPENDIX 7

LEVELS OF SATISFACTIONS IN SPECIFIC ASPECTS OF LIVING BY INCOME, AGE, SEX AND EDUCATION ACCORDING TO POPULATION GROUPS

## A54

LEVELS OF SATISFACTION IN SPECIFIC DOMAINS OF LIVING BY PER CAPITA INCOME ACCORDING TO POPEEATION GROUPS

Health

$\begin{array}{lllllllllllllllllllll}H & \text { Health and medical services } & (46) & 88 & 89 & 91 & 89 & 791 & 83 & 84 & 88 & 92 & 1250 & b & 83 & 86 & 82 & 921\end{array}$
Housing

| Own present dwelling | (41) | 91 | 94 | 93. 96 | 769 |  | 81 | 81 | 86 | 83 | 1249 |  | 6576 | 8 | 882 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Size of dwelling | (49) | 94 | 85 | 8890 | 774 |  | 76 | 72 | 77 | 75 | 1237 |  | 5667 | 6 | 913 |
| Privacy in home | (56) | 96 | 97 | 9697 | 790 |  | 86 | 88 | 95 | 91 | 1247 | b | 7485 | 8 | 92i |
| Availability of housing | (43) | 61 | 68 | 6567 | 765 |  | 66 | 59 | 43 | 49 | 1225 | c | 4444 | 3 | 895 |
| Choice of where to live | (59) | 85 | 87 | 9094 | 790 | b | 79 | 69 | 60 | 65 | 1244 | c | 5859 | 4 | 916 |
| Security of tenure | (63) | 88 | 88 | 9194 | 738 | a | 72 | 70 | 72 | 72 | 1227 |  | 5361 | 5 | 820 |
| Housing costs | (36) | 79 | 84 | 7381 | 551 |  | 52 | 55 | 70 | 70 | 958 | c | 6268 | 7 | 776 |
| Community facilities |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Govt./Muncipal services | (48) | 80 | 86 | 8276 | 788 |  | 75 | 69 | 54 | 61 | 1250 | c | 5858 | 4 | 920 |
| Access to facilities | (47) | 89 | 90 | 8687 | 789 |  | 81 | 79 | 74 | 75 | 1255 | a | 8387 | 7 | 923 |
| Roads and streets | (50) | 87 | 74 | 8591 | 792 | a | 72 | 68 | 59 | 63 | 1254 | b | 6262 | 5 | 926 |
| Transport | (57) | 93 | 88 | 9496 | 782 | a | 67 | 73 | 86 | 85 | 1245 | c | 7176 | 79 | 884 |
| Transport costs | (51) | 63 | 65 | 6368 | 756 |  | 38 | 35 | 33 | 43 | 1229 |  | 4447 | 4 | 851 |
| Safety from crime | (65) | 77 | 84 | 7671 | 790 | a | 58 | 50 | 41 | 46 | 1229 | c | 4342 | 3 | 924 |
| Police services | (60) | 79 | 84 | 8276 | 788 |  | 44 | 39 | 32 | 29 | 1246 | c | 4341 | 2 | 922 |
| Water for daily needs | (44) | 95 | 96 | 9498 | 789 |  | 96 | 97 | 97 | 99 | 1249 |  | 9497 | 9 | 925 |
| Family life |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Family happiness and peace | (28) | 94 | 96 | 9390 | 770 | a | 86 | 95 | 98 | 93 | 1243 | c | 9193 | 96 | 899 |
| Parent role | (33) | 93 | 92 | 9191 | 654 |  | 95 | 95 | 91 | 92 | 944 |  | 9493 | 98 | 767 |
| Respect from children | (29) | 92 | 96 | 9596 | 645 |  | 96 | 96 | 97 | 98 | 984 |  | 9496 |  | 753 |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Opportunity for further education | (26) | 68 | 73 | 8287 | 533 | c | 70 | 70 | 73 | 77 | 872 |  | 5568 | 7 | $5 E 1$ |
| Education costs | (30) | 66 | 73 | 7877 | 512 | a | 64 | 68 | 64 | 67 | 1060 |  | 6580 | 75 | 681 |
| Dccupation |  |  |  |  |  |  |  |  |  |  |  |  | - |  |  |
| Job availability | (39) | 57 | 65 | 6983 | 536 | c | 29 | 38 | 45 | 43 | 831 | b | 4353 | 52 | 638 |
| Progress in work | (35) | 85 | 90 | 8693 | 538 |  | 86 | 82 | 92 | 95 | 763 | $c$ | 8488 |  | 619 |
| Independence at work | (88) | 93 | 90 | 9095 | 544 |  | 88 | 87 | 93 | 93 | 723 | a | 8391 | 9 | 608 |
| Job security | (32) | 86 | 85 | 8993 | 550 | a | 70 | 77 | 86 | 85 | 770 | c | 8083 |  | 642 |
| Treatment at work | (64) | 92 | 90 | 9097 | 547 | a | 91 | 88 | 93 | 91 | 690 |  | 8889 | 85 | 610 |
| Respect from superiors | (83) | 93 | 92 | 8797 | 515 |  | 86 | 92 | 92 | 89 | 708 |  | 8990 |  | 609 |
| Religious life |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Your religious life | (31) | 94 | 94 | 8789 | 762 | a | 97 | 97 | 95 | 99 | 1241 |  | 9295 | 9 | 919 |

$N$ varies throughout because persons regarding the item in question as irrelevant or not applicable
were excluded from the analysis.

* $a, b, c$ percentage differences statistically significant at the $0,05,0,01$ and 0,001 levels according to the Tau statistic

Domains of living Percentages perceiving themselves to be "satisfied"or "very satisfied"

| $\begin{aligned} & \text { (Variable } \\ & \text { No.) } \end{aligned}$ | All | blacks | 200 |  | Township blacks |  |  |  |  |  | Rural <br> 125 |  |  | blacks 50 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 25 -50 |  |  |  | 1 | 25 | 50 | 200 |  |  |  |  |  |
|  | 24 | 49199 | + |  |  | 24 | 49 | 199 | + |  |  | 24 | 49 |  |  | + |  |  |
|  | \% | \% \% | \% | N | P* | \% | \% | \% | \% | $N$ | P* | \% | \% | \% N | N | P* |

Health

$\begin{array}{llllllllllllllllll}\text { Health and medical services } & (46) & 59 & 60 & 63 & 60 & 2312 & 66 & 65 & 64 & 58 & 1380 & 55 & 55 & 64 & 722\end{array}$
Housing

| Own present dwelling | (41) | 64 | 6259 | 652296 |  | 61 | 60 | 58 | 63 | 1370 |  | 68 | 71 |  | 722 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Size of dwelling | (49) | 44 | 3941 | 472282 |  | 31 | 29 | 37 | 48 | 1358 | C | 56 | 66 | 59 | 718 |
| Privacy in home | (56) | 60 | 5757 | 642248 |  | 52 | 53 | 54 | 63 | 1331 |  | 68 | 73 | 74 | 712 |
| Availability of housing | (43) | 43 | 3935 | 312278 | c | 39 | 33 | 31 | 29 | 1366 | a | 48 | 55 | 52 | 704 |
| Choice of where to live | (59) | 50 | 4946 | 452305 | a | 54 | 54 | 46 | 42 | 1376 | $b$ | 50 | 46 | 58 | 719 |
| Security of tenure | (63) | 51 | 5146 | $\because 482300$ | a | 53 | 51 | 45 | 42 | 1373 | b | 54 | 60 | 58 | 719 |
| Housing costs | (36) | 42 | 3034 | 471585 |  | 30 | 25 | 32 | 46 | 1231 | a | 76 | 62 | 54 | 206 |

Community facilities

| Govt./Muncipal services | (48) | 30 | 3333 | 412196 | a | 38 | 39 | 36 | 42 | 1375 |  | 24 | 19 | 24 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Access to facilities | (47) | 56 | 6565 | 712318 | c | 68 | 71 | 70 | 67 | 1390 |  | 49 | 54 | 54 | 718 |  |
| Roads and streets | (50) | 41 | 3130 | 342312 | C | 35 | 33 | 32 | 32 | 1384 |  | 46 | 32 | 29 | 719 | $\tau$ |
| Transport | (57) | 42 | 4849 | 452296 | a | 44 | 46 | 49 | 46 | 1370 |  | 41 | 49 | 48 | 716 | E |
| Transport costs | (51) | 21 | 1820 | 212299 |  | 20 | 20 | 21 | 20 | 1372 |  | 22 | 19 | 26 | 719 |  |
| Safety from crime | (65) | 40 | 3333 | 242294 | c | 35 | 32 | 30 | 19 | 1371 | b | 47 | 43 | 51 | 714 |  |
| Police services | (60) | 41 | 3529 | 292266 | c | 37 | 36 | 29 | 27 | 1383 | b | 45 | 39 | 37 | 673 | 立 |
| Water for daily needs | (44) | 55 | 6065 | 702327 | C | 70 | 72 | 72 | 69 | 1393 |  | 46 | 39 | 51 | 724 |  |

