

Evaluating health communication – a holistic overview of the impact of Soul City IV

E. Scheepers, N.J. Christofides, Susan Goldstein, S. Usdin, Dhaval S. Patel and Garth Japhet

Introduction

The Soul City Institute for Health and Development Communication is a South African non-government organisation that uses mass media to have a positive impact on quality of life, health and well-being of South Africans aged 8-65. Soul City is a national, multimedia, edutainment vehicle that integrates health and development issues into prime-time television and radio dramas, supported by print material. Advocacy (including community mobilisation and media advocacy) complements the edutainment media. The Soul City adult series targets previously disadvantaged African and Coloured South Africans aged 16-65. Although the series is suitable for all populations, theory of communication suggests that specific targeting and testing of materials makes it more effective. Soul City is, however, committed to the health and development of all South Africans irrespective of colour, race or any other characteristic.

Soul City's health communication practice is influenced by

converging trends in social change theory and by developments in health promotion and health communication. Communication for social change discourse emphasises a shift away from only focusing on individual behaviour towards a more interpersonal and social approach. This approach emphasises mechanisms of change such as private and public dialogue and debate, social norms and cultural values, and the development of a supportive environment. The latter includes support at a grassroots, community level as well as at the level of national political will. In health promotion discourse, 'health literacy' emerged as a key construct following the Ottawa Charter (1986), the Jakarta Declaration on Leading Health Promotion into the 21st Century (1997), and the strengthening of the socio-ecological perspective of health. This perspective encompasses social and economic conditions, the physical environment, lifestyles and personal resources in addition to physical capabilities in a comprehensive definition of health as a resource for everyday life instead of an object of living.^{1,2}

Abstract

Objective: Soul City is a South African multimedia edutainment health communication intervention. The Soul City adult series targets previously disadvantaged African and Coloured South Africans.

Methods: Soul City's impact on individuals, interpersonal processes and communities was investigated in the context of the broader socio-political environment. The evaluation comprised: 1. Pre/post-intervention surveys nationally; 2. A national qualitative impact assessment; 3. Ninety-seven semi-structured interviews assessing the impact of the intervention's advocacy strategy; 4. Monitoring of the national print and electronic media over a six-month period; 5. Monitoring of the 'Stop Woman Abuse' Helpline calls over a five-month period; and 6. The compilation of a database of organisations reached nationally.

Results: Soul City is a popular, credible vehicle that reached more than 80% of its target audience. It was effective in increasing health literacy, especially with reference to domestic violence and HIV/AIDS. The intervention facilitated the speedy implementation of the Domestic Violence Act and increased access to support services. Soul City shifted community norms and stimulated community dialogue.

Conclusion: Soul City's effectiveness is partially attributable to the fact that it deals with multiple issues comprehensively; multiple intervention components impact synergistically on individuals, communities and broader societal processes.

Key words: Health communication; health literacy; health promotion; social change; behaviour change; edutainment; Soul City.

as synergy between different components of the intervention is concerned. Domestic violence was one of the main features of the edutainment vehicle, as well as the focus of a comprehensive advocacy campaign. Third, HIV/AIDS and youth sexuality have been dealt with in the Soul City adult series since 1994.

Comparison of edutainment evaluation results across Africa shows that Soul City's reach was among the highest, and that the Soul City IV intervention was the most comprehensive, both in terms of the scope of the intervention as well as the range of health and development issues covered. Consequently, Soul City IV demonstrated impact across a wider range of health literacy indicators. The degree of improvement associated with Soul City IV compared well with (or is often higher than) the degree of improvement in interventions reviewed.¹⁹

Reasons for Soul City's effectiveness

Soul City's effectiveness may be attributed to the following factors.

The multimedia format. The enhanced effect of exposure to multiple sources of Soul City media is well illustrated in the dose response associations presented in Table 3. Using a multimedia approach increases reach and reinforces communication, thereby enhancing impact.

The drama edutainment format, sustained over time.

Edutainment media (drama in particular) affords audiences the opportunity to model and adopt new behaviour through vicarious reinforcement, emotional engagement, identification with characters and mental rehearsal.^{19,20} This phenomenon, known as 'parasocial interaction', has audiences adopting and relating to characters as real people, with whom they identify or aspire to.²¹ Reliance on cognitive processing (communicating accurate knowledge and information) is accompanied by an appeal to emotions and human interest; this increases audience involvement in the health and development issue²² and enhances impact. Thus, an edutainment approach acknowledges that healthy choices are not necessarily based on an informational, rational, linear process. Rather, it is useful to conceptualise healthy behaviour as a motivational, emotional process that does not follow a pre-established pattern.²³

Evidence of audience members' parasocial interaction with Soul City IV characters and settings, emerging in a context where they relate change in their lives attributed to Soul City IV, is common across all qualitative interviews conducted in the National Qualitative Impact Assessment. Examples (i.e. quotations) were presented earlier in the article (see section on 'Impact: individual change').

