

## **Second-order systems approach to recreation provision in lower socio-economic communities**

E. VAN DER KLASHORST<sup>1</sup>, A. GOSLIN<sup>1</sup>, J.G.U. VAN WYK<sup>1</sup> AND D.A. KLUKA<sup>2</sup>

<sup>1</sup>*Department of Biokinetics, Sport and Leisure Sciences, University of Pretoria, Pretoria 0002, South Africa. E-mail: anneliese.goslin@up.ac.za*

<sup>2</sup>*Barry University, Miami Shores, Florida, USA.*

*(Received: 13 March 2012; Revision accepted: 5 August 2012)*

### **Abstract**

This study explored recreation provision in lower socio-economic areas from the paradigm of systems theory. It was postulated that by adopting a second-order systems approach rather than perpetuating a first-order systems approach, a positive social impact could be affected. The study was grounded in a qualitative, participatory research design. Data were collected through focus groups, vignette scenarios, semi-structured interviews and empirical observation in two lower socio-economic communities in South-Africa. Participants included members of the lower socio-economic communities as well as external individuals and organisations providing help within the two communities. Results rejected the stated postulation and suggested that current recreation provision in the researched communities concurred with a first-order system and thus reinforced feelings of social exclusion. A definite pattern of learned helplessness, shifting responsibility and comfort with existing social existence emerged from the lower socio-economic community. However, when moving to the higher level of abstraction as provided by second-order systems theory it becomes clear that community recreation cannot be approached from an observer's point of view. It is recommended that a second-order systems approach be implemented that feeds on higher levels of recursion, shared reality that transform interaction between recreation providers and community from dominant-submissive to mutually beneficial. This change in interaction between the systems involved could result in the building of community capacity and possibly to the empowerment of community members.

**Keywords:** Second-order systems; recreation provision; lower socio-economic communities.

### ***How to cite this article:***

Van der Klashorst, E., Goslin, A., Van Wyk, J.G.U. & Kluka, D.A. (2012). Second-order systems approach to recreation provision in lower socio-economic communities. *African Journal for Physical, Health Education, Recreation and Dance*, 18(4:2), 1037- 1051.

## **Introduction and Theoretical Background**

Leisure, sport and recreation are not new concepts in society. It has, however, been associated with elitism and class privilege since early civilisations and thereby eliminating lower socio-economic communities to a great extent from accessing benefits associated with recreation participation (Arai & Pedlar, 2003). Lower socio-economic communities are often challenged by poverty, unemployment, limited access to services such as recreation provision, and a

general lower quality of life. Yet, Iwasaki (2006) and Mannell (2006) conceded that individuals could lead more enjoyable and productive lives through recreation experiences. Both Bittman (2002) and Young (in Allison, 2000) highlighted issues of justice in lower socio-economic communities relative to recreation provision. One of these issues, social exclusion, is a reality in lower socio-economic areas as people are “*put out of society*” by their inability to participate in, amongst other things, recreation activities. This inability is arguably a product of access, income and free time (Arai & Pedlar, 2003; Collins, 2004), and impacts access to recreation products and services. Consequently, low-income status often results in exclusion from participation in recreation activities (Bittman, 2002). Stromquist (2001) confirms that in the case of chronically poor people, poverty is not only about earning a low income; it is also about multidimensional deprivation. Not being literate, not having access to health care, social isolation and exploitation all play a part. Such deprivation and suffering exist in a world that has the knowledge and resources to rectify the situation. The causes of chronic poverty are complex and usually involve sets of overlapping factors; rarely is there a single, clear cause. Some of these factors are labelled ‘maintainers’ of chronic poverty and operate so as to keep poor people poor. ‘Drivers’ of chronic poverty push vulnerable non-poor and transitory poor people into poverty so that they cannot escape the situation. Poverty is often passed on from one generation to the next. Although poverty refers to what the poor are lacking, this could be the result of a condition either created or uncorrected by the upper and middle classes. It can, thus, be argued that the poor define the middle and upper classes.