Family life

|  | $(28)$ | 84 | 85 | 85 | 86 | 2291 |  | 81 | 83 | 85 | 82 | 1367 | 87 | 89 | 85 | 715 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Family happiness and peace | $(33)$ | 80 | 81 | 77 | 69 | 1880 | a | 79 | 82 | 77 | 67 | 1107 | a | 81 | 79 | 79 | 588 |
| Parent role | $(29)$ | 89 | 89 | 90 | 85 | 1847 |  | 88 | 89 | 89 | 82 | 1087 |  | 90 | 91 | 94 | 585 |

Education

| Opportunity for further <br> education <br> Education costs | $(26)$ | 34 | 36 | 43 | 48 | 1872 | c | 39 | 41 | 47 | 47 | 1124 | b | 33 | 32 | 40 | 560 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Occupation

$N$ varies throughout because persons regarding the item in question as irrelevant or not applicable were excluded from the analysis.

* $a, b, c$ percentage differences statistically significant at the $0,05,0,01$ and 0,001 levels according to the Tau statistic


Income

| Wage and salaries | (27) | 6964 | 71 |  | 653 |  |  |  | 70 | 76 | 813 | C | 54 | 60 | 57751 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ability to provide for family | (40) | 7687 | 92 | 92 | 619 | C | 71 | 83 | 91 | 90 | 1084 | c | 66 | 83 | 83808 |
| Insurance against sickness/death | (42) | 7881 | 85 | 88 | 608 | a | 34 | 49 | 66 | 77 | 1095 | C | 35 | 59 | 72805 |
| Income in old age | (45) | 6870 | 7.4 |  |  | b |  |  | 56 | 69 | 1120 | c | 35 | 51 | 59885 |
| Possessions | (58) |  | 90 |  |  |  |  |  | 95 | 92 |  |  |  | 89 | 9191 |

Food

| The food you eat | $(34)$ | 92 | 97 | 95 | 92 | 788 | 95 | 95 | 97 | 99 | 1225 | a | 91 | 95 | 95 | 926 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Food prices | $(38)$ | 23 | 28 | 28 | 30 | 787 | 13 | 13 | 12 | 15 | 1253 | 16 | 13 | 12 | 918 |  |

Socio political issues

| Voting rights | (62) | 8794 | 92 | 97727 | $b$ | 4935 | 26 | 22 | 957 | C | 28 | 26 | 15 | 77 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Life compared with other races | (37) | 7877 | 89 | 87785 | $c$ | 7170 | 68 | 69 | 1194 |  | 51 | 59 |  | 846 |
| Respect from other races | (61) | 8082 | 87 | 89786 | $b$ | 7775 | 74 | 71 | 1213 |  | 59 | 68 | 62 | 859 |
| Relations with other races | (66) | 9087 | 93 | 93780 |  | 8782 | 85 | 78 | 1198 |  | 73 | 80 | 77 | 838 |
| Freedom of movement | (55) | 9696 | 95 | 98790 |  | 8177 | 73 | 70 |  |  | 72 | 75 |  |  |

Intimate, private and social life

| Self-confidence | $(79)$ |
| :--- | :--- |
| Yourself as a person | $(92)$ |
| Peace of mind | $(80)$ |
| Trust in neighbours | $(78)$ |
| Trust in colleagues | $(93)$ |
| Respect in community | $(86)$ |
| Closeness and loyalty of friends | $(82)$ |
| Peer group adjustment | $(84)$ |
| Closest relationship with a man/ |  |
| woman | $(85)$ |
| Sex life | $(89)$ |
| Safety and security of marriage | $(81)$ |
| Spare time activity | $(90)$ |
| Fun in life | $(91)$ |
| Ability to reach goals | $(87)$ |
| Expectations of future | $(77)$ |


| 8993 | 88 | 94789 |  | 9092 | 98 | 95 | 1254 | b | 93 | 95 | 98 | 225 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 9091 | 88 | 89790 |  | 9495 | 96 | 96 | 1251 |  | 95 | 94 | 97 | 926 |
| 8983 | 88 | 89791 |  | 8691 | 94 | 90 | 1252 | a | 87 | 90 | 95 | 925 |
| 8686 | 91 | 92776 | a | 8685 | 83 | 83 | 1246 |  | 79 | 77 | 80 | 903 |
| 9289 | 90 | 87539 |  | 8788 | 86 | 86 | 726 |  | 85 | 89 | 87 | 616 |
| 9496 | 92 | 96779 |  | 9292 | 93 | 89 | 1231 |  | 83 | 90 | 90 | 894 |
| 9284 | 92 | 95781 | a | 9493 | 92 | 91 | 1246 |  | 86 | 91 | 93 | 894 |
| 9095 | 93 | 94784 |  | 9594 | 97 | 95 | 1245 |  | 94 | 95 | 99 | 959 |
| 9196 | 94 | 95689 |  | 9092 | 97 | 92 | 1160 |  | 90 | 93 | 99 | 732 |
| 8898 | 91 | 96627 |  | 9295 | 94 | 93 | 998 |  | 89 | 94 | 98 | 644 |
| 9096 | 96 | 96624 | a | 8895 | 98 | 95 | 969 | C | 92 | 94 | 97 | 654 |
| 8889 | 86 | 90756 |  | 8583 | 84 | 83 | 1178 |  | 82 | 86 | 86 | 836 |
| 8791 | 88 | 94782 |  | 7886 | 90 | 91 | 1208 | c | 86 | 88 | 94 | 889 |
| 8495 | 91 | 97769 | C | 7877 | 93 | 84 | 1207 | c | 69 | 85 | 94 | 889 |
| 7772 | 81 | 80778 |  | 5260 | 63 | 66 | 1237 | b | 58 | 63 | 65 | 902 |
| 57114 | 362 | 160793 |  | 211747 | 155 | 145 | 1258 |  | 312 | 465 | 151 | 928 |

LEVELS OF SATISFACTION IN SPECIFIC DOMAINS OF LIVING BY PER CAPITA INCOME ACCORDING TO POPULATION GROUPG

Domains of living Percentages perceiving themselves to be "satisfied" or "very satisfied"