Table 2: Scale analysis, multivariate logistic regression analysis odds ratios by exposure to Soul City multimedia. National survey results (n=2,000, post-intervention survey).

| Composite scale ^a | Multivariate logistic regression analysis – odds ratios (and CIs) by level of SC multimedia exposure | | |
|--|--|-----------------------------------|-----------------------------------|
| | 1 source (n=456) | 2 sources (n=693) | 3 sources (n=436) |
| Hypertension, knowledge (Severity, aspects of prevention, early detection, services, treatment and aspects of medication) | 1.3 (1.096-1.504) | 1.8 ^b (1.704-1.896) | 3.5 ^c (3.439-3.561) |
| Hypertension, perception of risk (Concern about self and others) | 1.2 (1.175-1.225) | 1.6 ^b (1.7-1.5) | 3.2 ^c (3.165-3.235) |
| Hypertension, actual practice (Having one's blood pressure checked, adopting a healthier lifestyle by changing one's diet, exercising more, consuming less alcohol and smoking less, as well as suggesting that someone else should have their blood pressure checked) | 1.3 (1.247-1.353) | 1.5 ^b (1.427-1.573) | 1.8 ^c (1.767-1.817) |
| Violence Against Women (VAW), perception of severity (In the community and within families) | 2.3 ^b (2.173-2.427) | 4.6 ^c (4.539-4.661) | 6.7 ^c (6.651-6.749) |
| VAW, interpersonal communication (Talking about VAW in various contexts) | 2.5 ^b (2.465-2.535) | 3.9 ^c (3.826-3.974) | 5.8 ^c (5.759-5.841) |
| HIV/AIDS and youth sexuality, intention (Willingness to phone the AIDS Helpline, to help someone who is HIV positive, to ask one's partner to use a condom, to ask one's partner to go for an HIV test, and willingness to go for an HIV test oneself) | 2.9 ^b (2.855-2.945) | 4.7 ^c (4.639-4.761) | 4.5 ^c (4.4-4.6) |

(a) Cronbach Alpha 0.70

(b) p<0.05

(c) p<0.01

A thorough development process, grounded in local contexts.

This factor is widely recognised as key to successful communication.²⁶⁻²⁸ In developing key intervention strategies and messages, Soul City engages in a thorough process of locally contextualised formative research: all Soul City series are preceded by an 18-month, cyclical and interactive development process involving literature reviews, consultation with local service providers, experts, and other stakeholders in the particular area, as well as thorough audience research. Scripts and media productions are pre-tested.

Conclusion

Health communication is a dynamic field of expertise that increasingly relies on sound evaluation practice to inform developments in the field and to guide decision-making regarding allocation of resources. Numerous studies investigate, comment on and contextualise the association between health communication and health literacy.^{1,5,6,29,37} Analysis shows that health communication can improve health literacy – if implemented effectively.^{5,38} It remains important for health communication interventions not to assume positive outcomes, but to critically investigate their impact – as a measure of accountability towards peers, donors, and communities on whose behalf funds are raised; and as a means to assess and improve communication strategies. Thus, on a programmatic level, the question always remains: "Does this program work?" The Soul City IV evaluation provides strong evidence that the intervention did have a positive impact on health literacy. One of the limitations of the Soul City IV evaluation is that it did not investigate the medium and longer-term impact of the intervention. In the short term, however, the association between Soul City IV and various facets of health literacy (as an outcome in its own right) is well demonstrated.

Another limitation of the Soul City IV evaluation is that it did not directly investigate the association between the Soul City IV intervention and (improved) health outcomes (such as blood pressure or HIV status). There is, however, substantial evidence linking health literacy to improved health outcomes.^{4,36,39,40}

The Soul City IV experience supports evidence that (if well implemented) health communication can be an effective strategy to increase health literacy and thus bring about improved health outcomes.

Acknowledgements

Community Agency for Social Enquiry; T. Samuels, J. Mollentz, R. Olananya, M. Claassens, S. Braehmer and Z. Kimmie.

Social surveys: Katharine Hall and Karen Daniels.

Strategy and tactics: Matthew J. Smith, Khosi Xaba, Mweru Mwingi and Irene Muriuki.

The Soul City IV Evaluation was funded by the European Union.