Issues of justice and injustice within low socio-economic communities have been only tangentially addressed in the literature pertaining to leisure and recreation participation. Some groups suffer as a consequence of the often subliminal assumptions and reactions of well-meaning people in their ordinary interactions, in their culturally stereotypical perceptions, in short, the normal processes of everyday life (Young in Allison, 2000). A major barrier to the creation of recreation and leisure programming, especially in South-Africa, is the fact that such programmes often fall into the ambit of non-profit organisations, which are dependent on donations and volunteers. The primary aim of most non-profit organisations is, firstly, to provide food and clothing. Everything else, including recreation provision, is secondary.

This study explored the utilisation of systems theory in community recreation provision to aid in understanding the functioning of social systems with specific reference to the relationship between a lower socio-economic community and the external system impacting on the community. Systems theory points to the interdependence of elements within a system and is therefore applicable to the study of communities. Most volunteers and community developers working in

lower socio-economic communities have been socialised and educated in Western society. According to Becvar and Becvar (2000), it is believed that linear cause/ effect thinking is appropriate when understanding reality from the philosophical assumptions of the western, scientific tradition. From this perspective, *event A* causes *event B* in a unidirectional fashion resulting in reality to be considered as separate from “us”. Meaning is therefore derived from external experience and “we” are merely the recipients. Systems theory, in contrast, is built on a different foundation of assumptions about reality. In systems theory linear causality does not exist. *Event A* and *B* exist in the context of interrelationship and interdependency with an emphasis on reciprocity, recursion and shared responsibility.

Systems theory is divided into first-order and second-order approaches. In a first-order approach, the observer serves as an observer of the identified system. The system, or in this case, a low socio-economic community, is equated to a black box. When observing and reacting to a community when observed from an outside perspective, what really happens on the inside is not clear from the outside (Becvar & Becvar, 2000). Understanding a community from a systems perspective enables an observer to explain what is happening within the system itself and to identify responses and solutions as either first-order or second-order. The recreation provider, as observer, attempts to understand community dynamics by observing a community’s feedback processes without being a part of the system. First-order systems theory puts the observer in another black box and fails to take into account the interactions and power equations between the two systems as both exist within a larger context (Becvar & Becvar, 2000). Observers of low socio-economic communities tend to react to first-order feedback and as a result believe that satisfying basic needs is all that is required to sustain the needs of a lower socio-economic community. Second-order systems approach originated in reaction to the deficiencies of the first-order engineering approach (Geyer & Zouwen, 2001).

In contrast to the first-order systems approach, on the level of second-order systems a low socio-economic community is viewed not only in the context of the inputs and outputs or relationships with other systems (Leydersdorff, 1997), but is transferred to a broader context that includes the observed (black box) plus observer. At this higher level of abstraction, the observer becomes part of, or becomes a participant in, what is observed. Observer and the observed cannot be separated, and the effect depends on the interaction. The observer, too, constitutes a system, trying to construct a model of another system (Heylighen & Joslyn, 2001).

Second-order systems theory directs attention away from individual problems viewed in isolation. From a first-order perspective recreation providers might

reason that a community needs new facilities, when in fact, it needs constant, sustainable recreation programmes. *Event A* therefore does not lead to *event B* in a linear fashion. A new facility will, therefore, not necessarily result in community members participating in recreation programmes. Systems are complex and should be treated as such. Within second-order systems theory linear causality does not exist (Becvar & Becvar, 2000). Instead, there is an emphasis on reciprocity, recursion and shared responsibility. In the case of recreation programmes, it is, therefore not the sole responsibility of a recreation provider to provide recreation programmes to a community. The community and recreation provider as systems exist together in a reciprocal causality where each influences the other, and both are equally the cause and effect of each other's behaviour. Subjectivity is seen as inevitable as the observer perceives, acts on, and creates personal reality in collaboration with the system. Again, this relationship cannot be viewed in linear simplicity as recreation providers often function from a different socio-economic social status 'system'. It brings to question whether equality is possible even within the interdependency of the relationship. The interdependence of observer and the observed is an important aspect of a holistic perspective that takes into account the context of interactions. Interactions are regarded as non-causal, dialectic processes of mutual influence in which both parties' understanding requires the assessment of patterns of interaction and power relations with an emphasis on *what* is happening rather than on *why* it is happening (Heylighen & Joslyn, 2001).