|  | $\begin{aligned} & \text { (Variable } \\ & \text { No.) } \end{aligned}$ | $\begin{gathered} \text { Al1 } \\ 1 \\ 24 \\ \% \end{gathered}$ | $\begin{aligned} & 1 \mathrm{bl} \\ & 25 \\ & 49 \\ & \% \end{aligned}$ | $\begin{gathered} \text { lacks } \\ 50 \\ 199 \\ \% \end{gathered}$ | $\begin{gathered} 200 \\ + \\ \% \end{gathered}$ | N | P* | $\begin{gathered} \text { Tow } \\ 1 \\ 24 \\ * \quad \% \end{gathered}$ | $\begin{gathered} \text { wshi } \\ 25 \\ 49 \\ \% \end{gathered}$ | $\begin{aligned} & i p \text { bl } \\ & 50 \\ & 199 \\ & \% \end{aligned}$ | $\begin{gathered} \text { blacks } \\ 200 \\ 9+ \\ \% \end{gathered}$ | N | P* | $\begin{gathered} \text { Rura } \\ 1 \\ 24 \\ \% \end{gathered}$ | $\begin{gathered} a 1 b \\ 25 \\ 49 \\ \% \end{gathered}$ | $\begin{gathered} \text { lacks } \\ 50 \\ + \\ \% \end{gathered}$ | 5 | P |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Income |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Wage and salaries | (27) | 21 | 16 | 30 | 401 | 1457 | c | 24 | 18 | 29 | 43 | 897 | C | 21 | 17 | 38 | 395 | b |
| Ability to provide for family | (40) | 40 | 42 | 51 | 662 | 2114 | c | 46 | 47 | 54 | 65 | 1249 | C | 39 | 38 |  | EE4 | a |
| Insurance against sickness/death | (42) | 12 | 11 | 16 | 232 | 2179 | b | 13 | 14 | 17 | 28 | 1270 | b | 13 | 7 | 16 | Bras |  |
| Income in old age | (45) | 12 | 10 | 15 | . 17 | 2197 | a | 14 | 11 | 16 | 21 | 1284 | a | 12 | 8 |  | 705 |  |
| Possessions | (58) | 34 | 44 | 53 | 65 | 2270 | c | 39 | 47 | 55 | 67 | 1355 | c | 32 | 42 |  | [ | C |
| Food |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| The food you eat | (34) | 49 | 56 | 68 | 75 | 2321 | c | 58 | 61 | 73 | 74 | 1389 | c | 44 | 49 | 60 | 723 | C |
| Food prices | (38) | 9 | 6 | 8 | 11 | 2319 |  | 10 | 7 | 8 | 13 | 1387 |  | 8 | 6 |  | Prex |  |
| Socio political issues |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Voting rights | (62) | 33 | 31 | 28 | 321 | 1858 |  | 38 | 31 | 30 | 30 | 1039 | a | 31 | 32 |  |  |  |
| Life compared with other races | (37) | 28 | 25 | 27 | 24 | 2247 |  | 35 | 30 | 31 | 26 | 1329 |  | 24 | 18 | 18 |  | a |
| Respect from other races | (61) | 38 | 38 | 35 | 36 | 2249 |  | 42 | 42 | 36 | 40 | 1328 | a | 34 | 35 | 35 | 面部 |  |
| Relations with other races | (66) | 37 | 41 | 39 | 42 | 2210 |  | 45 | 45 | 40 | 44 | 1292 |  | 33 | 39 |  |  |  |
| Freedom of movement | (55) | 52 | 46 | 43 | 54 | 2303 | b | 52 | 50 | 42 | 50 | 1384 | b | 56 | 44 |  | TEP |  |
| Intimate, private and social life |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Self-confidence | (79) | 77 | 78 | 85 | 93 | 2321 | c | 82 | 80 | 85 | 93 | 1393 | b | 73 | 72 | 85 | TEx | a |
| Yourself as a person | (92) | 80 | 83 | 91 | 91 | 2318 | C | 86 | 86 | 91 | 92 | 1386 | b | 78 | 79 | 90 | 72x | b |
| Peace of mind | (80) | 57 | 56 | 65 | 71 | 2319 | c | 66 | 61 | 69 | 69 | 1387 |  | 53 | 50 |  | 723 |  |
| Trust in neighbours | (78) | 60 | 63 | 59 | 70 | 2320 |  | 63 | 66 | 58 | 66 | 1389 |  | 60 | 60 |  | 227 |  |
| Trust in colleagues | (93) | 55 | 56 | 56 | 63 | 1373 |  | 67 | 59 | 58 | 61 | 838 |  | 49 | 47 |  | 3 3 |  |
| Respect in community | (86) | 61 | 61 | 62 | 71 | 2241 |  | 67 | 64 | 65 | 77 | 1350 |  | 58 | 54 |  | EES |  |
| Closeness and loyalty of friends | (82) | 69 | 67 | 71 | 69 | 2166 |  | 72 | 70 | 73 | 73 | 1326 |  | 68 | 62 | 65 | E- |  |
| Peer group adjustment | (84) | 73 | 73 | 76 | 85 | 2224 | a | 75 | 72 | 75 | 85 | 1348 |  | 71 | 74 |  | 508 |  |
| Closest relationship with a man/ woman | (85) | 81 | 83 | 84 | 92 | 2091 | b | 76 | 81 | 82 | 93 | 1230 | b | 85 | 87 |  | Ex: |  |
| Sex life | (89) | 86 | 82 | 87 | 91 | 2156 |  | 82 | 82 | 86 | 92 | 1279 |  | 88 | 83 |  | ET |  |
| Safety and security of marriage | (81) | 81 | 82 | 81 | 871 | 1468 |  | 73 | 80 | 78 | 87 | 856 |  | 87 | 89 |  | 4 5 |  |
| Spare time activity | (90) | 65 | 71 | 73 | 71 | 2150 | b | 74 | 74 | 74 | 73 | 1284 |  | 63 | 70 |  | GE2 |  |
| Fun in life | (91) | 58 | 55 | 62 | 72 | 2254 | b | 62 | 57 | 64 | 73 | 1344 | a | 56 | 49 |  | -143 |  |
| Ability to reach goals | (87) | 47 | 49 | 55 | 59 | 2288 | c | 51 | 56 |  | 60 | 1377 | a | 47 | 44 |  | ETS |  |
| Expectations of future | (77) | 50 | 46 | 49 | 56 | 2286 |  | 47 | 48 | 48 | 52 | 1369 |  | 51 | 44 |  | HSS |  |
| $\mathrm{N}=$ |  | 755 | 623 | 849 | 106 | 62333 |  | 303 | 395 | 615 | 85 | 1398 |  | 408 | 171 | 146 | OE |  |

LEVELS OF SATISFACTION IN SPECIFIC DOMAINS OF LIVING BY AGE ACCORDING TO POPULATION GROUPS

Domains of living Percentages perceiving themselves to be "satisfied"or "very satisfied"

$N$ varies throughout because persons regarding the item in question as irrelevant or not applicable were excluded from the analysis.

* $a, b, c$ percentage differences statistically significant at the $0,05,0,01$ and 0,001 levels according to the Tau statistic

Domains of living Percentages perceiving themselves to be "satisfied"or "very satisfied"

|  | (Variable No) | $\begin{gathered} \text { A11 blacks } \\ 30- \\ \left.-2944 \begin{array}{l} 45+y \\ \% \\ \% \end{array}\right) \% \end{gathered}$ |  |  | N | $\mathrm{P}^{*}$ | Township blacks 30- |  |  |  | $p^{*}$ | $\begin{aligned} & \text { Rural blacks } \\ & 30- \\ & -294445+y \\ & \% \% \% \end{aligned}$ |  |  | N | $p^{*}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Health |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Own and family health | (25) | 69 | 59 | 55 | 2433 | c |  | 64 |  | 1485 | c | 63 |  | 46 | 733 | c |
| Health and medical services | 5 (46) | 64 | 61 | 59 | 2431 | a |  |  |  | 1484 |  | 62 |  | 49 | 732 | b |
| Housing |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Own present dwelling | (41) | 59 | 61 | 67 | -2414 | c |  | 62 |  | 1473 |  | 64 |  | 81 | 732 | c |
| Size of dwelling | (49) | 38 |  | 50 | 2397 | C |  | 35 |  | 1459 | b | 55 | 56 | 68 | 727 | b |
| Privacy in home | (56) | 54 | 59 | 63 | 2358 | c | 49 |  |  | 1427 | c | 69 | 66 | 74 | 721 |  |
| Availability of housing | (43) | 36 | 36 | 43 | 2389 | b |  | 33 | 37 | 1464 | a | 52 | 44 | 56 | 712 |  |
| Choice of where to live | (59) | 49 |  | 49 | 2422 |  |  | 49 | 54 | 1478 | a | 55 | 51 | 46 | 729 | a |
| Security of tenure | (63) | 50 |  | 52 | 2417 |  |  |  | 51 | 1475 |  | 54 | 57 | 60 | 729 |  |
| Housing costs | (36) | 35 | 34 | 36 | 1684 |  |  |  |  | 1318 |  | 60 | 66 | 73 | 212 |  |
| Community facilities |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Govt./Muncipal services | (48) | 33 | 32 | 36 | 2311 |  | 38 | 38 | 42 | 1478 |  | 22 | 24 | 23 | 630 |  |
| Access to facilities | (47) | 65 |  | 62 | 2437 |  | 72 | 68 | 70 | 1494 |  | 50 | 55 | 50 | 728 |  |
| Roads and streets | (50) | 34 | 36 | 34 | 2432 |  | 32 | 35 | 34 | 1489 |  | 38 | 42 | 39 | 729 |  |
| Transport | (57) |  |  | 43 | 2414 | b |  | 44 |  | 1473 | a | 51 | 46 | 36 | 726 | c |
| Transport costs | (51) | 22 | 20 | 18 | 2417 | a | 22 | 20 | 20 | 1475 |  | 25 | 25 | 17 | 729 | a |
| Safety from crime | (65) | 37 | 33 | 34 | 2411 |  | 32 | 28 | 33 | 1473 |  | 53 | 47 | 39 | 723 | b |
| Police services | (60) | 36 | 34 | 33 | 2385 |  | 32 | 33 | 33 | 1489 |  | 48 | 38 | 37 | 681 | b |
| Water for daily needs | (44) | 63 | 60 | 59 | 2447 | a | 71 | 72 | 71 | 1498 |  | 50 | 47 | 38 | 734 | b |
| Family life |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Family happiness and peace | (28) | 85 |  | 85 | 2408 |  | 85 | 81 | 83 | 1470 |  | 87 | 88 | 88 | 724 |  |
| Parent role | (33) | 69 | 80 | 85 | 1948 | c | 71 | 78 | 85 | 1168 | c | 69 | 82 | 86 | 591 | c |
| Respect from children | (29) | 85 |  | 90 | 1906 | b | 84 |  | 87 | 1137 |  | 88 | 91 | 94 | 589 | a |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Opportunity for further education | (26) | 41 | 36 | 42 | 1978 |  |  |  | 50 | 1219 |  | 32 | 36 | 34 | 566 |  |
| Education costs | (30) | 39 | 33 | 30 | 2152 | c | 42 | 35 | 34 | 1316 | b | 37 | 35 | 31 | 640 |  |
| Occupation |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Job availability | (39) | 17 |  | 21 | 1930 | a |  | 22 |  | 1144 | b | 19 | 23 | 18 | 581 |  |
| Progress in work | (35) | 63 |  | 63 | 1439 |  | 68 | 65 | 69 | 882 |  | 57 | 54 | 63 | 393 |  |
| Independence at work | (88) | 60 |  | 66 | 1406 | a | 59 | 64 | 66 | 859 |  | 59 | 65 | 67 | 384 |  |
| Job security | (32) | 54 |  | 59 | 1433 |  |  | 56 | 64 | 885 | a | 50 | 55 | 53 | 385 |  |
| Treatment at work | (64) | 59 |  | 65 | 1354 | a |  | 63 | 70 | 824 | a | 52 | 58 | 56 | 372 |  |
| Respect from superiors | (83) | 54 |  | 36 | 1375 | - | 56 | 66 | 71 | 846 | c | 47 | 59 | 54 | 373 |  |
| Religious life |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Your religious life | (31) | 85 | 87 | 89 | 2182 | a | 85 | 86 | 91 | 1386 | b | 86 | 89 | 85 | 599 |  |