References

- Kickbusch I. *Think Health! what makes the difference*. Health Promot Int 1997;12(4):263-72.
- Nathan D. Health Promotion Glossary. Health Promot Int 1998;13:349-64.
- Tappin MC, Cole-Livie RA. Health education's role in promoting health literacy and advocacy for the 21st century. J Sch Health 2001;71(10):477-82.
- Peterson L, Martin C. *Health Literacy Fact Sheet Bibliography*. Princeton (NJ): Center for Health Care Strategies; 2003.
- Bush R, et al. *Health Literacy Overview: Slide Presentations*. Boston (MA): Harvard Schools of Public Health and Health Literacy; 2002. Available from: URL: <http://www.hsph.harvard.edu/healthliteracy/slides/index.htm>
- Rattan SC. Health literacy: communication for the public good. Health Promot Int 2001;16(2):207-14.
- WHO. Jakarta Declaration on Leading Health Promotion into the 21st Century. 1997. Proceedings of the 4th International Conference on Health Promotion: New Players for a New Era – Leading Health Promotion into the 21st Century; 1997 July 21-25; Jakarta, Indonesia.
- Nuttbeam D. Health literacy as a public health goal. Health Promot Int 2000;15:259-67.
- Hepworth J. Evaluation in health care research: linking theories, methodologies and practice in health promotion. Health Promot Int 1997;12:213-6.
- Rada J, Raitama M, Hoonen-Chapman P. Evidence-based purchasing of health promotion: methodology for reviewing evidence. Health Promot Int 1999;14(2):177-82.
- Raphael D. The question of evidence in health promotion. Health Promot Int 2000;15:353-67.
- Nuttbeam D. Evaluating health promotion – progress, problems and solutions. Health Promot Int 1998;13:27-44.
- Hancock J, Goggin A, Burton L, McClelland A, Carter R, Durrant A, et al. Developing methodologies for evaluating community-wide health promotion. Health Promot Int 1996;11:227-36.
- Campbell M, Fitzpatrick R, Haines A, Kinmonth AL, Savelleick P, Spiegelhalter D, et al. Framework for design and evaluation of complex interventions to improve health. *Br Med J* 2000;321:694-6.
- Scott D, Weston R, editors. *Evaluating Health Promotion*. Gloucester (UK): Stanley Thornes; 1999.
- Scheepers E, Goldstein S, Udén S. Evaluation Methodology Report; vol 1. In: Evaluation: Soul City 4 Series. Johannesburg (SA): Soul City Institute for Health and Development Communication; 2003 July. Available from: URL: <http://www.soulcity.org.za/14.06.aq@php>.
- Scheepers E, Goldstein S, Udén S. Evaluation Methodology Report; vol 2. In: Evaluation: Soul City 4 Series. Johannesburg (SA): Soul City Institute for Health and Development Communication; 2003 July. Available from: URL: <http://www.soulcity.org.za/14.06.aq@php>.
- Scheepers E, Goldstein S, Udén S. Theory and Impact Synopsis. In: Evaluation: Soul City 4 Series. Johannesburg (SA): Soul City Institute for Health and Development Communication; 2003 August. Available from: URL: <http://www.soulcity.org.za/14.06.aq@php>.
- Bandura A. Social Learning Theory. Englewood Cliffs (NJ): Prentice-Hall; 1977.
- Bandura A. *Social Foundations of Thought and Action*. Englewood Cliffs (NJ): Prentice-Hall; 1986.
- Pigg M, Singhal A, Law S, Parry S, Soel S, Rogers EM, et al. Interventions to educate and social change: An analysis of participatory innovation, social learning, collective efficacy, and paradoxical communication. *J Commun* 2001;50(4):31-55.
- Bourman M. *The Tattle and the Peacock: Collaborative for Professional Change – The Entertainment-Education Strategy on Television*. Wageningen (NL): Wageningen Agricultural University; 1999.
- Ardhenthane CC, Obregon R. A critical assessment of theories / models used in health communication for HIV/AIDS. *J Health Commun* 2000;5 Suppl:3-15.
- Scheepers E, Christides N, Goldstein S, Udén S. Violence Against Women Summary Report, vol 8. In: Evaluation: Soul City 4 series. Johannesburg (SA): Soul City Institute for Health and Development Communication; 2003 August. Available from: <http://www.soulcity.org.za/14.06.aq>.
- Rogers EM. Introduction. *J Health Commun* 2000;5 Suppl:1-3.
- Rajabali AI. Promoting health literacy: a case study in the prevention of diarrhoeal disease from Bangladesh. *Health Promot Int* 2000;15(4):285-91.
- The Declaration of the Communication for Development Roundtable. Proceedings of the VIII International Communication for Development Roundtable; 2001 November 26-28; Managua, Nicaragua.
- UNAIDS/WHO. *Communication Framework for HIV/AIDS: A New Direction*. UNAIDS/WHO/UNAIDS. Geneva: UNAIDS; 1999.
- Davis J, Nicholson L. *The Use of Mainstream Media to Encourage Social Responsibility: The International Experience – Inventory of Projects*. Media Park (CA): Henry J. Kaiser Foundation; 1996.

30. Kachiswara N, Kuzurgumata - Kijana. In: Clancy J, Nickerson L, editors. *The Use of Mainstream Media to Encourage Social Responsibility: The International Experience - Inventory of Reports*. Menlo Park, CA: Henry J. Kaiser Foundation; 1995.
31. Jato MN, Simbakaka C, Tarevich JM, Awam DN, Kibinga CN, Ngwemungu E. The impact of multi-media family planning promotion on the contraceptive behaviour of women in Tanzania. *Int Fam Plan Perspect* 1999;25:60-7.
32. Levin-Zamir D, Peterburg Y. Health literacy in health systems: perspectives on patient self-management in Israel. *Health Promot Int* 2001;16(3):87-94.
33. Rogers DM, Visdhan PW, Swalehe RM, Rao N, Sachidanand P, Sood S. Effect of an entertainment-education radio soap opera on family planning behaviour in Tanzania. *Stud Fam Plan* 1999;30:193-211.
34. Rankin Wang. Critical health literacy: a case study from China in a hiv/aids context. *Health Promot Int* 2000;15(3):269-74.
35. Vaughan PW, Rogers DM. A staged model of communication effects: evidence from an entertainment-education radio soap opera in Tanzania. *J Health Commun* 2000;5:203-27.
36. Weiss BD. Health literacy: an important issue for communicating health information to patients. *Zhenghua Yi Xue Za Zhi (Japan)* 2001;64(11):603-8.
37. Yoder PS, Homick R, Chiswa BC. Evaluating the program effects of a radio drama about AIDS in Zambia. *Stud Fam Plan* 1996;27(4):188-203.
38. Vaughan PW, Rogers DM, Singhal A, Swalehe RM. Entertainment Education and HIV/AIDS Prevention: A field experiment in Tanzania. *J Health Commun* 2000;5 Suppl:81-100.
39. Kulehnan SC, Rompa D. Functional health literacy is associated with health status and health-related knowledge in people living with HIV/AIDS. *J Acquir Immune Defic Syndr* 2000;25(4):117-44.
40. Kikubush Buse S. Health literacy: addressing the health and education divide. *Health Promot Int* 2001;16 (3):209-97.
41. Kikubachi L, Rattana SC. Health literacy: making a difference in the USA. *J Health Commun* 2001;6(2):87-8.

