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# MEASURING AND UNDERSTANDING THE WELL-BEING OF SOUTH AFRICANS: EVERYDAY QUALITY OF LIFE IN SOUTH AFRICA

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ABSTRACT. South Africa has a Gini co-efficient of 62, one of the world's highest (Finmark: Project FinScope 2004 and 2005, FinMark Trust, Johannesburg). Hence, measures of wealth are ubiquitous social indicators in South Africa, However, a growing emphasis in government towards measurable service delivery targets and remedial action to redress the inequalities of our past makes the reliable measurement of people's quality of life in greater depth in quantitative terms an imperative. We have developed a simple framework to measure people's quality of life in key domains that extend beyond that simply of wealth, using composite indices to allow progress to be tracked and to make valid comparisons across our diverse population. Termed the Everyday Quality of Life Index (EQLi), it comprises a suite of measures encompassing socio-economic status (with special reference to poverty), urbanisation, health (nutrition, exercise and fitness), stress/pressure, quality of the environment, satisfaction of human needs, connectivity, optimism, subjective well-being (happiness, after Diener and Lucas: 2000, in M. Lewis, J.M. Haviland (eds.), Handbook of Emotions. (2nd ed) (Guilford, New York)), and the overall measure of well-being, the EQLi itself. The initial framework was developed from a structured questionnaire administered to a probability sample of 2000 South African adults in 2002. From this, a 52-item shortlist was derived to create the series of measures. This has been tested and refined in three subsequent annual studies, each of 3500 people across urban and rural South Africa. In 2004, items involving work as well as determining the balance of skills and challenges at work using the concept of "flow" (Csikszentmihalyi: 1990, Flow: The Psychology of Optimal Experience (Harper and Row, New York)) were added. This paper outlines the rationale behind the selection and development of these measures, describes the EQL of South Africans using these and other key measures and concludes with implications for policy-makers and service providers in South Africa. Some marketing implications are also given: there is a growing emphasis worldwide on corporate social investment initiatives and, particularly in South Africa, on community upliftment and development - poverty alleviation and improving the lives of the disadvantaged ("people" rather than "consumers"). Further, people's well-being affects how they react to marketing activities.

KEY WORDS: Quality of life, well-being, poverty, South Africa

## 1. INTRODUCTION AND DEFINITIONS

Marketing research practitioners in South Africa use wealth or socioeconomic status (SES) measures as surrogates for well-being, because of the high Gini coefficient. SES is a good predictor of many outcomes in a person's life, from the point of view of both consumer behaviour and social and health circumstances (Cornish and Denny, 1989; Meier and Moy, 1999; Higgs, 2002). Whilst SES measures give insight into some aspects of lifestyle, they fall short in truly understanding how people live – the realm of the broader concept of "well-being" of which wealth is just a part. Measures of "happiness" or subjective well-being (SWB) (Diener et al., 1997) today receive greater attention but these too form just a part of the concept of well-being. Well-being involves a wider set of domains, ranging from the objective to the subjective.

The US Census Bureau suggests that the concepts of SES, urbanisation and well-being have some commonalities but also have important differences. Their focus is on poverty and hardship measures – adequacy of food and nutrition, affordability of housing, power and communications, and support systems in the event of hardship:

Personal or household income is generally regarded as the single best measure of the degree to which people are "well off." But other factors also contribute to people's well-being. Extended measures of well-being gauge how people are faring at the household level. Included are possession of consumer durables, housing and neighbourhood conditions, and the meeting of basic needs. (US Bureau of the Census website, January 2006)

These basic elements of well-being relate to physiological and physical needs. They encompass both objective measures (variables that can be reliably observed of a person by another person) as well as quasi-objective measures (self-reported variables of a physical nature, such as reported access to services and facilities).

However, emotional and so-called "higher-order" needs (Maslow, 1954; Diener and Lucas, 2000; Huitt, 2002) also greatly affect a person's personal sense of well-being. These are subjective measures (self-reported variables that refer to how a person is feeling): personal assessments of one's well-being (SWB – happiness in its broadest sense (Diener et al., 1997), health and fitness, stress and pressure levels, emotional state, relationships with others, recognition and reward, goal achievement, how one perceives the world and satisfaction with how one's life is progressing. These play a significant role in shaping our personal life choices, how we process information and make decisions, feeding back, in turn, into the arenas discussed earlier. This led us to formulate a broad model of well-being (Figure 1).

The term "well-being" has different connotations for different constituencies: for some, it concerns poverty; for others, it is the physical elements; for others, it involves spirituality and mental fitness. We employ the term "Everyday Quality of Life (EQL)" to encapsulate the whole human being,

how that person lives and what that means for her or his life, leading to our definition of quality of life:

A person's overall well being or EQL is a function of the resources and external factors that affect how that person is able to live (in the broadest sense), the internal choices that a person makes and their effects on that person, how that person perceives her or his individual needs are being satisfied, and his or her perceived level of SWB or happiness.

#### 2. DEVELOPING THE MEASURES – RATIONALE AND PROCESS

Unpacking each component of Figure 1 leads to the development of a detailed measurement framework and the derivation of the measures (Higgs, 2003). The urbanisation/SES/poverty group is used to illustrate the process, simpler summaries of the other measures in Figure 1 following.

