

# IMPACT OF LOW COST HOUSING ON THE PERCEIVED QUALITY OF LIFE AND WELL-BEING OF ITS OCCUPANTS

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## ABSTRACT

Housing issues within the South African context continue to provide challenges to all role players. Human ecologists agree with the government's view that a house encompasses more than a structure, and that its environment and location are equally important in meeting the needs and expectations of the occupants. This study was undertaken to establish whether the planning and building of housing units do indeed comply with government policy and adhere to the set standards for houses being "more than just a structure". In this study evaluation research was undertaken using multiple data collection techniques such as documentary content analysis, a semantograph, focus groups and a survey conducted by means of a structured questionnaire. This article will only report on the quantitative research methodology where a questionnaire was used to ascertain to which extent the needs of individuals in a low cost housing development in Cape Town, South Africa, had been met in compliance with indicators for healthy housing. The sample of the study was systematically selected and included 400 households. Descriptive statistics were used to analyse the data. The research found that the houses developed did not contribute to improved health and the quality of life amongst the inhabitants.

*Keywords: low cost housing, communities, evaluation, quality of life, housing policy, and well-being*

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## INTRODUCTION

Access to housing and safe accommodation is an integral part of government's commitment to poverty relief and the improvement of well-being of people. Within the context of poverty alleviation housing can play a significant role in the socio economic upliftment of the poor. The Housing Act (107 of 1997) underwrites the Constitution of South Africa (Act 108 of 1996) which enshrines the right to adequate housing and describes housing development as "a variety of processes through which habitable, stable and sustainable public and private residential environments are created for viable households and communities". Housing is seen as "both a product and a process that is vital to the socio-economic well-being of a nation". The Act acknowledges that the environment, in which a house is situated, is just as important as the house itself to provide for the basic needs of the occupant (Act 107 of 1997). Human Ecologists agree with this view of government that a house encompasses more than a structure, and that its environment and location are equally important in meeting the needs and expectations of the occupants.

Urbanization leads to an increase in new urban developments, as well as to the expansion of existing urban areas. This swift increase in the

numbers of city dwellers and spatial growth happened without the essential development of public services and facilities (Mtembi-Mahanye, 2002). As a result this led to uncontrolled urbanization, unlawful land occupation and the rise in expenses with regard to the financing of crucial services and housing (Mtembi-Mahanye, 2001; Braaf, 1998). Large scale migration, high population growth, urban development's and poverty are a few factors that led to environmental degradation, insufficient physical infrastructure and services, health consequences, increased exposure to concentrated refuse, unsustainable resource use and the overpopulation of environmentally sensitive land (Hope & Lekorwe, 1999).

Suitable neighbourhoods/residential areas can be expressed in terms of physiological needs such as comfort and protection against the elements and psychological needs such as community- and family life (De Silva, 2002; Cohen, Mulroy, Tull, White & Crowley, 2004). (Merrington, 1998 in Meyer) emphasizes this "The residential environment mankind uses for shelter, includes the shelter structure and all the facilities, utility and services necessary for the physical and mental health, social well-being of the individual and the family and which are needed to link the individual and the family to the community...". With the

development of low-income housing projects, the emphasis should thus be on the housing needs and expectations of the community for which it is planned.

The contradictory nature of housing policy is reflected through the fact that government strives to implement a human orientated policy through developer driven strategies (Bond, 2000; Jenkins, 1999; Lalloo, 1999; Tomlinson, 1998). Developer driven strategies lead to the solving of communities' immediate problems, but are seldom extended beyond the completion of projects and therefore do not lead to greater community influence in the decision making processes (Miraftab, 2003). The slow speed and scope with which government provides low cost housing created the perception that the emphasis on human development within housing development is not being adhered to. The aim of the main study was to develop a holistic evaluation model for low-cost housing from the perspective of human ecology. The research objectives were to obtain information about circumstances and conditions within a specific community (Objective 1). The study endeavored to develop a holistic housing evaluation model (Objective 2) based on housing indicators for healthy housing. A questionnaire (objective 3), corresponding with the compound model, was designed to ascertain to which extent the needs of individuals in the Wesbank community (Objective 4) had been met in compliance with the indicators. A community profile (Objective 5) of Wesbank was then drawn up accordingly. This paper however reflects on the findings of the survey (objective 3) which focused on the impact of low cost housing on the health and well-being of people.