$N$ varies throughout because persons regarding the item in question as irrelevant or not applicable were excluded from the analysis.

* $a, b, c$ percentage differences statistically significant at the $0,05,0,01$ and 0,001 levels according to the Tau statistic

LEVELS DF SATISFACTION IN SPECIFIC DOMAINS OF LIVING BY AGE ACCORDING TO POPULATION GROUPS

Domains of living Percentages perceiving themselves to be "satisfied" or "very satisfied"


## Income



Food

| The food you eat | $(34)$ | 95 | 95 | 94 | 821 | 96 | 96 | 96 | 1292 | 93 | 95 | 94 | 968 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Food prices | $(38)$ | 26 | 26 | 28 | 819 | 15 | 14 | 13 | 1290 | 14 | 12 | 16 | 960 |

Socio political issues

| Voting rights | (62) | 909392 | 754 |  | 343438 | 988 |  | 242129 | 709 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Life compared with other races | (37) | 798687 | 817 | b | 716874 | 1227 |  | 485659 | 887 b |
| Respect from other races | (61) | 788987 | 819 | b | 717879 | 1249 | b | 526770 | 899 c |
| Relations with other races | (66) | 889392 | 810 |  | 828482 | 1232 |  | 707980 | 875 b |
| Freedom of movement | (55) | 939797 | 823 | a | 787775 | 1267 |  | 666874 | 947 a |

Intimate, private and social life

| Self-confidence | (79) |  | 918 |  | 821 |  | 92 | 93 |  | 1290 |  | 94 | 96 |  | 967 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Yourself as a person | (92) | 90 | 908 | 88 | 822 |  | 97 | 94 | 94 | 1288 | a | 92 | 95 | 96 | 968 a |
| Peace of mind | (80) | 89 | 868 | 88 | 823 |  | 93 | 908 | 89 | 1298 | a | 88 | 90 | 93 | 967 a |
| Trust in neighbours | (78) | 89 | 908 | 89 | 808 |  | 84 | 86 | 85 | 1282 |  | 76 | 78 | 82 | 944 a |
| Trust in colleagues | (93) | 89 | 908 | 88 | 555 |  | 87 | 89 | 86 | 743 |  | 87 | 86 | 91 | 638 |
| Respect in community | (86) | 90 | 959 | 94 | 810 |  | 90 | 92 | 93 | 1264 | a | 82 | 90 | 88 | 936 a |
| Closeness and loyalty of friends | (82) | 88 | 919 | 94 | 814 | a | 93 | 93 | 91 | 1281 |  | 88 | 90 | 92 | 936 a |
| Peer group adjustment | (84) | 91 | 969 | 91 | 816 |  | 96 | 94 | 93 | 1281 | a | 94 | 95 | 96 | 951 |
| Closest relationship with a man/ woman | (85) | 96 | 959 | 93 | 716 |  | 92 | 95 | 89 | 1197 |  | 90 | 94 | 95 | 759 a |
| Sex life | (89) | 92 | 949 | 91 | 645 |  | 94 | 95 | 93 | 1031 |  | 92 | 92 | 95 | 661 |
| Safety and security of marriage | (81) | 92 | 959 | 96 | 646 |  | 94 | 94 | 96 | 1002 |  | 89 | 94 | 97 | 670 b |
| Spare time activity | (90) |  | 849 | 91 | 787 |  | 85 | 83 | 84 | 1215 |  | 84 | 84 | 87 | 874 |
| Fun in life | (91) | 91 | 928 | 87 | 813 | a | 88 | 88 | 81 | 1243 | Б | 86 | 88 | 91 | 930 a |
| Ability to reach goals | (87) | 93 | 958 |  | 800 | b | 83 | 81 | 78 | 1242 |  | 82 |  | 82 | 930 |
| Expectations of future | (77) | 84 | 807 |  | 810 | $b$ | 61 | 58 | 59 | 1272 |  | 62 | 59 | 64 | 944 |
| $N=$ |  | 208 | 257 | 361 | 826 |  | 457 | 520 | 318 | 1295 |  | 278 | 366 | 326 | 970 |