### **Research problem and aims**

A literature review revealed no studies approaching recreation provision from a second-order systems approach. Vanderstraeten (2001) postulated that the potential of systems theory in general has not yet been fully recognised and suggested that careful consideration of the insights into systems theory may open up new horizons for social change. Recreation activities are situated in a social context. Implementing second-order principles could assist recreation providers in understanding lower socio-economic communities on a different level. While first-order systems can be considered as observable translations of input into output, second-order systems can add the perspective of evolution to networks of first-order systems (Leydersdorff, 1997).

The latter statement of Leydersdorff (1997) presents the rationale for the problem statement and research question for the study. Although recreation provision has potential to vitalise and change lower socio-economic communities, it often lacks sustainable impact on the quality of life of residents within these communities. Recreation interventions are approached from a first-order systems perspective and are usually singular *ad hoc* events rather than planned, continuous programmes emerging from a second-order systems

approach. For the purpose of this study, the research was limited to two adjacent urban lower socio-economic communities in Gauteng, South-Africa. Recreation provision in these research communities stagnated over time resulting from a combination of several factors including ignorance, low attendance and insufficient opportunities for participation.

The underlying assumption of the study rests on the need for systems change within lower socio-economic communities. A second-order systems approach could cause positive social impact. The following research question was subsequently posed to test the assumption:

*“Can transition from first-order systems to second-order systems approach to recreation provision contribute to social system change in lower socio-economic communities?”*

The study aimed to explore the influence of recreation opportunities as a means of improving and maintaining social cohesion and quality of life in low socio-economic communities, identify barriers preventing sustainable recreation programmes in the particular lower socio-economic communities; clarify ways in which residents in the research area perceived recreation provision within their communities, and evaluate the current approach to recreation provision in these communities against criteria set for a second-order systems approach.

## **Methodology**

### *Research design*

The study is grounded in a qualitative, participatory, social research design. A literature review provided theoretical background on systems theory and the impact of recreation provision in lower socio-economic areas. This particular research design is appropriate for systems-based research. Systems-based research concerns itself with discovering various components of the system (in this research the community and recreation providers), and how these components interact to create a context or system. The approach seeks to investigate whether particular phenomena (recreation participation and provision) are understandable in terms of the context in which they occur and question linear causality which presumes that every phenomenon can be explained by a cause-and-effect relationship in isolation from the effect and the context in which it occurs.

‘Recreation participation’ and ‘living in a low socio-economic community’ are not concepts that can be separated; the phenomena must be studied and explained in context. According to Terre Blanche and Durrheim (1999:257),

*'Systems research assumes that many phenomena are better understood as a function of the context or 'systems' within which they occur and where they serve adaptive or stabilising functions, often as both cause and effect.'*

The dual role of the researcher in this study was therefore to identify, firstly, the various systems that are in operation within the two communities, and then to describe the way in which phenomena operate within these systems.

### *Demarcation of the research context*

The research context is limited to two historically white adjacent lower socio-economic communities in the Tshwane Metropolitan urban area of South-Africa, namely Danville and Elandsport. The 1994 democratic election caused an influx of previously disadvantaged black residents creating an upwardly mobile black community alongside an unemployed, economically-depressed white community. These two communities are recognised as low socio-economic communities in terms of low cost housing, levels of education, literacy and income. Recreation opportunities and facilities in the research area are non-existent, except for programmes presented by outside church-groups at soup kitchens. Access to private transport is sparse, and residents often do not have the desire and motivation to seek recreation experiences outside the community. Organisations and volunteers from outside the community (external systems) were included in the study as they impact significantly on the functioning of both lower socio-economic community systems. External involvement consisted of various religious groups as well as of corporate organisations. Involvement in the identified communities included provision of resources, soup kitchens and attempts to create employment opportunities.