# 2.1. Urbanisation and SES/Poverty

A continuous quasi-interval measure of urbanisation can be constructed (Higgs, 1987) by determining people's access to services and facilities characteristic of urban areas using the two broad geographical concepts of thresholds (smallest population needed to support specific types of infrastructure or business) (Yeates, 1974) and of *relative space* (the number of options and level of variety or diversity people have or choose to embrace) (Abler et al., 1971).

Variables reflecting these two concepts were included in a metropolitan survey of 2000 adults in winter 2002, summer 2003 and a national study in

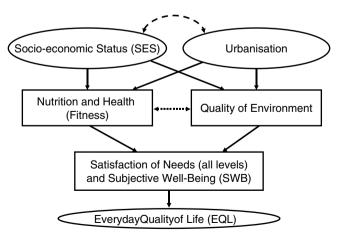


Fig. 1. A broad model of well-being.

all areas of 3500 adults in winter 2003. A tick-list approach was used to indicate the presence or absence of key durables in households, access to infrastructure and outlet types and variety in people's lives (*indicator* variables).

SES was measured by indicator variables focusing on poverty rather than wealth (the provision of basic services (water, sanitation, power), access to telecommunications and transport, adequacy of nutrition) as a result of the finding that happiness and quality of life measures (see later) flatten out at monthly household incomes of R3000 for health, R6500 for happiness and R11 500 for overall quality of life. The advantage of this measure over income data is that –

- self-reported income data in South Africa is notoriously unreliable; and
- the minimum income needed to survive, or attain a reasonable quality
  of life, depends on where one lives (the concept of product purchasing
  parity), the size of one's family, other dependants (such as the extended
  family in black culture) and other monetary assets.

A Burt matrix (a cross-tabulation matrix where the variables form both the rows and columns of a table) of both these two sets of variables was constructed. This was analysed using correspondence analysis to determine the relevant continuum. The origins of correspondence analysis lie in a French technique termed *reciprocal averaging*, allied to which is optimal scaling (Greenacre, 1984). A classic application is the determination of an *ecological gradient*, indicated by the presence or absence of certain plant species. The technique used here is a refinement of this approach and can be regarded as an unfolding technique designed to reveal latent continua (DeSarbo, 1993). It makes no assumptions about the levels of measurement of the items although, in some cases, the French method of *doubling* is applied for consistency (Higgs, 1994).

The dispersion of the variables along the principal (x) axis is the usual basis for allocating scoring weights to each in a manner that maximizes the variance between them, leading to an optimally differentiated scoring structure (Alt, 1990). Sometimes both the x- and y-axes are used when the points fall along a characteristic horseshoe-shaped curve. We calibrate these weights to create a composite score between zero and 100 for each respondent. The process is akin to a nominal-level factor analysis focused primarily on the first (and sometimes also the second) factor. If the first one (or two) axes (factors) account for at least 50% of the variance of the original input Burt matrix, a stable measure results. The scoring weights are analogous to factor scores. A parsimonious final set of variables is selected

by eliminating duplication and non-differentiating variables using an iterative process and standard rules.

The graphic results for the poverty measure are given in Figure 2, the poverty continuum falling along a curve. Key indicators of poverty are poor sanitation, a lack of electricity, poor quality water supply, a lack of communication and transport, and an inability to afford proper nutrition. Whilst this is obvious in qualitative terms, the analysis enables relative values to be assigned to each variable to enable a person's position along the poverty spectrum to be individually scored. The variance explained by the poverty continuum is 76% (67% is explained by the first axis (factor) and 9% by the second). The variance explained in the urbanisation analysis was 66%.

## 2.2. Health and Fitness

Health is affected by nutrition, stress and external factors. Nutrition is influenced by SES (especially at the lower end), urbanisation and quality of the environment. Supplements and diets also play a role, although our 2002 data shows that, ironically, these are the preserve of the wealthy. The most intangible element in nutrition, though, is that of the personal choices one makes in one's life – a constant underlying theme. Stress (life events,

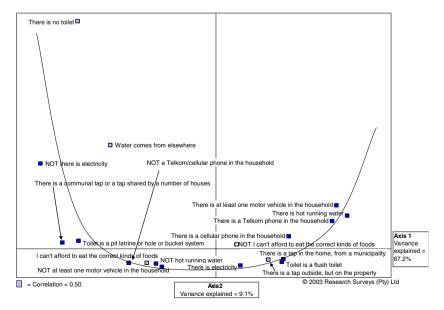


Fig. 2. The poverty continuum.

pressures and how one chooses to cope with stress), exercise and one's genetic inheritance and background are also key:

Stress is the most common cause of ill-health in our society, probably underlying as many as 70% of all visits to family doctors. (Posen, 1995)

The health measure was derived from a person's self reported general health levels, their stated exercise and perceived fitness levels, adequacy of nutrition, use of alcohol, adequacy of leisure time, support systems, emotional state and variety in a person's life. The variance explained was 60%.

The stress/pressure measure was derived from a fear for one's safety variable, alcohol use, and variables covering leisure, support systems, presence of a close relationship, satisfaction with achievements, resignation, sense of purpose, spirituality and emotional state (feelings of failure, depression, anxiety, loneliness, energy levels, calmness and self-reported happiness). Variance explained was 54%.