| Domains of living Percentages perceiving themselves to be "satisfied" or "very satisfied" |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (Variable No) | $\begin{aligned} & \text { All blacks } \\ & 30- \\ & -294445+y \\ & \% \% \% \end{aligned}$ |  |  |  | $p^{*}$ | $\begin{aligned} & \text { Township blacks } \\ & 30- \\ & -294445+y \\ & \% \% \% \% \end{aligned}$ |  |  |  | $p^{*}$ | $\begin{aligned} & \text { Rural blacks } \\ & 30- \\ & -294445+y \\ & \% \% \% \end{aligned}$ |  |  | $N$ | p |
| Income |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Wage and salaries | (27) |  | 2525 |  | 1476 |  | 27 |  | 28 | 910 |  | 23 |  |  | 399 |  |
| Ability to provide for family | (40) |  | 4847 |  | 2207 |  | 48 |  | 55 | 1332 | a | 41 |  | 41 | 670 |  |
| Insurance against sickness/death | h (42) |  | 1415 |  | 2272 |  | 14 |  | 18 | 1351 |  | 12 |  | 12 | 710 |  |
| Income in old age | (45) |  | 1316 |  | 2288 | b | 11 |  |  | 1363 | b | 12 | 9 | 15 | 712 |  |
| Possessions | (58) |  | 4546 |  | 2378 |  | 48 |  | 53 | 1450 | a | 34 |  |  | 714 |  |
| Food |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| The food you eat | (34) | 65 | 56.57 |  | 2442 | c | 70 | 64 | 66 | 1495 |  | 56 |  | 44 | 733 | b |
| Food prices | (38) | 10 | 86 | 6 | 2437 | $b$ | 9 | 9 | 7 | 1490 |  | 12 | 8 | 5 | 732 | b |
| Socio political issues |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Voting rights | (62) | 30 | 2935 |  | 1930 |  | 30 |  | 36 | 1098 | a | 33 |  | 33 | 646 |  |
| Life compared with other races | (37) | 29 | 2626 |  | 2365 |  | 31 |  | 42 | 1433 |  | 25 |  | 18 | 717 | a |
| Respect from other races | (61) | 36 | 3737 |  | 2359 |  | 37 |  |  | 1424 | a | 37 |  |  | 720 | a |
| Relations with other races | (66) | 39 | 4139 |  | 2316 |  | 41 |  | 46 | 1384 |  | 37 |  |  | 717 |  |
| Freedom of movement | (55) | 50 | 4648 |  | 2423 |  | 48 |  | 50 | 1489 |  | 57 |  |  | 722 |  |
| Intimate, private and social life |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Self-confidence | (79) | 82 | 8378 |  | 2442 | a | 84 |  | 81 | 1499 |  | 77 |  | 71 | 730 |  |
| Yourself as a person | (92) |  | 8783 |  | 2437 | $b$ | 90 |  | 85 | 1490 | a | 82 |  |  | 733 |  |
| Peace of mind | (80) |  | 5859 |  | 2439 | $c$ | 70 |  |  | 1492 | a | 60 |  |  | 733 |  |
| Trust in neighbours | (78) | 56 | 6066 |  | 2440 | b | 57 |  | 68 | 1494 | c | 59 |  | 61 | 732 |  |
| Trust in colleagues | (93) | 55 | 5560 |  | 1393 |  | 58 |  |  | 854 |  | 47 |  |  | 383 |  |
| Respect in community | (86) | 60 | 6167 |  | 2553 | $b$ | 63 |  | 70 | 1448 | $b$ | 55 | 55 | 62 | 694 |  |
| Closeness and loyalty of friends | ds (82) | 68 | 6873 |  | 2281 | a | 71 |  | 77 | 1426 |  | 65 |  | 67 | 651 |  |
| Peer group adjustment | (84) | 74 | 7476 |  | 2336 |  | 74 |  | 78 | 1445 |  | 73 | 73 | 72 | 678 |  |
| Closest relationship with a man/ woman | / (85) | 80 | 8585 |  | 2193 | b | 78 |  | 83 | 1324 | a | 83 | 89 | 88 | 664 |  |
| Sex life | (89) | 87 | 868 |  | 2263 | a | 86 |  | 84 | 1371 |  | 90 |  | 82 | 686 | a |
| Safety and security of marriage | - (81) | 73 | 8186 |  | 1518 | c | 67 |  | 83 | 902 | C | 85 |  |  | 468 | a |
| Spare time activity | (90) | 75 | 6768 |  | 2268 | c | 77 |  | 73 | 1387 | a | 67 |  |  | 672 |  |
| Fun in life | (91) |  | 6056 |  | 2376 | a |  |  |  | 1450 |  | 57 |  |  | 713 |  |
| Ability to reach goals | (87) |  | 5250 |  | 2407 |  | 55 |  | 56 | 1481 |  | 53 |  | 44 | 715 | a |
| Expectations of future | (77) | 52 | 5045 |  | 2407 | $b$ |  |  |  | 1475 |  | 53 |  |  | 719 | a |
| $N=$ |  | 960 | 843 | 651 | 2454 |  | 617 | 49 | 38 | 1504 |  | 273 | 256 | 206 | 735 |  |

Domains of living Percentages perceiving themselves to be "satisfied"or "very satisfied"

|  | (Variable No) | Whites |  |  |  | Indians |  |  |  | Coloureds |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & m \\ & \% \end{aligned}$ | $\begin{aligned} & f \\ & \% \end{aligned}$ | $N$ | P* | $\begin{aligned} & m \\ & \% \end{aligned}$ | $\begin{aligned} & f \\ & \% \end{aligned}$ | $N$ | $p^{*}$ | $\begin{aligned} & m \\ & \% \end{aligned}$ | $\begin{aligned} & f \\ & \% \end{aligned}$ | $N$ | p |
| Health |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Own and family health | (25) | 93 | 88 | 829 | a | 90 | 89 | 1296 |  | 90 | 94 | 956 | a |
| Health and medical services | 5 (46) | 90 | 89 | 831 |  | 88 | 84 | 1302 | a | 82 | 86 | 959 | a |
| Hous ing |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Own present dwelling | (41) | 95 | 92 | '806 |  | 82 | 82 | 1301 |  | 68 | 77 | 919 | b |
| Size of dwelling | (49) | 88 | 90 | 814 |  | 73 | 75 | 1287 |  | 60 | 66 | 954 | a |
| Privacy in home | (56) | 96 | 97 | 830 |  | 90 | 89 | 1299 |  | 80 | 83 | 963 |  |
| Availability of housing | (43) | 65 | 65 | 802 |  | 56 | 58 | 1278 |  | 42 | 44 | 932 |  |
| Choice of where to live | (59) | 90 | 88 | 828 |  | 71 | 69 | 1296 |  | 56 | 58 | 957 |  |
| Security of tenure | (63) | 90 | 90 | 776 |  | 73 | 70 | 1278 |  | 55 | 60 | 855 |  |
| Housing costs | (36) | 78 | 78 | 577 |  | 60 | 57 | 994 |  | 65 | 69 | 800 |  |
| Community facilities |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Govt./Muncipal services | (48) | 79 | 81 | 828 |  | 68 | 68 | 1301 |  | 52 | 58 | 961 | a |
| Access to facilities | (47) | 89 | 86 | 829 |  | 80 | 77 | 1306 |  | 84 | 84 | 965 |  |
| Roads and streets | (50) | 87 | 83 | 832 | a | 64 | 69 | 1306 | a | 58 | 62 | 968 |  |
| Transport | (57) | 95 | 91 | 822 | a | 76 | 75 | 1297 |  | 74 | 75 | 922 |  |
| Transport costs | (51) | 65 | 62 | 793 |  | 39 | 36 | 1281 |  | 42 | 46 | 889 |  |
| Safety from crime | (65) | 80 | 74 | 829 | a | 49 | 51 | 1281 |  | 42 | 40 | 966 |  |
| Police services | (60) | 80 | 81 | 828 |  | 36 | 40 | 1298 |  | 38 | 39 | 963 |  |
| Water for daily needs | (44) | 95 | 95 | 829 |  | 97 | 97 | 1295 |  | 94 | 97 | 967 | b |
| Family life |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Family happiness and peace | (28) | 92 | 94 | 809 |  | 94 | 93 | 1292 |  | 92 | 93 | 937 |  |
| Parent role | (33) | 91 | 93 | 680 |  | 96 | 94 | 1037 |  | 92 | 95 | 791 | a |
| Respect from children | (29) | 95 | 95 | 672 |  | 96 | 97 | 1032 |  | 96 | 96 | 776 |  |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Opportunity for further education | (26) | 84 | 74 | 559 | $b$ | 72 | 71 | 907 |  | 65 | 66 | 592 |  |
| Education costs | (30) | 74 | 76 | 534 |  | 69 | 66 | 1100 |  | 73 | 75 | 711 |  |
| Occupation |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Job availability | (39) | 69 | 68 | 562 |  | 42 | 35 | 858 | a | 53 | 46 |  | a |
| Progress in work | (35) | 88 | 88 | 556 |  | 86 | 85 | 790 |  | 88 | 88 | 636 |  |
| Independence at work | (88) | 92 | 92 | 561 |  | 90 | 87 | 749 |  | 91 | 88 | 627 |  |
| Job security | (32) | 89 | 89 | 569 |  | 81 | 75 | 799 | a | 81 | 85 | 662 |  |
| Treatment at work | (64) | 94 | 90 | 566 | a | 91 | 87 | 714 |  | 90 | 87 | 626 |  |
| Respect from superiors | (83) | 92 | 91 | 533 |  | 92 | 90 | 733 |  | 92 | 89 | 625 |  |
| Religious life |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Your religious life | (31) | 89 | 91 | 799 |  | 97 | 98 | 1293 |  | 94 | 94 | 961 |  |

$N$ varies throughout because persons regarding the item in question as irrelevant or not applicable were excluded from the analysis.