### *Sample*

Participatory research is often conducted in contexts that do not allow for probability sampling as used in large-scale surveys (Babbie, 2008). As this study concerned itself with detailed in-depth analysis of respondents' perceptions, a purposive non-probability sample to select participants for the focus groups was appropriate. Six focus groups consisting of ten participants per focus group were formed. Focus groups represented males and females residing in the research area with an age range between 16 and 55 years.

### *Data collection procedures*

Data were collected through participatory research methods of focus groups, vignettes, semi-structured interviews, and empirical observation. Six focus groups of ten respondents each provided opportunity to discuss issues relevant to recreation provision in their community in a familiar, non-threatening environment, and as part

of a group of people with whom they identified (Cresswell, 2008). Focus groups were presented with hypothetical vignette situations and discussions. The researchers facilitated discussions following a semi-structured interview format. Discussions were recorded with the informed consent of the participants. In the case of the minor participants (<18 years of age) informed consent was obtained from the parents. According to Creswell (2008) vignettes improve the quality of qualitative data collection as they enable participants to adopt non-personal perspectives and thus reduce the influence of socially desirable responses. Vignette scenarios focused on five hypothetical situations related to the aims of the study: recreation provision in the community including the role of the recreation provider; community members' perception of quality of life; participation in recreation and leisure activities; social status and recreation provision; recreation provision as an agent for stimulating social change within the communities and barriers to recreation participation.

In addition, data collection was supplemented with empirical observation. The normal daily routine of residents in the research area was observed for a period of one year to supplement and corroborate data collected from focus group discussions. Observations adopted an approach of 'observer-as-participant' where the observer is known to the residents as the researcher, but is part of the social life of residents, and records what is happening for research purposes. This approach is in line with a second-order systems approach with the researcher in the role of participant in the system, as opposed to a first-order systems approach, with the researcher in the role of outside expert.

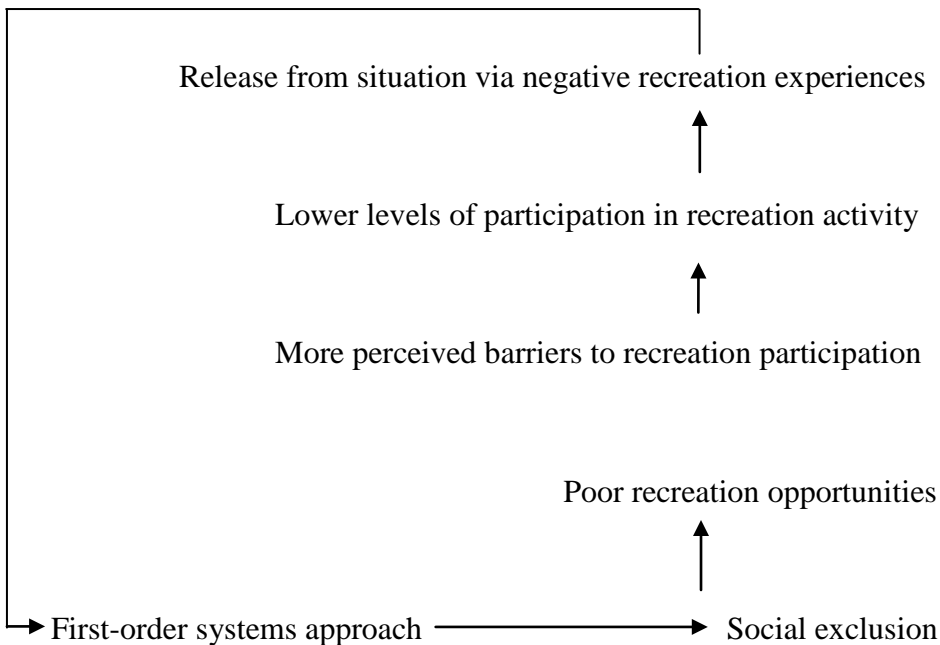
Observations were recorded throughout a period of one year. The extended period of research time reduced the reactivity effect of the researcher on the researched (Babbie, 2008). Observations followed a semi-structured format focusing on the issues identified in the vignettes and included descriptions of residents' behaviour and activities; descriptions of recreation events as well as descriptions of the physical settings of the events. Four sets of observational data were used, and included notes made *in situ*, notes made as soon as possible after initial observations, journal notes to record issues, ideas and difficulties observed in relation to recreational and leisure activities and a tentative record of ongoing analysis and interpretation. Data generated from focus groups' vignettes were transcribed and analysed focusing on the search for explanatory patterns between identified vignette themes in a second-order systems context. Patterns appearing within data obtained from observations as well as in data generated by the vignettes were explored through cross-case analysis resulting in two concept maps.