# 2.3. Quality of the Environment

The quality of the environment measure currently uses variables covering quality of shelter, water quality, air quality, adequacy of sanitation, source of energy, adequacy of leisure (poorer people in general have to work harder to cope with their environment), and safety and security. Sixty-nine percent of the variation in the Burt matrix was explained. Quality of the work environment is soon to be added.

## 2.4. Human Needs

The self-perceived satisfaction of human needs is more subjective. For the more restricted purposes of understanding well-being, needs were categorised as follows (with no notion of a hierarchy being necessary), this list initially being derived primarily from secondary sources (Higgs, 2003):

- \* Basic physical/psychological well-being
  - Physiological (food, rest, shelter, warmth)
  - Safety and security (freedom from danger, concern for the future, feelings of security)
  - o Love (close family ties)
- \* Emotional/social well-being (interaction with a group)
  - o Belonging (social identity, the group or clan)

- o Recognition (reward, power, admiration)
- \* Cerebral/self well-being (personal growth)
  - o Competence (achievement, self esteem)
  - Cognitive (know and understand one's world)
  - o Aesthetic (symmetry, beauty, order)
  - o Potential (self-fulfillment, fulfillment of others)

Health was strongly correlated with needs satisfaction and led us to add health as a basic human need. The set of measures derived with respect to these three categories of needs represent a person's overall assessment of the filling of these needs. However, variance explained was only 35%, indicating that this suite still needs further development.

#### 2.5. *SWB*

The most recent and consistent approaches in measuring SWB are due to Diener et al. (Diener et al., 1997; Diener and Lucas, 2000). SWB is a person's own evaluation of her or his life, within his or her personal framework. As Diener and Lucas (2000) put it:

Although measures such as crime statistics, health indices and indicators of wealth surely are related to quality of life, these external indicators cannot capture what it means to be happy.

These personal evaluations are *cognitive* (satisfaction with one's life in overall terms or in various particular aspects) and/or *affective* (pleasant and unpleasant affect – one's overall longer term mood). These affective reactions must be assessed separately from each other: they are not necessarily polar opposites (Diener and Suh, 2000). International studies show that the cognitive and affective components are moderately well correlated (correlations of about 0.7 across nations, (Diener and Suh, 2000)). In South Africa, the cognitive component is measured via a simple five-point "ideal life" scale; the affective components are ascertained from a tick-list of statements covering direction and purpose, close relationships, life satisfaction, mental state (anxiety, depression, sense of failure, happiness, calmness, energy and feeling alive).

The affective components only correlated well with the cognitive component at the lower end, but not at the top end. There are a minority of people for whom well-being does indeed rise with SES but there is a larger group whose concerns about their old age, having enough to eat and eating correctly rises slightly, as do some physical security concerns, but they are more confident in their personal and social relationships (they feel accepted)

and in what they have achieved in life, and feel that their (remaining) dreams are realisable. They may be retired or working part-time. This suggests that achievement of goals or progress towards achievement of goals and dreams is a fourth component of SWB. We call this "striving" – human endeavour. The final analysis incorporating "striving" explained 50% of the variation in the Burt matrix.

This leads to the schematic model in Figure. 3. More objective components such as SES, urbanisation and environmental quality are linked with quasi-objective components such as health and nutrition, stress and exercise. These in turn are linked to the subjective elements of need satisfaction (especially in respect of relationships) and satisfaction with life and "happiness." This should not be seen as a directly causative model: too much depends on an individual person's approach to life and their personal choices. However, it provides a measurement framework.

# 2.6. The EQL Measure (EQLi™)

All these variables combined yield an overall measure of EQL. This EQLi™ measure explains 60% of the complete matrix.

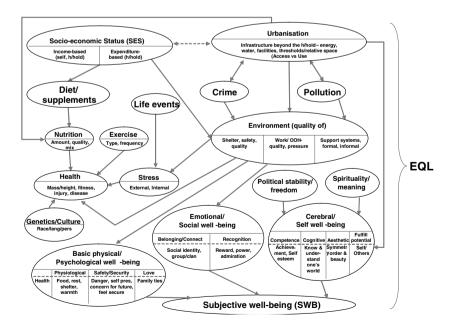


Fig. 3. The unpacked measurement framework.

# 2.7. Additional measures – The Marketing and Advertising Arena

For commercial purposes, three additional measures have also been constructed:

- Connectivity
- View of the future/optimism
- State of mind

Connectivity is critical to understand the transmission of ideas, messages, attitudes and behaviours. People's networks have a fundamental modifying influence on their everyday buying decisions. The terms "tipping point" (Gladwell, 2002), "Latin school of marketing," "viral marketing" and "tribal marketing" (Cova and Cova, 2002) represent this new emphasis. Markets are complex adaptive systems (Oldridge, 2003): the term "consumer" misses the fact that "...the most important characteristic of mankind is that of a herd animal, not a lone individual" (Earls, 2003). The connectivity measure constructed to understand this phenomenon explains 58% of the input variation.

Optimism and "consumer confidence" are measures that help to predict shifts in spending patterns. A drop in "consumer confidence" suggests that durable spending will fall (cars, appliances), credit will be adopted more cautiously and savings may rise whilst "comfort" goods (chocolate, alcohol, books, home furnishings) benefit – "retail therapy." In South Africa, this is important in understanding entrepreneurship – key to job creation. The measure developed to understand optimism explains 63% of the input matrix's variation.