## METHODOLOGY

The study made use of evaluation research which was undertaken using multiple data collection techniques. A holistic housing evaluation model (HHEM) based on housing indicators for healthy housing was developed (Erasmus, Albertyn & Schutte, 2008). The HHEM served as a basis for the questionnaire used in a survey conducted in a low cost housing development. The HHEM was compiled after examining South African government policy and legislation, analyses of the literature and identification of the indicators obtained from focus groups aimed at determining housing quality. The HHEM was used as a

framework for the development of the questionnaire, which was applied as a survey in the low-cost housing area of Wesbank. By applying the HHEM, a community's needs and other related housing aspects can be identified and then use to construct a community profile. Meaningful conclusions can be made regarding issues in that community and then visually displayed in a model for easy application by development practitioners.

### Research Setting

This low cost housing development, consisting of 5174 housing units, is situated within the poverty stricken south east area of the metropole, about 30 km from Cape Town (Wyngaard, 2002). It accommodates more than 60% of the population of Cape Town but provides less than 16% of the formal work opportunities within the metropole. This area's economic contribution to the metropole's formal business output for 2000, for example, was less than 7% (Provincial Development board of the Western Cape, 2002).

### Quantitative approach

#### Research subjects and sample

The sample of the study was systematically selected and included 400 households. The study area was divided into 14 survey areas. In some of the 14 areas every eighth (8) dwelling and in other survey areas, every fifth (5) dwelling was selected. This was depended on the amount of respondents which needed, proportionally to the area, to be visited.

#### The Instrument

Housing indicators were selected from a literature review, document analysis and focus groups. The dendrogram technique was used to conceptualize the various concepts/key words which formed the basis for the questions for the questionnaire. The questionnaire consisted of 31 close ended- and 16 open-ended questions which were grouped into 3 sections. The first section requested demographic information. The other two sections were divided into the micro/individual level (economic and socio-psychological issues, physical structure, physical security and privacy) and the community level (infrastructure, environment, community building and land use).

Content validity of the questionnaire was ensured through constructive criticism from housing experts. Items were revised and

improved according to the suggestions made. Adaptations were word and language changes, sequence of questions, combination and/or separation of concepts. A pilot study was conducted to check for clarity and appropriateness of the questions on fifteen (15) individuals with variables comparable to the research setting with regard to income, socio-economic living area and educational level.

Administration of questionnaire

Face-to-face administration of the questionnaire was applied because it requires the respondent to respond in the same language as the questions being asked. With this type of interview the respondent need not be able to write or read. The interviewer can also probe, explain and clarify uncertainties and vaguenesses around questions (Bowling, 2005).

#### Data collection

Ten trained fieldworkers conducted structured interviews over a period of four weeks with heads of households in previously identified homes. The fieldworkers were trained in understanding and interpreting the questions on the questionnaire. The majority of interviews were conducted at night after most of the respondents returned from work. All completed questionnaires were usable. As the questionnaires were completed, they were checked by a control person for completeness.

#### Data analysis

Data was analysed using SPSS version 16. Frequency tables were used to summarize responses from the survey. Thematic analysis was applied to qualitative responses. A numeric code was allocated to each response before it was analysed. Logical links were made based on existing literature.

#### Ethical Considerations

The research assistants used information sheets to explain the purpose of the study to potential participants. Information obtained was handled with confidentiality. Participation was voluntary and participants were informed of their right to withdraw from the study at any time. Ethical clearance was obtained from the Senate Research Grants and Study Leave Committee of the University of the Western Cape.

## RESULTS

This discussion reflects on the findings of research which focused on the impact of low cost housing on the health and well-being of people. Four

hundred heads of households in the low income group earning less than R3500 per month completed the structured questionnaire. More women-headed households (72%) took part in the interviews and most participants were aged between 31-40 years of age. The largest amount of respondents (48%) had only partial secondary education. One hundred and fifty one (37,8%) had only primary education and this led to a low income and very few employment opportunities. Forty one (10.3%) of the respondents had a full secondary education (Gr 12) and no one had any tertiary training.