## **Results and Discussion**

Initial empirical observations suggested that sustained recreation opportunities and facilities were non-existent within the identified lower socio-economic

communities. Available facilities were perceived as unusable by community members as they are frequented by the homeless, drug users and unsavoury individuals. True to a first order systems approach, monetary donations, food and useable items were regularly collected by external organizations and distributed to the ‘needy’ in the particular community. In return for receiving donations, residents were required to attend *ad hoc* recreation events in which they had no input. The study postulated that current community recreation provision within lower socio-economic communities can be equated to first-order systems provision where communities took no ownership for recreation provision and were merely recipients of goodwill. It was posited that by adopting a second-order systems approach rather than perpetuating a first-order systems approach, positive social impact could be affected in the particular lower socio-economic communities.

Overall results verified that recreation provision was undoubtedly approached from a first-order systems approach where the community was approached as a “black box” separated from the broader community and serviced by volunteers and organizations external to the research area. This approach reinforced feelings of social exclusion, learned helplessness, and transferred responsibility. Figure 1 presents a concept map of the overall findings indicating the impact of recreation provision according to a first order systems approach.



**Figure 1:** Effects of a first-order systems approach on recreation provision in the research area.

A detailed analysis of focus group discussions of the five vignette scenarios validated through observations indicated that community members value the help of external organisations although they experienced feelings of helplessness. This corroborated research findings provided by Muller (2002), Bittman (2002) and Dawson (1988) in similar communities. The notion of learned helplessness transfers responsibility for self-improvement and self-efficacy to external parties (Muller, 2002). Residents clearly articulated that their basic survival needs were satisfied through soup kitchens operated by outside religious groups as charity and intervention projects. The majority of participants in focus group discussions did not recognize the need for recreation activities even though they agreed that their basic needs have been met. A lack of disposable income and a lack of opportunities seem to be the rationale for perceptions on the necessity for recreation as can be deduced from vignette responses given below:

*“...if I did have extra money on what would I spend it? Do you see a movie theatre here? Do you see a bowling alley? No! We have the Wimpy in the Quagga Centre [a food franchise in an adjacent shopping mall] for fun and if that is not your thing, we have a bottle store. Hey, we have five bottle stores! How is that for recreation?”*

Participants perceived considerable systemic and non-systemic barriers preventing them from accessing recreation opportunities. Material deprivation, stigmatizing policies and practices labelling them as poor, discrimination in terms of facilities, stereotyping, lack of consideration for their needs and preferences and a general lack of intrinsic motivation emerged from the focus group discussions on vignette two and correlated with findings of Reid and Frisby (2002) in comparable research:

*“It does not matter what I want. I must be real about my own situation. Even if I can get the program for free, there will be something else that prevents the kids from attending – transport, maybe they don’t have the right shoes, maybe they need pocket money...”*

*“...Chances are good that they will not be able to do what other kids do. If our kids participate in a program outside the community all the other kids will know they are different, they are poor. My kids won’t go again.”*

Perceived barriers to recreation participation were more complex than mere economic inability. Caldwell (2005) postulated that people tend to engage in activities in which they feel competent or in which they feel they can develop competence. The notion of learned helplessness surfaced again in focus group responses related to feelings of competence. Respondents tended to transfer responsibility for self-development and self-efficacy to external agents – a classic symptom of first order systems interactions (Dubberly & Pangaro, 2007)

resulting in the external system either to conclude that the community is at fault, or that the community members are indeed helpless and not able to control their own reality. When recreation provision, however, is approached from the higher level of abstraction provided by a second-order approach it becomes evident that barriers might indeed be more than perceived and that the external system itself might be a contributing factor to the diagnosis of learned helplessness. A second-order systems' recreation provider, working with a social system, recognises the particular system as an agent in its own right, interacting with another agent – the external system of which the recreation provider forms part of. Observer and the observed cannot be separated, and the result of the observations will depend on the interaction.