A person's general state of mind influences the level of attention given to incoming information and in making daily decisions. People range from lower attention/more heuristic processing to higher attention/more cognitive processing. Happier, more optimistic people make more use of heuristics; less happy, pessimistic people agonise more over decisions and pay more cognitive attention to brand communications (Schwarz, 2000):

In general, individuals in a sad mood are more likely to use a systematic, data-driven strategy of information processing, with considerable attention to detail. In contrast, individuals in a happy mood are more likely to rely on pre-existing general knowledge structures, using a top-down, heuristic strategy of information processing, with less attention to detail. (Schwarz, 2000)

New understanding of the brain is revolutionising marketing, advertising and research models: the models of the past 50 years are at best incomplete and may often be questionable (Gladwell, 2005; Higgs, 2005). Hence, understanding well-being also becomes a marketing imperative. Well-being

has also become a new focus of interest worldwide. There is a growing prevalence of well-being related products and brand positionings not only at the top end of society but also in emerging, developing markets (A C Nielsen, 2004). Well-being is an intimate part of people's lifestyles: what they eat and drink, how they organise their leisure, how hard they work, what goals they strive for, what is important in their lives and what decisions they make. It represents with what eyes we will view any choice before us.

## 3. EQL IN SOUTH AFRICA

A selection of these and other measures are used below to portray the quality of life in South Africa.

# 3.1. The Basics – Setting the Scene

The Government's statistical service estimates that, in mid-2005, there were 46.9 million people (with an annual growth rate of about 1%), of whom 37 million were black, 4.5 million white, 4.1 million of mixed race ("coloured") and 1.1 million of Asian or Indian descent (StatsSA, 2005a). In the most recent (2001) census, there was an 18% undercount. Whilst the 2005 figures have been adjusted for this undercount, they should be regarded as approximate, with the possibility that the white figure, in particular, may be too low by as much as 0.5–0.7 million.

Of these 47 million –

- 27 million are aged 18 and over, 18 being the legal voting and drinking age in South Africa;
- 35% (41% of those aged 18 and over) live in the seven major metropolitan areas; and
- 22% live in smaller towns with 42% (37% of those aged 18 and over) living in rural areas.

These are estimates made by Research Surveys (Pty) Ltd (RS), one of the country's marketing research firms. The metro area estimates are defined by geographic suburb; the rural definition depends on the StatsSA definitions of tribal village, rural homestead and rural farm quarters whilst small urban is everyone else. The proportions of people in urban and non-urban areas vary considerably by race group, with two-thirds of whites living in metropolitan areas, compared with 55% of people of mixed race ("coloureds"), almost

80% of Indians and Asians and a third of blacks. A fifth of blacks live in smaller towns and the remaining 45% live in rural areas.

Non-South African readers may wonder why these figures are given by race. Because "non-whites" and, especially, blacks were legally discriminated against for many years, the only way to determine whether progress is being made in addressing inequalities is to report key social data by race group.

The country has nine provinces: Gauteng and the Western Cape are the wealthiest and the most urbanised (98 and 91%, respectively); the least urbanised are Limpopo (13%), Mpumalanga (45%) and the Eastern Cape and North West (46%). There are eleven official home languages, with isiZulu, isiXhosa and Afrikaans being the top three, accounting between them for 55% of people. Most people understand more than one language and English is the predominantly best-understood language.

Since 2002, RS has conducted annual studies into the well-being of adult South Africans (aged 18 tears and older). The March 2005 study consisted of a national sample of 3500 adults. The sample was a multi-stage area stratified sample of sub-places (suburbs and villages – this being one level of aggregation higher than enumerator area (EA); StatsSA does not release data at EA level but only at sub-place level), selected with probability proportional to size (PPS). Within each selected sub-place, a set of five households were chosen using a random walk procedure. Within each selected household, the adult whose birthday was next was chosen for interview (the "birthday rule"). People were interviewed face-to-face in their homes in their home language, using a structured paper questionnaire. Following fieldwork, questionnaires underwent an in-field check and a second check once they reached the editing and coding department. A backcheck of 21% was made by an independent back-check team before final coding and data capturing took place. Tables were run using the Survey-Craft software package. All that follows uses this as the primary data source unless otherwise indicated. Comparisons with an identical 2003 study are given where appropriate.

# 3.2. Access to Basic Amenities – Second Quarter 2005

• 52% of households have water from municipal sources in their homes (blacks - 39%). This rises to 81% in metro areas (blacks - only 70%) and 63% in smaller urban areas (blacks - 52%) but drops to 11% in rural areas (blacks - 9%).