The majority of women (46,3%) contribute to the income of their households. Twenty one participants (5,3%) indicated other forms of income such as assistance from family members not staying with them, married children that sends money, maintenance from a divorced father and an income from a tuck shop. More than three quarters (79%) of participants (n=314) indicated that their home was not a source of income, 86% (n=349) view their home as their property, and 55% does not view their home as an economic investment.

The dwellings were build out of cement blocks and 93, 7% indicated that the building was of a poor to a very poor condition. The biggest problems were experienced during the Cape Town winters when it is extremely cold and wet, 91% (n=368) of the respondents agreed with this. A highest percentage of respondents, 80,5% (n=322), was dissatisfied with the small size of the physical structure, which has too little space for their families. One hundred and fifty two respondents (38%) indicated that they preferred a bigger house with more rooms. 60,5% of respondents expressed unhappiness with the lack of privacy. There is only one room which must be shared with both parents and children. Land use is characterized by the extension of their dwellings through extra structures built on to their existing structures to provide extra place for own family members to stay in. This is a reflection on the limited space and size of the dwellings. Approximately 45,5% indicated that their property does not lead to better health and a 39% was of the opinion that their housing does not conform to their basic needs.

With regard to the socio-psychological aspects of housing, 46% agree that they are happy to stay in Wesbank, 46.3% agree that they can rely and depend on the rest of the community if they

experienced any problems. On the question whether this area is a suitable place to raise children, 59,9% (n=240) of the respondents did not agree. Most of the respondents (57,7%) view their dwelling as a place of refuge/haven to which they can return. 46,3% agreed that they can trust and depend on the community to assist when they have a problem. On the question whether this housing development led to improved socio-economic well-being of the community, 44, 2% agreed, 26,7% remained neutral and 28,7% disagreed. The majority of the respondents (67, 4%) were of the opinion that they can live out their cultural/religious beliefs. This opinion is echoed by the respondents' satisfaction with regard to the provision of churches.

At community level most of the respondents reacted positively to services such as provision of water (66%), electrical supply (58, 2%), waste removal (66,5%) and sanitation (61,2%) within their area. Respondents were overly satisfied (66%) with the schools in the community. Great dissatisfaction was shown with regard to health care (clinic/day hospital) (65, 4%), youth centre (74%), community hall (75, 4%), library (78, 2%) and the police station (92, 2%). They were nevertheless satisfied with the nursery school (70, 2%) and churches (78, 4%) within their community.

## DISCUSSION

The majority of inhabitants do not use their dwelling as an additional source of income; this might be as a result of the dwelling being so small. They do not view the physical structure as an economic investment or benefit and this can possibly be because they do not understand the concept and value of ownership and security of tenure. This can also be attributed to the poor quality of the housing and therefore seem to have no value.

Housing development as described in the Housing Act (107 of 1997), states that all inhabitants should have access to permanent residential structures with security of tenure, internal and external privacy and sufficient protection against the elements. The results of the study has shown that the criteria as stated above has not been met - dwellings are of poor quality built from inferior cement blocks which have a high water retention ability. Complaints about poor building reflects upon poor workmanship, inappropriate

construction techniques, low quality building material which leads to cracks in walls, leaking roofs and windows, with the result that the buildings/physical structures became mouldy and remained damp and wet. The fact that everything remains wet increases the cold temperature in dwellings. This in turn influences the comfortability and habitability of the home with resultant dissatisfaction of the inhabitants towards their housing unit. This is in direct contrast to the definition of housing development as described in the Housing Act (107 of 1997), which states that livable, stable and sustainable public and private living environments must be created. This housing development appears to be less successful towards the delivery on this required outcome.