* $a, b, c$ percentage differences statistically significant at the $0,05,0,01$ and 0,001 levels according to the Tau statistic

Level. OF satisfaction in specific domains of living by sex according to population groups

| Domains of living Percentages |  |  |  | ves |  |  |  | very |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | All Blacks |  |  |  | Township blacks. |  |  |  | Rural blacks |  |  |  |
|  |  | $\begin{aligned} & m \\ & \% \end{aligned}$ | $\begin{aligned} & f \\ & \% \end{aligned}$ | $N$ | p* | $\begin{aligned} & \text { m } \\ & \% \\ & \hline \end{aligned}$ | $\begin{aligned} & f \\ & \% \end{aligned}$ | N | $\mathbf{p}^{*}$ | $\begin{aligned} & m \\ & \% \end{aligned}$ | $\begin{aligned} & f \\ & \% \end{aligned}$ | $N$ | $p^{*}$ |
| Health |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Own and family heal th | (25) | 61 | 62 | 2406 |  | 69 | 66 | 1458 |  | 58 | 54 | 733 |  |
| Health and medical services | (46) | 59 | 63 | 2402 | a | 64 | 65 | 1455 |  | 53 | 60 | 732 | a |
| Housing |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Own present dwelling | (41) | 59 | 64 | 2386 | $b$ | 58 | 61 | 1445 |  | 66 | 73 | 732 | a |
| Size of dwelling | (49) | 42 | 43 | 2369 |  | 35 | 36 | 1431 |  | 57 | 60 | 727 |  |
| Privacy in home | (56) | 58 | 59 | 2331 |  | 56 | 55 | 1400 |  | 69 | 70 | 721 |  |
| Avallability of housing | (43) | 36 | 40 | 2365 | a | 32 | 34 | 1440 |  | 46 | 54 | 712 | a |
| Choice of where to live | (59) | 47 | 49 | 2395 |  | 50 | 49 | 1451 |  | 50 | 52 | 729 |  |
| Security of tenure | (63) | 46 | 52 | 2388 | b | 46 | 49 | 1446 |  | 52 | 60 | 729 | a |
| Housing costs | (36) | 36 | 35 | 1660 |  | 30 | 30 | 1295 |  | 71 | 64 | 212 |  |
| Community facilities |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Govt./Muncipal services | (48) | 29 | 36 | 2282 | c | 32 | 41 | 1449 | c | 23 | 23 | 630 |  |
| Access to facilities | (47) | 60 | 66 | 2409 | b | 68 | 72 | 1466 |  | 50 | 53 | 728 |  |
| Roads and streets | (50) | 31 | 37 | 2404 | b | 28 | 36 | 1461 | c | 38 | 41 | 729 |  |
| Transport | (57) | 47 | 47 | 2391 |  | 46 | 48 | 1450 |  | 46 | 44 | 726 |  |
| Transport costs | (51) | 20 | 20 | 2393 |  | 21 | 21 | 1451 |  | 25 | 20 | 729 |  |
| Safety from crime | (65) | 35 | 35 | 2381 |  | 30 | 31 | 1444 |  | 51 | 44 | 723 | a |
| Police services | (60) | 33 | 35 | 2356 |  | 31 | 34 | 1460 |  | 43 | 41 | 681 |  |
| Water for daily needs | (44) | 60 | 62 | 2418 |  | 71 | 72 | 1469 |  | 46 | 45 | 734 |  |
| Family life |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Family happiness and peace | (28) | 85 | 84 | 2380 |  | 84 | 82 | 1442 |  | 86 | 89 | 724 |  |
| Parent role | (33) | 78 | 79 | 1935 |  | 74 | 80 | 1155 | a | 81 | 80 | 591 |  |
| Respect from children | (29) | 91 | 89 | 1899 |  | 89 | 88 | 1131 |  | 93 | 90 | 589 |  |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Opportunity for further education | (26) | 40 | 38 | 1950 |  | 44 | 44 | 1191 |  | 40 | 29 | 556 | b |
| Education costs | (30) | 32 | 36 | 2127 | a | 34 | 39 | 1291 | a | 34 | 35 | 640 |  |
| Occupation |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Job availability | (39) | 21 | 18 | 1914 |  | 24 | 20 | 1128 |  | 24 | 17 | 58 | a |
| Progress in work | (35) | 60 | 62 | 1419 |  | 67 | 65 | 863 |  | 57 | 58 | 393 |  |
| Independence at work | (88) | 63 | 63 | 1391 |  | 63 | 63 | 845 |  | 61 | 66 | 384 |  |
| Job security | (32) | 58 | 54 | 1414 |  | 62 | 55 | 867 | a | 52 | 53 | 385 |  |
| Treatment at work | (64) | 60 | 63 | 1337 |  | 63 | 66 | 808 |  | 54 | 56 | 372 |  |
| Respect from superiors | (83) | 59 | 62 | 1359 |  | 61 | 66 | 664 |  | 54 | 53 | 373 |  |
| Religious life |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Your religious life | (31) | 82 | 90 | 2125 | $c$ | 81 | 94 | 1356 | c | 84 | 89 | 599 | a |

$N$ varies throughout because persons regarding the item in question as irrelevant or not applicable were excluded from the analysis.

* $a, b, c$ percentage differences statistically significant at the $0,05,0,01$ and 0,001 levels according to the Tau statistic

Domains of living Percentages perceiving themselves to be "satisfied" or "very satisfied"

| (Variable No) | Whites |  |  | Indians |  |  |  | Coloureds |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | m f |  |  | m | f |  |  | m |  |
|  | \% \% | $N$ | $p^{*}$ | \% | \% | $N$ | $\mathrm{p}^{\star}$ | \% | $N$ |

Income

| Wage and salaries | (27) | 73 | 68 | 680 |  | 59 | 51 | 845 | b | 55 | 59 | 776 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ability to provide for family | (40) | 91 | 85 | 647 | a | 83 | 83 | 1124 |  | 74 | 80 | 836 |
| Insurance against sickness/death | (42) | 85 | 82 | 638 |  | 53 | 51 | 1132 |  | 54 | 53 | 834 |
| Income in old age | (45) | 76 | 71 | 7.99 | a | 51 | 44 | 1160 | b | 49 | 46 | 920 |
| Possessions | (58) | 92 | 93 | 830 |  | 88 | 87 | 1278 |  | 86 | 86 | 951 |

Food

| The food you eat | (34) | 95 | .94 | 828 |  | 96 | 96 | 1307 |  | 93 | 95 | 968 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Food prices | $(38)$ | 30 | 24 | 826 | a | 18 | 12 | 1305 | a | 15 | 13 | 960 |

Intimate, private and social life

| Self-confidence | $(79)$ | 93 | 88 | 828 | b | 93 | 93 | 1305 | 96 | 94 | 967 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Yourself as a person | $(92)$ | 92 | 87 | 829 | a | 96 | 94 | 1303 | 94 | 968 |  |
| Peace of mind | $(80)$ | 89 | 86 | 830 |  | 91 | 91 | 1304 | 92 | 89 | 967 |
| Trust in neighbours | $(78)$ | 90 | 90 | 815 |  | 85 | 85 | 1297 | 77 | 79 | 944 |
| Trust in colleagues | $(93)$ | 89 | 89 | 556 |  | 87 | 87 | 753 | 88 | 88 | 638 |
| Respect in community | $(86)$ | 93 | 94 | 817 | 91 | 92 | 1279 | 87 | 88 | 936 |  |
| Closeness and loyalty of friends | $(82)$ | 92 | 91 | 820 |  | 93 | 92 | 1296 | 90 | 90 | 936 |
| Peer group adjustment | $(84)$ | 94 | 92 | 823 |  | 94 | 95 | 1296 | 94 | 96 | 951 |
| Closest relationship with a man/ |  |  |  |  |  |  |  |  |  |  |  |
| woman | $(85)$ | 95 | 94 | 720 |  | 92 | 93 | 1209 | 94 | 93 | 759 |
| Sex life | $(89)$ | 92 | 92 | 649 |  | 95 | 93 | 1045 | 94 | 92 | 661 |
| Safety and security of marriage | $(81)$ | 96 | 93 | 650 | a | 96 | 94 | 1011 | 96 | 93 | 670 |
| Spare time activity | $(90)$ | 88 | 89 | 793 |  | 83 | 84 | 1228 | 87 | 84 | 874 |
| Fun in life | $(91)$ | 91 | 88 | 820 |  | 88 | 84 | 1258 | a | 89 | 88 |
| Ability to reach goals | $(87)$ | 95 | 89 | 807 | b | 82 | 80 | 1256 | 81 | 82 | 930 |
| Expectations of future | $(77)$ | 80 | 78 | 817 |  | 58 | 60 | 1286 | 62 | 61 | 944 |
|  |  |  |  |  |  | 593 | 717 | 1310 | 371 | 599 | 970 |