- 19% have access to water from a tap on their stand.
- 20% make use of a communal tap.
- 9% get water from elsewhere, such as a dam or river.
- 54% have a flush toilet (blacks 42%), 36% use a pit latrine or a bucket/hole system with the remainder using the bush. In metro areas, 88% of households have flush toilets.
- 86% have electricity from the main grid (blacks 82%); this rises to 95% in urban areas but falls to 69% in rural areas. Hot running water is only available to 28% of adults (blacks 12%), this rising to 47% in metro areas (blacks 24%), 33% in other urban areas but is only 3% in rural areas.
- Access to the country's only current landline telephone system is limited to 17% of households (blacks 8%), this rising to 26% in metro areas. Across all races, access is low with only 47% of whites, 13% of blacks, 43% of coloureds and 75% of Indians having landline telephones. This is partly a result of the popularity of cell phones, and, especially with the advent of an affordable pre-paid product, by the lack of land line telephones in poorer areas. Overall, 53% of households have at least one cell phone (2003: 40%) (83% amongst whites, 49% amongst blacks).
- Only 21% of households have a car, with the high disparity between race groups a clear indicator of past inequalities: 86% of whites have a car compared with 67% of Indians, 32% of coloureds and only 9% of blacks. In metro areas, a third of households have a car, placing considerable strain on public transport and the largely informal private taxi network.
- Only a third of households have a hospital nearby.

## 3.3. *Employment and Income*

The 2005 data shows that -

- 41% of adults have employment (28% work full-time and 13% work part-time, just under a third work in the informal sector);
- 4% are self-employed;
- 28% are unemployed but looking for work (the official definition of unemployment) (2003: 30%);
- 4% are unemployed and not looking for work;
- 9% are retired and 8% are students; and
- 7% are housewives/househusbands.

Hence, overall, 45% are working for money, 9% are retired and 47% do not earn money.

The official rate of unemployment is highest in Limpopo (38%) and Free State (37%) and lowest in Northern Cape (18%) and Western Cape (20%). Blacks show the highest levels of official unemployment (33% (2003: 36%)), with coloureds at 23%, Indians/Asians at 13% and whites at 2%.

The median monthly household income in 2005 is R2000 (about US\$310 at an average 2005 exchange rate of R6.50–US\$1), compared with R1 800 (about US\$275) in 2003, an 11% increase. Inflation rates over the same period averaged 4.0% per year (StatsSA, 2005b), giving a real income growth of only 2.6% or 1.3% annually. The first quartile in 2005 is R900 (US\$140) and the third quartile is R5000 (US\$770). The median by race group in 2005 is -

- blacks R1400 (US\$215);
- whites R10000 (US\$1540);
- coloureds R3700 (US\$570); and
- Indians/Asians R7000 (US\$1070).

## 3.4. *Poverty – Overview*

The measure ascertains people's levels of deprivation and is scaled from zero to one hundred. Zero means no material deprivation; 100 means almost no basic needs are filled. In 2003, the mean of the measure stood at 43; in 2005, it stood at 41. This is a small but statistically significant improvement (5% significance level). There a two-point improvement for blacks (50–48), a sixpoint improvement for coloureds (32–26) and a three-point improvement for Indians/Asians (13–10). The white figure is static at eight.

# 3.5. What Is the Poverty Danger Point?

The distribution of poverty scores is given in Figure 4.

This distribution of poverty scores has been collapsed into seven poverty partitions. The characteristics of these groups are summarised in Table I. Those scoring 80 or higher have household incomes *per household member* per month of R100 or less – about 50 US cents per person per day. Those with scores of 60 and higher have household incomes per household member of R400 or less – about US\$2, a commonly accepted income poverty standard. Those with scores of 50 or more have household incomes per household member of less than R600 – about US\$3 per person per day – although many poor people also support people not in their immediate household, so that this may be an over-estimate of funds actually available.

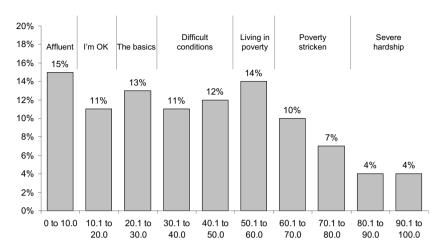


Fig. 4. Distribution of poverty scores.

At a score of 50, access to basic amenities falls precipitously, basic household durables are lacking and there is a rapid rise in people saying they cannot afford proper nutrition. We regard a score of 50 as the poverty line.

Hence, 39% of South Africans (2003: 39%) suffer hardship from poverty – 64% of these (25% of the total population (2003: 28%)) score 60 or more: the truly poverty stricken. A third of these (8% of the total population (2003: 9%)) score 80 or more, suffering hardship and deprivation of the most severe kind. Amongst blacks, 49% lie above the partition of 50, 32% above 60 and 10% above 80.

There are many poverty definitions and estimates: these range from an incidence of poverty of 57% in 2001 from South Africa's Human Research Council (HSRC) (HSRC Fact sheet No. 1, 2004) to figures of 11, 21 and 15% from the World Bank, depending on the definition used (International Poverty Centre, UNDP). Our partitioning based on deprivation yields results that are not dissimilar to those of the Afrobarometer series of studies from the Institute for Democracy in South Africa (IDASA) where the 2004 results showed that 43% of people went without food at least once in the last year and 11% regularly faced food shortages in that year (IDASA, 2005).

# 3.6. Where Is the Poverty Problem the Worst?

Three groups of people fare the worst:

• People living in rural farm workers' quarters average 63–78% of these score over 50, 59% score over 60 and 16% score over 80.