Authors

E. Scheepers, Soul City Institute for Health and Development Communication, South Africa

N.J. Christides, Gender and Health Unit, Medical Research Council, South Africa

Susan Gokstein, Soul City Institute for Health and Development Communication, South Africa, and School of Public Health, University of Witwatersrand, South Africa

S. Usdin, Soul City Institute for Health and Development Communication, South Africa

Dhaval S. Patel, Population Services International (Washington DC), United States

Garth Japhet, Soul City Institute for Health and Development Communication, South Africa

Correspondence

Ms Esca Scheepers, Soul City Institute for Health and Development Communication, PO Box 1290, Houghton 2041, Johannesburg, South Africa. Fax: +27 11 643 6253; e-mail: esca@soulcity.org.za

Over the past 10 years, Soul City has aimed to have an impact on broader health outcomes by improving health literacy. The term 'health literacy' is informed by an understanding of the social determinants of health. It is used alongside health advocacy as a health promotion strategy.³ Health literacy is a comprehensive, integrated construct with cognitive, motivational, skill and behavioural components.^{3,4} The term applies to individuals as well as communities and encompasses the following: understanding information and improving knowledge of health; understanding and considering the risks of individual and collective behaviour; individual and social skills in negotiating barriers to health and in utilising resources; and motivation to engage these skills. It further refers to self-efficacy and collective efficacy that mediate the implementation of health knowledge, skills and motivation. Efficacy enables the person and community to act in ways that promote and maintain good health.^{3,4}

Through improving people's access to information and their capacity to take action, improved health literacy is central to individual and community engagement in changing lifestyles and living conditions – i.e. it is central to community empowerment.^{2,3,7,8}

Converging developments in health promotion discourse and in social change discourse formed the framework for implementing the Soul City IV intervention. The Soul City IV intervention set out to have a positive impact on health and social outcomes by addressing the following:

1. The broader social and community environment (i.e. access to services, policy implementation, public debate, community action and community norms).
2. The immediate interpersonal environment (i.e. social norms and peer pressure, support-giving behaviour, and interpersonal dialogue and debate).
3. Individual determinants of health (i.e. knowledge and awareness, personal attitudes, self-efficacy, perception of risk, support-seeking, intention to change, and practices).

Soul City IV (broadcast in 1999) consisted of a multimedia intervention: a 13-part television drama (consisting of one-hour episodes) broadcast weekly on prime-time national television on the station with the largest viewership in South Africa for 13 weeks; a 45-part radio drama (consisting of 15-minute episodes) transmitted daily in nine languages through the public broadcaster on all nine of its African language stations nationally for the duration of the series; and three basic full-colour booklets – a million of each were distributed through 10 newspapers nationally. Soul City IV also encompassed a national advocacy strategy, consisting of direct lobbying of government and decision makers, national media advocacy and community mobilisation. The intervention as a whole addressed HIV/AIDS and youth

sexuality issues; domestic violence and sexual harassment (in partnership with the National Network on Violence Against Women – NNVAW); hypertension, and small business development and personal finance.

Evaluation methodology

The comprehensive understanding of health literacy (or social and behavioural change) sets the parameters for evaluating the effectiveness of health communication. Health promotion research poses particular challenges in that it deals with multiple social, cultural, psychological, political and health-related variables.^{9,11} It demands complex designs, using multiple methodologies, methods and techniques.^{9,11} The Soul City IV evaluation deliberately engaged with these difficulties in a complex design consisting of a number of interlinked components.

Key Soul City IV evaluation objectives^{16,17}

The primary aim of the evaluation was to investigate Soul City's impact on individuals, interpersonal processes and communities, in the context of the broader social and political environment. The following aspects were investigated:

1. Soul City's reach, audience profile, and audience reception.
2. Soul City's impact on individuals: i.e. awareness, knowledge and attitudes; perception of social norms (subjective social norms); perception of risk; self-efficacy; intention to change; information-seeking and support-seeking behaviour; as well as actual practice.
3. Soul City's impact on an interpersonal level: i.e. experience of peer/social pressure; support-giving behaviour; as well as interpersonal dialogue and debate.
4. Soul City's impact on communities: i.e. its impact on connecting people to local services; impact on community structures and organisations; impact on local organisational policy and practice; community mobilisation; and collective efficacy.
5. Soul City's impact on societal processes: i.e. its impact on public debate as reflected in the national media; and its impact on policy implementation (with reference to the Domestic Violence Act).

Study design, sampling and data collection^{16,17}

Several studies were independently contracted out to collectively form the integrated evaluation of Soul City IV.

1. A national survey. Baseline (pre-intervention) and evaluation (post-intervention) data collection conducted in June 1999 and February 2000 respectively consisted of standardised, face-to-face interviews, conducted on comparable samples of 2,000 adult respondents (aged 16-65) for each survey. The samples were statistically representative of the Soul City target population

nationally. A multi-stage, stratified, national, random sampling design was used. About 48% of the sampled respondents lived in rural areas while 52% resided in urban and metropolitan communities. An overwhelming majority (90%) was African with the remainder of the sample Coloured (10%). A two-to-one ratio of women to men comprised the sample. About 66% of respondents were between 16-35 while 34% were 35 and older. More than 50% had completed at least a secondary education. A standardised questionnaire was used with closed and open-ended questions designed to measure Soul City's intended health and social outcomes. The questionnaire consisted of 127 items, and it took on average an hour to administer. Responses were recorded on the questionnaire itself by trained interviewers.

2. A survey in two sites. This entailed repeated measurement of a panel (or cohort) of respondents in each of two sites (one urban site in Gauteng and one rural site in Kwa-Zulu Natal – two provinces in South Africa). Respondents represented Soul City's target audience and were statistically representative of each of the two communities. A multi-stage stratified sampling design was followed, with systematic sampling of dwellings within clusters and random selection of respondents within that. There were four measurements: pre-intervention (baseline), two measurements during the time that Soul City IV was on air, and post-intervention (evaluation) measurement. Standardised, face-to-face interviews were conducted with a sample of 500 respondents per site, with an additional 100 interviews controlling for the research effect. The same instrument (standardised questionnaire) was used in both the national survey and panel surveys, with the panel questionnaire adapted to take the study design into account.