The results also showed that the poor quality of the physical structure do not contribute to the overall health of the inhabitants. Health problems such as tuberculosis, colds, bronchitis and related respiratory infections are common in here. Indoor air quality, humidity, low temperature and overcrowding are a threat to the health of occupants (The World Health Organization, 2004). Proper ventilation and sufficient windows are important because lack of ventilation creates condensation on walls and ceilings (Sowman & Urquhart, 1998). A lack of sufficient ventilation and poor temperature control increase the level of mould and dampness as well as the problems created by these (San Francisco Department of Public Health, 2004:5). Water leakages in homes stimulate mould growth and this influences the air quality of homes (Winston & Turner, 2001:65). Damp conditions in homes can be viewed as contributing factors to rheumatism, arthritis and respiratory infections as well as illnesses such as pneumonia and bronchitis (Smit, 2000; Marsh, 1999; Ranson, 1991). It is to be expected that the health problems will increase as a result of the poor physical structure, the type of building material used, insufficient ventilation (not enough windows) and poor temperature control. These circumstances increase during the winter months when rain and wind damage complicates the situation.

As a result of the limited space and small housing units a serious lack of privacy was reported. A shortage of living space not only contributes to the disintegration of extended families, discomfort and insufficient privacy, but causes an acute link between insufficient living space and

psychological insecurity (Gabe & Williams, 1993 in Smit, 2000). This does not lead to an improvement in the quality of life of people or to the improvement of good health. Therefore it seems that the dwellings do not meet the basic needs of their inhabitants. The low household income (about R3 500 and less per month) leads to no changes or improvements on their properties. As a result of limited financial resources, respondents feel disempowered to bring about changes to their structure. Developers must take this fact into consideration and must provide beneficiaries with structures that has better finishes and demand the least amount of maintenance.

Within the context of this community it appears that issues such as provision of services (water, electricity, refuse removal) and the accessibility of certain facilities (educational institutions, cultural facilities and the family clinic) created a feeling of satisfaction with the inhabitants. This in itself adds value to a healthy environment and good health. The majority of respondents indicated that they are happy to stay in Wesbank, but more than half was of the opinion that it is not a good place to raise children. This is probably as a result of the limited development of youth and community facilities. Most of the respondents view their dwelling as a place of refuge/haven to which they can return and agreed that they can trust and depend on the community to assist when they have a problem. The majority was of the opinion that they can exercise their cultural and religious practices. This viewpoint is emphasised by the high percentage of satisfaction with regard to the provision of churches.

At the core of governments housing strategies lays the acknowledgement of the creation of suitable residential environments. The only way to establish long term viability and thus sustainability is to ensure that housing adhere to the preferences, aspirations and changed needs of existing and prospective inhabitants. South Africa's housing policy and programmes are in accordance to the "International Covenant on Economic, Social and Cultural Rights" of 1966's definition of adequate housing, which states that "'adequate housing' is measured by certain core factors: availability of services; materials, facilities and infrastructure and location" (The UN Committee on Economic, Cultural and Social Rights, 1992), but unfortunately this is not

reflected in practice (Public Service Commission, 2003).

## CONCLUSION

From the findings of this study it appeared that aspects such as the quality of the physical structure, space and privacy, sufficient and sustainable provision of services and accessibility to facilities determine how the occupants of low-cost housing experience their structures. Strong opinions have been voiced about a serious shortage of privacy and the poor quality of the housing structures, the latter resulting in conditions of ill health. The research found that development of housing in this low-income development did not contribute to improved health and the perceived quality and well-being of its inhabitants.

It is recommended that developers should first undertake a complete and thorough survey of the beneficiaries of proposed housing developments. Participation by beneficiaries should be encouraged in any housing process to ensure that the right type of housing will be built and developed for the right type of community. This could possibly ensure the sustainability of their communities.

## REFERENCES

- Bond, P. (2000). *Cities of gold, township of coal: Essays on South Africa's new urban crisis*. Trenton, N.J: Africa World Press.
- Braaff, B.A. (1998). *Perspectives on informal settlements: with special reference to the CMA*. Unpublished Masters Thesis. Stellenbosch, University of Stellenbosch.
- Bowling, A. (2005). Mode of questionnaire administration can have serious effects on data quality. *Journal of Public Health*, Vol. 27, No. 3, pp. 281–29. Retrieved July 18, 2010 from [www.jpubhealth@oxfordjournals.org](http://www.jpubhealth@oxfordjournals.org).
- Cohen, C.S., Mulroy, E., Tull, T., White, C. & Crowley, S. (2004). *Housing plus services: Supporting vulnerable families in Permanent Housing*. Child Welfare LXXXIII (Sept/Okt).
- De Silva, V. (2002). *Creating quality neighbourhoods in low cost public housing in Sri Lanka*. Retrieved September 5, 2003 from [www.hdm.lth.se](http://www.hdm.lth.se)
- Erasmus, C.J., Albertyn, R.A., & Schutte, D.W. (2008). *Die ontwikkeling van 'n holistiese behuisingsevalueringsmodel vir lae-koste behuising*. Unpublished Doctoral thesis. University of the Western Cape. Bellville.
- Hope, K.R. & Lekorwe, M.H. (1999). *Towards a*