TABLE I
Profile of the seven poverty partitions

	% (Size)						
	Affluent 15%	ľm OK 11%	The basics 13%	Difficult conditions 23%	Living in poverty 14%	Poverty stricken 17%	Severe hardship 8%
Access to municipal water in home Access to municipal water out of home Water from elsewhere	100	95 3	97 3 0	50 48 2	17 62 11	2 86 12	1 38 61
Flush toilet Pit latrine, hole, bucket system No toilet/bush	100	98 0 2	96 0 4	60 26 14	17 70 13	1 81 18	0 81 19
Electricity Hot running water	100	100	100	99	92	61	16
No landline or cell phone	0	∞	18	41	51	80	81
Car in household Tarred roads	100	33	8 73	7 45	3 25	0 20	1 13
Can't afford to eat the correct kinds of food Dwelling – house Flat Shack Traditional but	0 88	9 81 11 0	12 80 6 0	16 73 73 4	27 65 0 16	34 40 21 33	75 19 0 21 56
Race group – black White Coloured Indian/Asian	61 61 12 10	56 18 20 6	81 5 13	. 88 0 1 0	96 0 4 0 0 4	0 0 0 0	100

TABLE I
Continued

	% (Size)						
	Affluent 15%	ľm OK 11%	The basics 13%	Difficult conditions 23%	Living in poverty 14%	Poverty stricken 17%	Severe hardship 8%
Work status – earn money	65	58	52	42	36	35	24
Retried Officially unemployed	7 9	18	. 82 28	33	32	37	43
Others not earning	17	18	15	16	22	20	24
Median personal income (earners) (R) (US\$)	5700 880	3500 540	1800 280	1200 180	900	700	009
Median monthly h/hold income (R) (US\$)	9000	5000 770	2600 400	1800 280	1300 200	1000 150	800 120
Ave household size (ave 4.8)	3.8	4.2	4.7	4.9	5.2	5.3	5.6

- People in rural villages also average 63 with 79% over 50, 56% over 60 and 18% over 80. Those living in traditional huts average 72.
- People in urban squatter shacks average 60 with 72% over 50, 50% over 60 and 15% over 80. People in shacks in small towns are worse off at 67.

The need for rural upliftment and for the improvement of the lives of people in urban squatter shacks is urgent. Quality of life improves immensely once people have a formal dwelling in which to live: people in formal houses in the former black townships have a mean of 30 with only 7% above 50.

The need for jobs is a national priority – Table I shows that unemployment is a major cause of poverty, along with the low wages paid to most workers: the personal income of earners declines as poverty levels rise, the number of wage earners per household declines but household size rises – triple jeopardy. This is a poverty trap from which escape is difficult. As Archbishop Emeritus Desmond Tutu says: "...too many people are living in gruelling, demeaning, dehumanising poverty...South Africans are sitting on a powder keg – we really must work like mad to eradicate poverty." (Speech to the Nelson Mandela Foundation, Houghton, Johannesburg, 23 November 2004, quoted on www.news.bbc.co.uk, 23 November 2004) (Figure 5).

## 3.7. Poverty Stress

The stress measure correlates with poverty levels, suggesting that poverty leads to stress. Stress has a harmful effect on one's body (and for many

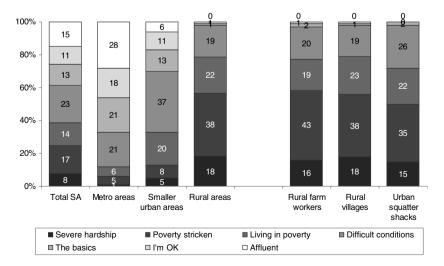


Fig. 5. Poverty partitions.

poorer people, nutrition is already inadequate), as well as casting a shadow over many other aspects of people's lives, such as relationships, productivity and one's ability to achieve in life: hence, poverty alleviation is a critical priority for the country (Figure 6).

# 3.8. Quality of the Environment

The mean on this measure is 56, down from 61 in 2003. In urban areas, the average is 63 but drops to 45 in rural areas. There is a link with poverty: amongst the *Affluent* group, the mean is 73: for those suffering *Severe hardship*, it is 33. Whites average 72 (down nine points from 2003), reflecting some degradation in air quality and less time for leisure. Blacks average 52, down three points, poorer service delivery in smaller towns (water, sanitation and roads) being partly offset by improved conditions in metropolitan areas. Coloureds average 52, down three points, and Indians/Asians 69.

## 3.9. Health, Stress and Pressure

"I feel well and in good health" received a 61% response in the 2005 study (2003: 57%), but 11% say that they "don't feel really well most of the time" (28% in the *Severe hardship* poverty group) leaving 28% in an intermediate state of health. A third of people admit to little or no physical exercise whilst 53% consider themselves physically fit. One person in five says that she or he cannot afford to eat the correct kinds of foods (2003: 30% – an improvement) (75% in the top poverty group).

Adequate leisure time is only the purview of a third of adult South Africans (2003: 48%), this rising to a half in the *Affluent* group but dropping to 19% in the *Severe hardship* group. Having good support systems is a

			Stress level	S
		Low	Medium	High
sis	Low	Life is good	The busy affluent	The stressed affluent
Poverty levels	Medium	I'm OK	Mr Average	The stressed less affluent
ď	High	The cheerful poor	Coping	Severe poverty stress

National		Stress levels		
INALI	Oliai	Low	Medium	High
Is	Low	16%	8%	1%
Poverty levels	Medium	17%	15%	4%
Pc	High	14%	18%	7%

Fig. 6. Poverty stress.

contributor to one's overall mental state: 61% of people say that they have friends and family to turn to whenever needed, this being consistent across all the poverty groups but lower compared with the 2003 figure of 74%.