3. A National Qualitative Impact Assessment. Data collection comprised 31 qualitative focus group interviews and individual interviews conducted among Soul City's target audience. Approximately two-thirds of the fieldwork was conducted in the two sites in two provinces mentioned above, and one-third of the fieldwork was extended to a further four provinces (i.e. fieldwork was conducted in six of nine provinces). Participants in the urban and rural sites were part of the panel (cohort) described above, and were recruited on the basis of similarities in their responses to a selection of items in the panel survey. These items covered the content themes dealt with in Soul City IV. Respondents were allocated to homogeneous focus groups profiled as follows: respondents displaying positive change in attitudes, subjective norms and behaviour from one measurement to the next; respondents displaying negative change; and respondents displaying no change. This profiling and recruitment of participants enabled researchers to qualitatively investigate 'change' in a way that is not possible using survey methodology alone. Participants in the other four provinces were purposively selected, with exposure to Soul City as the only criterion. A further 30 semi-structured interviews

were conducted with community members representing leadership, services and civil society in the two sites. Respondents were recruited in their organisational or leadership capacities, and participated on the basis of their availability.

4. Evaluation of the partnership between Soul City and the National Network on Violence Against Women (NNVAW).

Data collection consisted of 97 semi-structured interviews and focus group interviews with national and provincial government; service providers; NGOs; journalists; training institutions; community members; intervention partners and stakeholders; and external observers of the Domestic Violence Act policy process. The study further monitored the national print and electronic media over a six-month period, and monitored the 'Stop Woman Abuse' Helpline calls over a five-month period using telephone records obtained from the telecommunication service provider (Telkom).

5. Compilation of a database of organisations and institutions reached by Soul City. Data collection was based on ongoing correspondence initiated by audience members nationally with Soul City over several years (requesting material, for example), existing Soul City databases, responses to a public announcement made in national papers and development publications (print and electronic), and a subsequent self-administered survey of organisations that responded.

Data analysis^{16,17}

The quantitative analysis of the national survey consisted of the following:

1. Identifying significant shifts ($p \leq 0.05$) from pre- to post-intervention using chi-square tests for all outcome items in the questionnaire.

Modelling responses from the pre- and post-intervention surveys using binary logistic regression analysis on the combined dataset in order to overcome some of the shortcomings of cross-tabulation analysis. Explanatory variables used were phase (pre/post intervention), area (urban, rural), age, sex, race and education level.

Cross-tabulations were then carried out on each item, controlling for variables that were significant in explaining responses. (Chi-square tests were used to measure significance.)

2. A similar approach was used to explore the association between Soul City IV media and responses to items in the post-intervention dataset. The same explanatory variables were included in the model (except for phase), in addition to exposure to different components of the Soul City intervention. (Separate analysis was carried out to assess the relative impact of each of the multimedia components.)

In addition to single-item analysis described above, scale analysis (analysis of composite scores on a combination of 'single' items)

was performed on all survey data: items were subjected to a face validity screening, which grouped measures by outcomes (i.e. awareness, knowledge, attitudes, subjective social norms, behaviour, intention, interpersonal communication and support behaviour, perception of risk and self-efficacy) for all Soul City IV topic areas. Subsequently, the scales were analysed for reliability (Cronbach alpha) using the evaluation survey data. Scales were considered reliable when Cronbach alpha was greater than or equal to 0.70. Response categories were labelled for desired directionality and composite scores were calculated. Multivariate regression analysis was performed in order to determine the association between the explanatory variables (Soul City exposure, and exposure to the NNVAW) on the outcome variables, controlling for socio-demographic variables (i.e. area, age, sex, employment, and education). No detectable cluster effect was found.

In the case of the panel survey analysis, scales constructed and tested for reliability as above were used to measure the changes in responses to various constructs over time. In isolated cases, single-item analysis was performed. Each scale was measured in the same manner, with a minimum score of 0 and a maximum score of 1. The desired responses were measured in a positive direction. A repeated-measure analysis of covariance design was used to test whether respondents had changed their responses over time, and whether any of these changes were correlated to exposure to Soul City IV. The covariates used in the analysis were age and education, and the between-subject factors were sex, location (urban or rural site) and exposure to the Soul City intervention.

The Qualitative Impact Assessment data analysis consisted of computer-aided thematic analysis (using Atlas.ti) of verbatim transcriptions of interviews. Codes were generated from the data itself, keeping the integrity of the context in which they emerged. Coding adhered closely to the words and phrases used by respondents to eliminate premature interpretation or distortion of data. Similar codes were grouped into themes. Each interview constituted a single hermeneutic unit – i.e. was analysed generating codes and themes unique to that interview. Subsequently, meta-analysis (identifying similarities as well as unique features) of all interviews was conducted within relevant audience segments (e.g. urban/rural respondents). In a last stage of analysis, qualitatively descriptive models were built, accurately reflecting the prominence and contextualised meaning of themes emerging across qualitative interviews. Qualitative findings were interpreted within the theoretical model underpinning the Soul City IV intervention and evaluation.

In the partnership evaluation study, simple quantitative descriptive analysis of Stop Women Abuse Helpline calls (calls answered and calls attempted) was performed, using a database obtained from Telkom SA Ltd. Quantitative content analysis of

media coverage of violence against women (and domestic violence in particular) was conducted. Relevant articles and bulletins were coded, using a coding sheet with pre-determined codes to ascertain key aspects covered. All codes as well as additional information – such as date and/or time of reporting, type of media and the specific publication/media channel – were captured electronically. Inter-coder reliability for a sample of articles coded early on in the process was calculated using Krippendorff's reliability test. Krippendorff's reliability coefficients for three key codes were as follows: Primary Content (0.77); Soul City Mention (0.64) and NNVAW Mention (0.70). As a strategy to improve inter-coder reliability, coders were given additional training and the coding system was simplified. Coding categories were collapsed in the final analysis in order to further increase reliability. The electronic database of press releases and interviews conducted or initiated by the partnership over the first 3–4 months of the evaluation period was used as a comparative measure in assessing the impact on the partnership of media advocacy. Simple, descriptive quantitative analysis was conducted on both databases: actual press coverage, as well as press releases and interviews conducted or initiated by the partnership. In the absence of baseline data for media coverage of domestic violence prior to the Soul City IV intervention, trends in both databases were compared as a measure of association between the intervention and actual media coverage. Direct mention of Soul City and/or the NNVAW was also used as an indicator of impact.