Doma ins of living Percentages perceiving themselves to be "satisfied" or "very satisfied"

| Wage and salaries | (27) | 23 | 26 | 1458 |  | 26 | 27 | 893 | 22 | 27 | 399 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ability to provide for family | (40) | 44 | 48 | 2179 | a | 49 | 53 | 1304 | 41 | 42 | 670 |
| Insurance against sickness/death | (42) | 13 | 15 | 2251 | a | 15 | 16 | 1330 | 10 | 14 | 710 |
| Income in old age | (45) | 12 | 13 | 2262 |  | 15 | 14 | 1337 | 11 | 12 | 712 |
| Possessions | (58) | 46 | 44 | 2352 |  | 53 | 48 | 1425 a | 40 | 36 | 714 |
| Food |  |  |  |  |  |  |  |  |  |  |  |
| The food you eat | (34) | 57 | 69 | 2414 | a | 68 | 66 | 1467 | 44 | 52 | 733 |
| Food prices | (38) | 8 | 8 | 2410 |  | 9 | 9 | 1463 | 9 | 8 | 732 |
| Socio political issues |  |  |  |  |  |  |  |  |  |  |  |
| Voting rights | (62) | 31 | 31 | 1909 |  | 30 | 33 | 1077 | 35 | 39 | 646 |
| Life compared with other races | (37) | 26 | 28 | 2336 |  | 30 | 32 | 1404 | 23 | 22 | 717 |
| Respect from other races * | (61) | 35 | 39 | 2329 | a | 39 | 41 | 1394 | 31 | 37 | 720 |
| Relations with other races | (66) | 39 | 40 | 2288 |  | 44 | . 42 | 1356 | 33 | 37 | 717 |
| Freedom of movement | (55) | 46 | 49 | 2394 |  | 44 | 50 | 1460 a | 58 | 51 | 722 |

Intimate, private and social life

| Self-confidence | (79) | 83 | 80 | 2413 | a | 85 | 83 | 1470 |  | 80 | 73 | 730 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Yourself as a person | (92) | 87 | 85 | 2409 | a | 90 | 88 | 1462 | a | 82 | 79 | 733 |
| Peace of mind | (80) | 59 | 62 | 2411 |  | 65 | 68 | 1464 |  | 57 | 54 | 733 |
| Trust in neighbours | (78) | 64 | 60 | 2411 | a | 64 | 61 | 1465 |  | 62 | 58 | 732 |
| Trust in colleagues | (93) | 53 | 59 | 1379 | a | 56 | 63 | 840 | a | 47 | 52 | 383 |
| Respect in community | (86) | 61 | 63 | 2324 |  | 66 | 66 | 1419 |  | 55 | 58 | 694 |
| Closeness and loyalty of friends | (82) | 71 | 68 | 2252 |  | 72 | 71 | 1397 |  | 70 | 64 | 651 |
| Peer group adjustment | (84) | 77 | 73 | 2307 | a | 76 | 73 | 1416 |  | 74 | 72 | 678 |
| Closest relationship with a man/ woman | (85) | 86 | 81 | 2167 | b | 83 | 79 | 1298 |  | 89 | 84 | 664 |
| Sex life | (89) | 87 | 85 | 2237 |  | 87 | 84 | 1346 |  | 88 | 88 | 686 |
| Safety and security of marriage | (81) | 84 | 78 | 1508 | b | 80 | 76 | 893 |  | 91 | 85 | 468 |
| Spare time activity | (90) | 67 | 72 | 2239 | a | 72 | 74 | 1358 |  | 62 | 67 | 672 |
| Fun in life | (91) | 61 | 59 | 2346 |  | 64 | 62 | 1421 |  | 58 | 53 | 713 |
| Ability to reach goals | (87) | 50 | 52 | 2379 |  | 58 | 55 | 1453 |  | 48 | 48 | 715 |
| Expectations of future | (77) | 51 | 48 | 2377 | a | 51 | 48 | 1445 |  | 49 | 48 | 719 |
| $\mathrm{N}=$ |  |  | 1412 | 2425 |  | 551 | 924 | 1475 |  | 624 | 110 | 734 |

## A66

LEVELS OF SATISFACTION IN SPECIFIC DOMAINS OF LIVING BY LEVEL OF EDUCATION ACCORDING TO POPULATION GROUPS

Domains of living Percentages perceiving themselves to be "satisfied"or "very satisfied"

$N$ varies throughout because persons regarding the item in question as irrelevant or not applicable were excluded from the analysis.

* $a, b, c$ percentage differences statistically significant at the $0,05,0,01$ and 0,001 levels according to the Tau statistic

LEVELS OF SATISFACTION IN SPECIFIC DOMAINS OF LIVING BY LEVEL OF EDUCATION ACCORDING TO POPULATION GROUPS

| Domains of living Percentage |  | ivin |  | se | es to |  |  |  |  | very |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | All blacks -Std Std Matric <br> 7 8-9 + post <br> \% \% \% |  |  | c | p* | Township blacks -Std Std Matric <br> 7 8-9 + post <br> \% \% \% N |  |  |  | $\mathrm{p}^{*}$ | Rural blacks <br> -Std Std <br> 7 8-9 <br> \% \% N |  |  |
| Health |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Own and family health | (25) | 57 | 72 | 77 | 2434 | c | 62 | 75 | 78 | 1486 | c | 53 | 72 | 732 |
| Health and medical services | (46) | 61 | 61 | 64 | 2433 |  | 66 | 63 | 65 | 1486 |  | 56 | 62 | 731 |
| Housing |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Own present dwelling | (41) | 63 | 61 | 58 | 2416 |  | 61 | 60 | 60 | 1475 |  | 70 | 71 | 731 |
| Size of dwelling | (49) | 44 | 38 | 36 | 2399 | b | 36 | 34 | 34 | 1461 |  | 60 | 55 | 726 |
| Privacy in home | (56) | 59 | 56 | 59 | 2359 |  | 55 | 52 | 57 | 1428 |  | 69 | 76 | 720 |
| Availability of housing | (43) | 40 | 35 | 29 | 2391 | c | 35 | 31 | 28 | 1466 | a | 50 | 51 | 711 |
| Choice of where to live | (59) | 48 | 51 | 44 | 2424 |  | 51 | 51 | 43 | 1480 |  | 49 | 60 | 728 |
| Security of tenure | (63) | 50 | 49 | 44 | 2419 |  | 50 | 49 | 43 | 1477 |  | 57 | 56 | 728 |
| Housing costs | (36) | 35 | 36 | 36 | 1688 |  | 27 | 34 | 36 | 1322 | a | 68 | 57 | 212 |
| Community facilities |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Govt./Muncipal services | (48) | 33 | 35 | 31 | 2313 |  | 40 | 36 | 37 | 1480 |  | 23 | 24 | 629 |
| Access to facilities | (47) | 61 | 69 | 68 | 2439 | c | 70 | 70 | 72 | 1496 |  | 49 | 65 | 727 |
| Roads and streets | (50) | 37 | 28 | 27 | 2434 | c | 36 | 29 | 27 | 1491 | b | 42 | 25 | 728 |
| Transport | (57) | 46 | 50 | 50 | 2415 | a | 46 | 49 | 48 | 1474 |  | 43 | 53 | 725 |
| Transport costs | (59) | 20 | 22 | 20 | 2419 |  | 21 | 22 | 20 | 1477 |  | 22 | 26 | 728 |
| Safety from crime | (65) | 36 | 33 | 28 | 2412 | b | 32 | 32 | 25 | 1475 |  | 47 | 47 | 722 |
| Police services | (60) | 37 | 29 | 25 | 2388 | $c$ | 36 | 29 | 24 | 1491 |  | 42 | 39 | 681 |
| Water for daily needs | (44) | 58 | 65 | 73 | 2449 | c | 70 | 73 | 78 | 1500 | b | 45 | 45 | 733 |
| Family life |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Family happiness and peace | (28) | 84 | 86 | 83 | 2409 |  | 83 | 85 | 83 | 1471 |  | 87 | 91 | 723 |
| Parent role | (33) | 79 | 77 | 72 | 1950 | a | 79 | 77 | 73 | 1170 |  | 81 | 72 | 590 |
| Respect from children | (29) | 89 | 89 | 88 | 1908 |  | 89 | 88 | 87 | 1140 |  | 91 | 95 | 588 |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Opportunity for further education | (26) | 35 | 46 | 54 | 1975 | c | 40 | 49 | 53 | 1215 | c | 31 | 46 | 566 b |
| Education costs | (30) | 32 | 42 | 41 | 2151 | c | 34 | 42 | 44 | 1315 | $c$ | 33 | 42 | 639 a |
| Occupation |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Job availability | (39) | 18 | 21 | 29 | 1933 | C | 20 | 22 | 29 | 1147 | a | 19 | 26 |  |
| Progress in work | (35) | 57 | 69 | 77 | 1437 | c | 61 | 71 | 80 | 881 | c | 54 | 80 | 392 |
| Independence at work | (88) | 61 | 67 | 66 | 1407 | a | 62 | 65 | 66 | 861 |  | 62 | 71 | 383 |
| Job security | (32) | 52 | 62 | 70 | 1432 | c | 54 | 60 | 71 | 885 | c | 49 | 71 | 384 |
| Treatment at work | (64) | 58 | 69 | 68 | 1354 | c | 63 | 66 | 69 | 825 |  | 51 | 75 | 371 |
| Respect from superiors | (83) | 59 | 67 | 60 | 1375 | a | 63 | 67 | 63 | 847 |  | 51 | 64 | 372 |
| Religious life |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Your religious life | (31) | 87 | 87 | 84 | 2183 |  | 87 | 88 | 83 | 1387 |  | 87 | 86 | 598 |

$N$ varies throughout because persons regarding the item in question as irrelevant or not applicable were excluded from the analysis.