People's self-reported mental and emotional state shows consistency over the years:

- "I feel I am a failure" 7% in both 2003 and 2005
- "I experience feelings of depression or hopelessness" 15% (2003: 16%)
- "I feel like my life is emotionally empty" 12% (2003: 13%)
- "I feel anxious, tense and a sense of panic" 7% (2003: 8%)
- "I feel lonely" 10% (2003: 12%)
- "I feel alive and energetic" 51% (2003: 53%)
- "Generally, I am a happy and cheerful person" 56% (2003: 60%)
- "I have a varied life with lots of different activities" 28% (2003: 25%)
- "I regard myself as a spiritual person" 39% (2003: 37%)
- "My life has meaning and purpose" 49% (2003: 55%)

The overall impression is one of increased activity and stress – vibrancy. The average of the health measure in 2003 was 72; in 2005, it is 71. The stress/pressure measure mean was 29 in 2003; in 2005 it is 32. These are significant changes at the 5% significance level although small in real terms: the increased activity and stress are partly counteracted by higher levels of ful-fillment.

Health has a strong correlation with high levels of poverty: the health mean is 81 in the *Affluent* group and drops monotonically to 56 in the *Severe hardship* group. These averages hide the severity of the situation: overall, 23% of people can be described as either *Sickly and depressed* or as *Poorly* (by having scores of 60 or below on the health measure); this drops to 6% in the *Affluent* group but rises to 28% in the *Living with poverty* group, to 33% in the *Poverty stricken* group and to 56% in the *Severe hardship* group.

The stress/pressure measure rises from an average of 24 in the *Affluent* group to 40 in the *Severe hardship* group. A score of over 50 represents stressed people – 12% overall (Table II).

As well as reduced leisure, for whites, there has been a decline in having friends and family to hand and a greater sense that they have lost direction and purpose. This may be attributed partly to problems induced by affirmative action and broad-based black economic empowerment (jobs are more difficult to find and to keep) and to migration. Life satisfaction has declined ten points over the two years (69–59%).

	Health		Stress/press	ure
	2003	2005	2003	2005
Total SA	72	71	29	32
Blacks	70	69	31	33
Whites	82	79	18	26
Coloureds	72	75	27	26
Indians/Asians	79	77	25	25

TABLE II
Health and stress/pressure

#### 3.10. *SWB*

SWB shows no change over time, standing at 75 in both 2003 and 2005. There is some variation across race group: blacks – 73, whites – 82 (down two points), coloureds – 76 and Indians/Asians 82. There is some correlation with poverty levels, with *Affluent* people scoring 84 compared with 73 amongst those *Living in Poverty*, 70 amongst those *Poverty stricken* and only 61 amongst those suffering *Severe hardship*. For these people, too, unemployment is particularly distressing: those looking for work scoring 65, this dropping to 60 for those who have given up. Having a full-time job, on average, lifts SWB scores five points – but eight points above those unemployed. Lack of a job affects one's self-esteem, reward and recognition levels. Working away from home also leads to a drop in SWB by, on average, eight points compared with those working people who live at home.

# 3.11. Overall EQL $(EQLi^{TM})$

This overarching measure takes all variables in the framework into account simultaneously. In 2003, the measure stood at 58; in 2005, it is 57, an insignificant overall change. Despite the small real growth in incomes over the past 2 years, this has not yet greatly affected the overall quality of people's lives when taken as an average over the whole country. For whites, however, the measure declined from 82 to 78 for reasons already given. The black figure was steady at 52, a decline of three points in small urban areas being almost balanced by one point rises in metropolitan and rural areas:

# Metropolitan areas

○ Blacks – 59 (2003: 58)

○ Whites – 78 (2003: 83)

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o Coloureds – 68 (2003: 69)
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o Indians/Asians - 74 (2003: 74)

#### Other urban areas

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Blacks - 56 (2003: 59)
Whites - 79 (2003: 81)
Coloureds - 63 (2003: 61)
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#### Rural areas

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Blacks - 45 (2003: 44)
Whites - 70 (2003: 77)
Coloureds - 58 (2003: 48) (caution: small sample base)
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For blacks in metro areas, improvements are evident in basic infrastructure (such as hot running water, up to 24% from 14%, a substantial rise in cell phone ownership (in the household) from 38 to 62%, a life of increasing variety (20–31%), feelings of better health (but a slight decline in exercise levels), a drop in the levels of people saying that they cannot afford to eat correctly (25–17%), and an improvement in air quality. This is partly balanced by a decline in having friends and family to turn to (73–66%) and somewhat less leisure time.

For blacks in other urban areas, there have been improvements in cell phone ownership (40–53%), but some drops in the provision of basic services such as water and sanitation, a drop in the variety of one's life, an increase in fear level (15–23%), a decline in leisure levels and a decline in having friends and family to turn to. There are also generally greater feelings of anxiety and depression.

The overall impression is one of a country where family and community structures are in considerable flux. Pressure levels are higher in a more vibrant but more stressed environment. For blacks, there are some clear improvements in metro areas in basic living conditions, but service delivery is a potential problem in non-metro areas.