The evaluation was conducted and managed by independent researchers. The evaluation period was July 1999 to December 1999.

Results

Reach

National survey results indicate that Soul City IV had considerable reach (see footnote 1) across urban and rural populations in South Africa (see Figure 1).

It reached diverse audience segments with reference to education, age, sex and geographical location: 42% of the television audience (and 54% of the radio audience) live in rural areas; 66% of the television audience (and 67% of the radio audience) are women; 30% of both television and radio audiences are youth aged 16 to 24; and 22% of the television audience (and 26% of the radio audience) has no formal schooling or some level of primary-level education only.

Soul City reaches a wide variety of South African organisations and institutions. The database of organisations and institutions

Footnote 1: Reach denotes exposure to the media and must be distinguished from 'recognition', a term that refers to knowledge of the media.

reached constructed in 1999 consists of more than 4,300 entries, and includes schools (47%), Adult Basic Education and Training (ABET) centres (34%) and clinics (10%). The remaining 9% of entries comprise NGOs and CBOs, government departments, church groups, para-statal, private sector institutions, and universities (both local and international).

Audience reception

The National Qualitative Impact Assessment shows that Soul City is perceived as a relevant, credible and entertaining educational vehicle. Qualitative analysis suggests that Soul City's impact (demonstrated subsequently) is related to its constructive, pro-social role modelling, and its modelling of plausible alternatives or coping-strategies in a setting that is real and familiar to its audience. The dramatic format combined with messages that communicate in a clear and nuanced manner – complete with consequences attached to choices – enable the audience to critically reflect on their own attitudes and behaviour, and leave them with a sense that they have choices.

"What Soul City does is to show you the problem, the advantages, the disadvantages, even the cause of that problem and consequences, then after that, show you the options or alternatives to take when trying to solve that problem."

[Rural Male, National Qualitative Impact Assessment] (see footnote 2)

"And again, it [Soul City] gives you picture from both sides, so you have to choose yourself what is right and what is wrong. Meaning you are able to determine your own opinion from the scene you see from Soul City."

[Urban female, National Qualitative Impact Assessment]

Impact: creating a supportive environment

Evaluation results across studies (the national and site surveys,

the National Qualitative Impact Assessment, and the evaluation of the partnership) provide evidence that Soul City IV contributed to creating a supportive environment for facilitating behaviour change and for maintaining positive behaviour, particularly in the areas of domestic violence and HIV/AIDS.

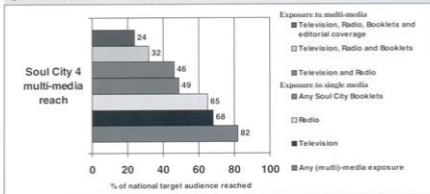
The evaluation of the partnership between Soul City and the NNVAW demonstrates how the Soul City IV intervention had an impact on the national policy implementation environment through a successful advocacy strategy (including direct lobbying, media advocacy and community mobilisation), which contributed to raising public debate around domestic violence and facilitated the implementation of the Domestic Violence Act (DVA) in 1999 (see Figure 2).

Sustained advocacy for successful implementation of the DVA (i.e. improved service delivery, including more sensitive service delivery) is necessary in order to follow-through on immediate or short-term gains.

Both the survey results and the qualitative impact assessment results provide evidence that Soul City IV increased access to support services in the areas of hypertension, HIV/AIDS, and domestic violence. The intervention raised awareness of, and increased contact with, local violence against women services: national survey results indicate that 1% of respondents with no exposure to the Soul City television drama reported that they had made contact with an organisation working in violence against women while Soul City was on air, whereas 4% of respondents with low and medium exposure to the television drama, and 5% of those with high exposure to the television drama, reported making contact (chi-square test of significance,

Footnote 2: Quotations reported in this article are representative of government themes emerging across interviews.

Figure 1: Soul City IV reach.



$p \leq 0.05$). These percentages must be interpreted against the background that 8% of respondents in the post-intervention survey reported experience of domestic violence.

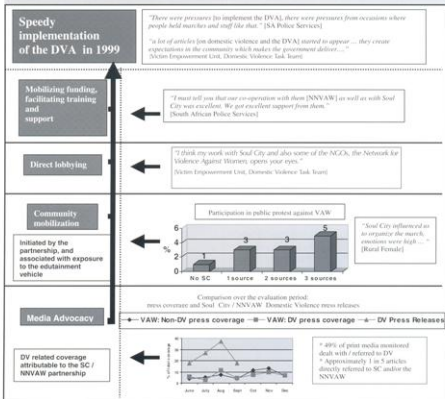
The evaluation of the partnership and monitoring of telephone records provide evidence that the intervention increased access to referral services and crisis counselling through the Stop Women Abuse Helpline (SWAH) and promotion of the AIDS Helpline. Approximately 180,000 SWAH calls were answered on four lines over five months. More than one in five calls answered were from non-urban areas. National survey results suggest that exposure to Soul City IV is associated with knowledge of the Stop Women Abuse Helpline (binary logistic regression analysis of national survey results, $p \leq 0.05$, see Figure 3). Knowledge of this helpline is exclusively related to the Soul City IV intervention and therefore acts as a marker for exposure to the intervention.