* $a, b, c$ percentage differences statistically significant at the $0,05,0,01$ and 0,001 levels according to the Tau statistic
levels of Satisfaction in specific domains of living by level of education according to population groups

| Domains of living Percentages perceiving themselves to be "satisfied" or "very satisfied" |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (Variable No) | Whi - Std 7 $\%$ | tes Std 8-9 $\%$ | Mat ric $\%$ | Post matr $\%$ | N | $\mathrm{p}^{*}$ | $\begin{gathered} -S t d \\ 7 \\ \% \end{gathered}$ | India Std $8-9$ $\%$ | ns Mat ric $\%$ | Post matr $\%$ | ic | $\mathbf{P}^{*}$ | $\begin{gathered} -S t d \\ 7 \\ \% \end{gathered}$ |  | eds <br> Matric <br> + post <br> \% N |
| Income |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Wage and salaries | (27) | 71 | 65 | 71 | 74 | 677 |  | 47 | 61 | 67 | 72 | 841 | $c$ | 57 | 52 | 65776 |
| Ability to provide for family | (40) | 85 | 87 | 88 | 89 | 645 |  | 79 | 87 | 90 | 92 | 1120 | $c$ | 78 | 77 | 79836 |
| Insurance against sickness/death | th (42) | 81 | 82 | 81 | 89 | 634 | a | 44 | 56 | 68 | 78 | 1127 | $c$ | 50 | 59 | 63834 |
| Income in old age | (45) | 74 | 70 | 74 | 74 | 795 |  | 39 | 54 | 60 | 69 | 1157 | c | 45 | 50 | 55920 |
| Possessions | (58) | 93 | 94 | 90 | 92 | 826 |  | 86 | 88 | 90 | 94 | 1276 | b | 86 | 85 | 88951 |
| Food |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| The food you eat | (34) | 96 | 95 | 93 | 96 | 824 |  | 95 | 96 | 97 | 100 | 1305 | a | 94 | 93 | 94968 |
| Food prices | (38) | 17 | 28 | -29 | 30 | 822 | b | 13 | 13 | 16 |  | 1303 |  | 15 | 9 | 15960 |
| Socio political issues |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Voting rights | (62) | 88 | 92 | 92 | 95 | 757 | a | 41 | 27 | 38 | 16 | 998 | c | 28 | 21 | 12709 |
| Life compared with other races | (37) | 89 | 83 | 82 | 87 | 820 |  | 70 | 68 | 72 | 70 | 1241 |  | 56 | 54 | 47887 |
| Respect from other races | (61) | 83 | 84 | 85 | 89 | 823 |  | 79 | 74 | 70 |  | 1261 | b | 66 | 62 | 54899 |
| Relations with other races | (66) | 91 | 91 | 90 | 94 | 813 |  | 82 | 82 | 84 | 82 | 1245 |  | 77 | 79 | 72875 |
| Freedom of movement | (55) | 95 | 96 | 97 | 95 | 826 |  | 79 | 75 | 77 |  | 1279 | a | 75 | 63 | 48947 |
| Intimate, private and social life |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Self-confidence | (79) | 89 | 90 | 91 | 90 | 824 |  | 92 | 93 | 96 | 98 | 1303 | b | 95 | 96 | 95967 |
| Yourself as a person | (92) | 91 | 90 | 85 | 92 | 825 |  | 94 | 97 | 97 | 99 | 1301 | b | 95 | 93 | 96968 |
| Peace of mind | (80) | 88 | 86 | 87 | 89 | 826 |  | 89 | 93 | 93 | 94 | 1302 | a | 90 | 90 | 91967 |
| Trust in neighbours | (78) | 87 | 91 | 90 | 89 | 811 |  | 85 | 83 | 87 | 87 | 1295 |  | 78 | 80 | 79944 |
| Trust in colleagues | (93) | 97 | 93 | 88 | 85 | 555 | b | 86 | 89 | 89 | 86 | 750 |  | 88 | 87 | 88638 |
| Respect in community | (86) | 96 | 93 | 91 | 95 | 813 |  | 91 | 92 | 94 | 94 | 1278 |  | 87 | 89 | 87936 |
| Closeness and loyalty of friends | ds (82) | 90 | 92 | 89 | 95 | 816 |  | 91 | 93 | 97 | 96 | 1294 | b | 89 | 93 | 91936 |
| Peer group adjustment | (84) | 90 | 93 | 92 | 95 | 819 |  | 94 | 95 | 96 | 98 | 1294 | a | 94 | 96 | 100951 |
| Closest relationship with a man/ woman | n/ (85) | 94 | 91 | 95 | 97 | 717 | a | 91 | 93 | 96 | 96 | 1207 | $b$ | 93 | 93 | 98759 |
| Sex life | (89) | 87 | 93 | 93 | 93 | 647 |  | 94 | 97 | 93 |  | 1040 |  | 92 | 94 | 99661 |
| Safety and security of marriage | ( 81 ) | 93 | 95 | 93 | 97 | 648 |  | 94 | 96 | 95 |  | 1007 |  | 94 | 93 | 93670 |
| Spare time activity | (90) | 86 | 90 | 90 | 86 | 790 |  | 84 | 81 | 85 |  | 1228 |  | 85 | 85 | 86874 |
| Fun in life | (91) | 84 | 92 | 90 | 91 | 816 |  | 83 | 86 | 92 |  | 1257 | c | 87 | 87 | 94930 |
| Ability to reach goals | (87) | 85 | 91 | 92 | 96 | 804 | C | 76 | 82 | 89 | 91 | 1254 | C | 79 | 87 | 90930 |
| Expectations of future | (77) | 72 | 81 | 79 | 80 | 813 |  | 57 | 62 | 64 |  | 1284 | a | 61 | 64 | 60944 |
| $N=$ |  | 145 | 205 | 268 | 211 | 829 |  | 719 | 304 | 201 |  | 1308 |  | 667 | 188 | 115970 |



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[^0]:    2. Many researchers do not attempt to define the essence of the quality of life concept and settle for a working definition instead. By contrast, much effort has been expended on defining the criteria associated with the measurement of quality of life.
[^1]:    12. One of the most difficult tasks which quality of life researchers must undertake is to prepare stimuli which are sufficiently realistic to ensure a valid assessment on the part of the subject-judge, and which are at the same time inclusive of the most salient aspects of life conditions.
[^2]:    15. One might suggest that Drewnowski's (1974) first attempt at compiling comprehensive measures of well-being set the stage for universally applicable development programmes aimed at raising the level of living of the world's poorer people. Later the 'basic needs' approach to development succeeded in attracting a larger following of policy-makers as well as social scientists. Generally, development targets in the basic needs strategy fall into two separate but complementary need categories:
[^3]:    19) A striking example of a measurement technique aimed at capturing the subjective component in defining qualities of life is Cantril's (1965) 'self-anchoring' scale. Subjects are required to describe their life situation in relation to the 'best' and 'worst' worlds imaginable to them.
[^4]:    20. The relationship between life satisfaction and discrepancies or gaps between a subject's status and that of various reference standards has been extensively researched see for evidence and discussion Gurr (1970), Campbell et al., (1976, pp 14, 171 ff .), Andrews and Withey (1976), Andrews and McKennell (1980), McKennell (1978), McKennell and Andrews (1980), Michalos (1980; 1985), but a systematic study of reference standards and gaptheoretical models in developing plural societies such as South Africa is still awaiting.
[^5]:    22. Paradoxically, domains which are most amenable to policy reform, regardless of social significance, generally receive more public attention than other domains.
[^6]:    24. Because the exercise involving a comparison of results of multivariate analyses was complex and intended only to compare the different outcomes we employed only a single dependent rather than our composite index of quality of life. The former was considered on the basis of results in Table 1, to be perfectly adequate for the comparison which follows
[^7]:    Expetations of future.

[^8]:    
    