# 3.12. Contributors to Well-being, Quality of life and Happiness

The major contributors to well-being, quality of life and happiness in South Africa are largely congruent with international findings (Diener and Suh, 2000):

Basic infrastructure – water, sanitation, power, hot water, communications, transport

- A varied life with many activities
- Health exercise, reduced stress, adequate nutrition, mental activity, moderate drinking, better environment and reduced pollution, adequate leisure time, good support systems
- Networks acceptance, belonging, respect, close and fulfilling relationships
- Optimism active life, mental activity, direction and purpose in one's life, realisable dreams and ambitions, satisfaction with achievements, respect of others
- Dignity and self-esteem avoidance of disparagement and denigration, recognition of people's "human-being-ness"
- Employment especially work that challenges one without being too daunting and work that is not below one's skill level (the concept of "flow" (Csikszentmihalyi, 1990) amongst those employed, 29% of people felt they had this balance, but 14% said that work bored them and they had no challenges, whilst 16% said they were anxious about the challenges they faced at work).

Money is not listed: it plays a role, but only to a point. We term this the "socio-economic/well-being see-saw". Below a monthly household income of R3000, needs are dominated by wealth; as income rises, this is gradually displaced by a variety of needs beyond basic infrastructural needs; once R11 000 is reached, money is key to a much smaller group of people and decisions. SWB may level off at as low as R7000. Health scores level off at R3000. Relatively small income increments at the lower end of the income spectrum have a major effect on people' lives, especially their health (Figure 7).

## 3.13. Marketing Orientated Measures

We use two main analyses in the marketing and communications environment: an analysis that combines connectivity with state of mind, and another that sharpens this by adding optimism – noted earlier as a key variable in SA. The first analysis yields the *Influence-style* segmentation, used to profile brands or users of media titles/channels as well as to determine what influencers feel about a brand or medium. RS has discovered that a brand with a high proportion of *Vibrant influencers*, in particular, has a better likelihood of rapid growth. Too many *Variable influencers* can lead to a brand's decline.

The optimism measure in 2003 was 68. In 2005, it is 66, but 2004 saw a rise in optimism to 76 as a result of falling inflation and interest rates, the

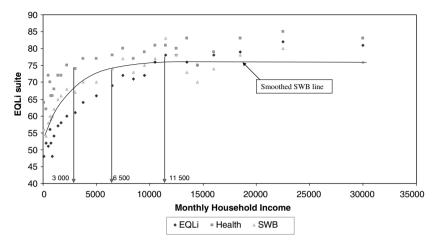


Fig. 7. Correlation with household income.

celebration of 10 years of democracy, the second successful democratic elections in April, winning the 2010 Soccer World Cup bid, our Tri-Nations rugby win and the fairly successful Olympic showing by South African athletes. The decline in 2005 is due to rising fuel prices and the knock-on effect on food prices, and may also be influenced by the on-going exposure of corruption at high levels of Government as well as the slow rate of poverty alleviation. Overall, people have three dominant economic concerns: employment, concern about the possibility of job loss by a house-hold's main wage-earner due to health or other reasons and concerns about rising prices, especially food and fuel prices (Figure 8).

The second analysis is termed the *Wildfire* segmentation and seeks to identify those people so "buzzy", out-going, optimistic and well-connected that they have the potential to ignite a brand (equally, if they have a negative view of the brand, the results can be disastrous). In 2005, we identified 19% of the population to be these "igniters".

#### 4 SUMMARY

Quality of life in South Africa shows major variation, with a perhaps tooslow pace of improvement being evident amongst the previously disadvantaged groups, this being somewhat counteracted by a white population still very well-off in comparison with the average but under increasing stress and competition. That four out of ten South Africans live in poverty is a serious concern. Understanding of the severity of this poverty makes this a

			Connectivity	
		Medium/low	High	Very high
of mind	Medium/low	Sad loners - 29%	Variable influencers - 36%	Over-stressed influencers - 6%
State	High	Happy in their own little world - 3%	Positive influencers - 11%	Vibrant influencers - 15%

Fig. 8. Influence style analysis.

humanitarian issue of the first importance. Job creation is a national priority. The low wages paid to people at the bottom end of the skills ladder is another issue. The need specifically for rural upliftment and for the improvement of the lives of people in urban squatter shacks is clear. Quality of life improves immensely once people have a formal dwelling in which to live.

This study has not focused on the AIDS pandemic: its negative effect is masked in these overall measures due to improvements in access to basic services such as water, power and better shelter. However, in a study conducted by RS for the FinMark Trust, (FinMark, 2004/5, probability sample of 3 885 nationwide), 20% of South Africans had experienced the death of someone in their household and a third expressed concerns about the health of the main wage earner. Other studies also conducted by RS during the course of 2005 point towards the considerable confusion that exists in SA about the treatment of the pandemic (RS press release, November 2005).

Job creation (and people's concerns over the earning ability of the main wage earner), poverty alleviation, inflation control and housing delivery are the four most pressing problems faced by the ordinary South African in 2005, in approximate order of importance.

President Mbeki, in his inauguration speech in April 2004, focused on the issue of service delivery, with government departments now being required to include scorecards on service delivery in their annual reports – an issue that is making the measurement of people's quality of life in SA a greater imperative than before. This paper has outlined a measurement framework that has shown stability over time and enables progress towards a better life for all to be quantitatively measured.

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