The impact of the intervention on connecting people affected by violence against women to services must be interpreted in the broader context in which services function in South Africa; barriers such as access to services, and poor quality or lack of services in some areas of the country, limit the intervention's effective and sustainable impact in creating a supportive environment for change.

The National Qualitative Impact Assessment provides evidence that, with reference to organisational policies and practices (particularly in the areas of HIV/AIDS and youth sexuality), Soul City influenced people in leadership positions in the community. It shaped, enhanced and supplemented communication between community leadership and their constituencies as demonstrated by the following quotation:

"One other thing that Soul City has done for us is that we use it as an example even when we are preaching in church... it's

Figure 2: Soul City/NNVAW Partnership – sample data illustrating impact on the Domestic Violence Act policy implementation process.



easy for people to follow what they are taught by Soul City because they identify with it."

[Urban preacher, National Qualitative Impact Assessment]

Soul City IV also began to have an impact on reorientation of services through its impact on service providers.

"I can say to me personally it [Soul City] encouraged me more to be aware of the situation women are living under. And to be firm when I act against women abuse.... You know - before I could watch Soul City, when the woman came to report a case about the husband abusing her, it's easy to say 'no, no, no - go back and discuss with the family, with the husband, because we know you're going to withdraw this case'. Some of the women used to leave the station unhappy because we are negative. But after we had watched Soul City, then we could understand how serious it was. Then it changed my attitude towards it."

[Rural Police Commander, National Qualitative Impact Assessment]

Impact: social and interpersonal environment

In both the surveys (nationally and in the sites) as well as in the National Qualitative Impact Assessment, Soul City is reported to shift community norms and to stimulate community dialogue and debate: through media advocacy and community mobilisation, as well as through the edutainment vehicle Soul City raised public debate nationally and within communities.

"As a person who is in contact with the community now and again, you hear people referring to Soul City. And when they talk - that's why I remember - when I talk about domestic violence, now and again they refer to Soul City."

[Rural police commander, National Qualitative Impact Assessment]

Some religious leaders from Evangelical Churches were critical of Soul City's influence on the community. However, this theme did not occur in other interviews:

"But when it comes to marriage and what is happening today, Soul City is nearly killing our culture. They are saying they are

making people to be aware, but at the same time they are destroying our culture."

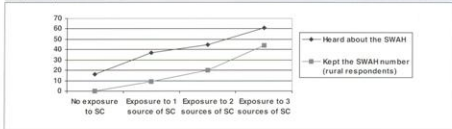
[Urban Evangelical Preacher]

The holistic impact of Soul City on one community is well illustrated in a case study (documented through the National Qualitative Impact Assessment) that represents a powerful account of community empowerment and collective efficacy. An informal settlement characterised by severe poverty, unemployment, violence against women, no service delivery (and subsequent environmental health problems) and a sense of marginalisation and oppression typical of African communities living in townships in South Africa, renamed their area 'Soul City' after the edutainment vehicle. This happened as residents started drawing comparisons between their own living conditions and that of the community depicted in Soul City (the edutainment vehicle). Originally, the community felt exploited by the landlord who insisted on them paying "ridiculous amounts of money" - until the community got together, and through community action took care of this problem. Analysis suggests that Soul City fostered a sense of co-operation and togetherness in problem solving within the community. It increased collective health consciousness; facilitated a sense of collective empowerment to effect change in the community; facilitated collective action and the formalisation of community structures; and reinforced social networks. Soul City further facilitated a positive vision and hope for a better future for the community.

"We have hope that what we are doing is going to take us somewhere ... because we know that there is a bright future that is waiting for us. ... we know what they were undergoing [referring to the community in the Soul City edutainment vehicle] because we have been sharing the same problems, so seeing what happened to them has made us to know that it's going to be like that for us as well. So when they say we are people from Soul City we are proud of that because we know that we shall prevail."

[Community resident, National Qualitative Impact Assessment]

Figure 3: Knowledge of the Stop Women Abuse Helpline by exposure to Soul City IV, binary logistic regression analysis of national survey results, $p < 0.05$.



Impact: individual change

With reference to individual change, national survey results across all topic areas covered in Soul City IV suggest that exposure to Soul City IV is associated with: increasing awareness and accurate knowledge; stimulating interpersonal dialogue within families and other social networks; and with shifting attitudes, intentions and intermediate practice towards sustaining healthier choices, i.e. health-seeking/support-seeking behaviour as well as support-giving behaviour (see Table 1; evidence of association with exposure to Soul City IV is presented in Tables 2 and 3). Awareness that violence against women is a serious problem increased from 83% (pre-intervention) to 89% (post-intervention); recognition of emotional abuse increased from 84% to 92%; accurate knowledge of blood pressure medication increased from 26% to 32%; occasionally talking about HIV/AIDS increased by six percentage points; attitudes that violence between a man and a woman is not a private affair increased from 56% to 66%; and intention to ask one's partner to go for an HIV test increased from 59% to 69%.

The National Qualitative Impact Assessment supports suggestions that Soul City IV succeeded in increasing self-efficacy and a sense of empowerment (particularly among women):

"I want to say that it's strong ... it [Soul City] has touched us with a prayer, I also get abused. It's because of the way I see they get abused, so I knew in my mind that I have a way ... To know that, when you have someone who abuses you like this,

you can ... there are departments you can go to. And you can talk to other people who can help you."