- managed framework for the sustainability of cities. *Urbanization and the environment in Southern Africa*. *Urban Forum*, 10(3): 837-855.
- Housing Act. 107 of 1997. Government Gazette. Cape Town: Government Printer.
- Jenkins, P. (1999). Difficulties Encountered in Community Involvement in Delivery under the New South African Housing Policy. *Habitat International*, 23(4): 31-446.
- Laloo, K. (1999). Arenas of Contested Citizenship: Housing Policy in South Africa. *Habitat International*, 23(1):35-47.
- Marsh, A. (1999). Housing and Health: the nature of the connection. Retrieve July 21, 2006 from [www.radstats.org.uk](http://www.radstats.org.uk)
- Meyer, I.H. (1998). Theoretical Perspectives on low-cost housing. Paper delivered during a Housing Policy and Management course, 24-28 Augustus. School of Public Administration, Bellville, University of Stellenbosch.
- Miraftab, F. (2003). The Perils of Participatory Discourse: Housing Policy in Postapartheid South Africa. *Journal of Planning Education and Research*, 22:226-239.
- Mtembi-Mahanyele, S. (2001). "Budget Speech by the Minister of Housing. National Assembly." Retrieve on May, 11 2001 from [www.gov.za](http://www.gov.za)
- Mtembi-Mahanyele, S. (2002). "Keynote address by the Minister of Housing at the Sustainable Environment Conference: Some perspectives on sustainable built environments in Africa." Universiteit van die Witwatersrand, Johannesburg. Retrieve January 10, 2002 from [www.gov.za](http://www.gov.za)
- Provincial Development Board of the Western Cape. (2002). "Integrated Development Planning and Urban Renewal in Cape Town." Discussion document. Unpublished.
- Public Service Commission. (2003). "Report on the Evaluation of the national Housing Subsidy Scheme." Pretoria.
- Ranson, R. (1991). *Healthy Housing: A practical guide*. Published on behalf of the World Health Organization Regional Office for Europe. London: Chapman & Hall.
- San Francisco Department of Public Health. (2004). *Unaffordable Housing: The Costs to Public Health. Program on Health, Equity, and Sustainability*. Retrieve June 16, 2006 from [www.dph.sf.ca.us/ehs](http://www.dph.sf.ca.us/ehs)
- Smit, W. (2000). The impact of the transition from informal housing to formalized housing in low-income housing projects in South Africa. Paper delivered at the Nordic Africa Institute Conference on the Formal and Informal City – What happens at the Interface? Copenhagen.
- Sowman, M. & Urquhart, P. (1998). *A Place called Home. Environmental issues and low-cost housing*. Kaapstad: University of Cape Town Press.
- Tomlinson, M.R. (1998). South Africa's new housing policy. An assessment of the first two years 1995-96. *International Journal of Urban and Regional Research*, 22(1): 137-146.
- The UN Committee on Economic, Cultural and Social rights. (1992). General Comment No. 4 – Sixth session 1991, Un Doc E/ 1992. Retrieve April 4, 2001 from [www.housing.gov.za](http://www.housing.gov.za)
- The World Health Organization. (2004). *Review of evidence on housing and health. Fourth Ministerial Conference on Environment and Health. Background Document No. 5046267*. Geneve.
- Winston, A. J. & Turner, C. J. (2001). Technical elements of a housing structure: the effects of elements on everyday life. Retrieve August 5, 2005 from [www.ourworld.org.htm](http://www.ourworld.org.htm)
- Wyngaard, D.A.C. (2002). *Evaluating the provision of low cost housing in the context of Developmental Local Government: The case of Wesbank*. Unpublished Masters thesis. University of Stellenbosch, Stellenbosch.