[Rural female, National Qualitative Impact Assessment]

However, there is also qualitative evidence that Soul City IV aided self-reflection and intention to change among some men:

"Since I have started watching Soul City I have since realised that I am an abuser, I did not think about it before but they have made me to see myself as an abuser. I have tried to change and it's not that easy, but at least because I have that picture of abuse in my mind when ever I think of doing it that comes to mind and I would stop that. It's quite tough to make that conscious decision but you have to stick to it and as time goes by it will be easy just to talk about your problem without even resulting to violence. I mean I used to beat my girlfriend then apologise after, I have seen that happening in lots of movies and I have seen it happening in Soul City as well. Thatang would beat his wife then after that he would ask for her forgiveness but then after being forgiven he would go back to his habits. I have experienced that myself."

[Rural male, National Qualitative Impact Assessment]

Qualitative data suggest that Soul City IV succeeded in decreasing the experience of negative social or peer pressure:

"The change I was talking about is that of pressure from friends. They pressurised me about my girlfriend. So, that gave me a lot of pressure but fortunately after watching that episode [Soul City youth sexuality episode] I abstained from committing that

Table 1: Some illustrative examples of significant shifts from pre-intervention to post-intervention measurement, National survey results (n=2,000, post-intervention survey).

| Item | Multivariate logistic regression analysis and chi-square test of significance (p<0.05) | |
|--|--|----------------|
| | Pre (n=1,979) | Post (n=1,981) |
| VWV, awareness | | |
| Domestic violence as a serious problem – agree | 83% | 89% |
| Heard about Domestic Violence Act (DVA) – yes | 23% | 30% |
| A man who is always telling his wife that she is no good and cannot do anything is abusing his wife – agree | 84% | 92% |
| Hypertension, knowledge | | |
| High blood pressure can seriously harm people if it is not properly treated – agree | 90% | 93% |
| You can feel if you have high blood pressure – disagree | 19% | 21% |
| You only need to take medication for high blood pressure until you feel better – disagree | 26% | 32% |
| Interpersonal dialogue and debate | | |
| 'Occasionally' talk to someone close about AIDS | 17% | 43% |
| VWV, attitudes | | |
| A man who forces his wife to have sex even though she doesn't want sex is raping her – agree | 86% | 90% |
| Violence between a man and woman is a private affair – disagree | 56% | 66% |
| No woman ever deserves to be beaten – agree | 77% | 80% |
| HIV/AIDS and youth sexuality, intention | | |
| Asking your partner to use a condom to prevent getting HIV/AIDS? – yes | 58% | 64% |
| Asking your partner to go for an HIV/AIDS test? – yes | 59% | 69% |
| HIV/AIDS and youth sexuality, subjective norm | | |
| Most of [my] friends [disagree] that a man is right in expecting a woman to have sex with him without using a condom | 59% | 65% |

thing [sleeping with my girlfriend]. ... What I saw as important for me is that of the guy [in Soul City] who was pressurised by friends. That is so because even when we spoke about it at school as boys, I could express (speak out) myself that this is what you were doing to me. I feel different, because now when I do not like something I can speak out and say I do not like it, even to my friends. Before that I was under pressure, but now I feel I can express myself."

[Urban male, National Qualitative Impact Assessment]

In the areas of hypertension and small business development and personal savings, exposure to Soul City IV is quantitatively associated with positive behaviour change over the broadcast period as measured in the panel (cohort) surveys in two sites (see Figure 4). Data reported relate to all subjects in both sites.

For HIV/AIDS and domestic violence, exposure to Soul City is associated with carrying out positive behaviour as measured in the post-intervention national survey. Key results are summarised in Tables 2 and 3.

When all consistent dose-response relationships (as measured in the national survey) are taken into account, on average across all variables, exposure to one source of Soul City IV is associated with a 48% increase in desired responses, exposure to two sources of Soul City IV with an 76% increase, whereas exposure to three sources of Soul City (the television drama, radio drama and any print materials) more than doubled desired responses (see footnote 3). Across the whole range of intended outcomes measured in the national survey, positive results (see footnote 4) were observed in approximately four in five instances.

There was no quantitative evidence of an impact on changing the following over the relatively short evaluation period (see

footnote 5): personal attitudes pertaining to sexual behaviour; sexual behaviour itself; and attitudes and subjective social norms around sexual harassment. Soul City's impact on changing domestic violence behaviour could not be reliably analysed due to the small number of valid responses on key items.

The areas in which exposure to the Soul City IV entertainment vehicle is consistently associated with the greatest improvement are knowledge and awareness of the Domestic Violence Act; condom usage; community action against domestic violence; knowledge and awareness of where to find support regarding violence against women; and intention to do something to stop violence against women.

Discussion

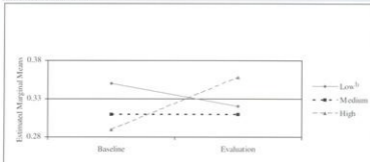
Data presented above support the overall assessment that Soul City IV succeeded in improving health literacy as defined earlier – notably so in the areas of domestic violence, HIV/AIDS and youth sexuality. This could be explained by the fact that Soul City IV dealt with these two themes in more depth as far as nuanced communication is concerned – i.e. intending to have an impact on a broader range of health and social outcomes than in the case of themes such as hypertension and small business development and personal finance. Second, Soul City IV also dealt with these themes in a more comprehensive manner as far

Footnote 3: As measured by the difference between respondents with no exposure to Soul City IV, and those with exposure to one, two or three sources of Soul City IV.

Footnote 4: i.e. a statistically significant association between exposure to any Soul City media component and the desired outcome.

Footnote 5: 8-9 months from pre-intervention to post-intervention measurement.

Figure 4: Average scores on the behaviour scale for personal finance,^a by exposure to the Soul City television drama. (Attempting to save money, succeeding in saving money, worked out a budget or business plan, and owning a small business.)



(a) Cronbach alpha = 0.69.

(b) low = exposure to 1-4 episodes; medium = exposure to 5-8 episodes; high = exposure to 9-13 episodes.