Recreation's contribution to changing individual and communal quality of life in lower socio-economic areas is well documented in scholarly literature (Allison, 2000; Raphael *et al*, 2001; Park, Turnbull, Rutherford & Turnbull, 2002; Caldwell, 2005; Baker & Palmer, 2006). Results from the first vignette, however, suggested a lack of appreciation for recreation's potential in community development. Results from vignette three, then again, contradicted those findings. Respondents definitively articulated an awareness of recreation's contribution to health and well-being and its potential as coping mechanism in social contexts of poverty:

*“...when we played sports in primary school I didn't feel so angry and useless all the time. If the community Thomas (character in vignette) organizes their own recreation and sport activities I can almost guarantee that violence and alcohol abuse in that community will decline. You know what would be great? If the people from over the hill (privileged communities) can stay a little longer and play soccer or something with us. Then we will be on a level foot for a few hours.”*

The latter response provided a first and only glimpse of respondents' yearning for autonomy in terms of taking responsibility for their own development rather than perpetuating the role of helplessness, hopelessness and hiding behind poverty. Responses to this particular vignette illustrate why recreation provision in lower socio-economic communities should be attempted from a second-order systems approach. It will enable the external system (eg. volunteers, charity organisations) to firstly get to know the community and secondly to work in collaboration with the community to facilitate change. Second-order change requires a change in the rules of the system, and, as a result, in the system itself. By changing the rules, perceptions are changed, and new behavioural alternatives become possible in the process. It requires a response that is illogical to place in context, and also paradoxical when considered within the framework of the existing rules. Allison (2000), in her work on recreation in marginalized communities, noted the importance of some sense of autonomy. Residents in

marginalized communities are often the receivers of help and donations thus increasing their dependence on external factors. Recreation activities could provide opportunities where economic status is not a prerequisite for participation and develop feelings of independence.

The fourth vignette explored respondents' perceptions of recreation's community development potential deeper and tested the notion if the limited recreation opportunities offered in the research area reinforced their current perception of lower social status. Findings from this particular vignette confirmed that attempts to facilitate change in low socio-economic status communities must, be approached with sensitivity, as even apparently innocent community-based leisure opportunities can negatively affect community relationships if it reinforces divisions and inequalities (Shaw, 2006). An elderly respondent remarked:

*"I am tired of people trying to change me. Nobody really wants to change who we are, if we were not here who will they save? You know what... everybody with a bright idea wants to test it on us. Why not? We are clearly helpless."*

The above responses provided convincing evidence of the fact that the lower socio-economic community is observed and unconsciously treated by the external system as a first-order system. The response not only emphasised the feeling of social exclusion experienced by members of the lower socio-economic community but it also reveals how the community are viewed by external systems. At first glance it can be understood as confirmation of the community's strong resistance to relinquish their status of learned helplessness and unwillingness to change from victims and receivers of charity to initiators of their own destiny. It can also be concluded that responsibility for their behaviour was transferred to external factors (poverty, organizers of soup kitchens, lack of recreation activities, unsafe environment, superior attitudes of outside volunteers) confirming Duffy and Wong's (1996) observations of lower socio-economic communities' built-in resistance to any social change that could threaten the status quo. However, from a second-order systems approach it is imperative to understand that the community's *status quo* is maintained not only by the system (community) but also by external systems impacting on it. It can therefore not simply be concluded that the community do not want to change as that would be a linear solution. Responsibility to react to change initiatives can also not be firmly placed on the community as system as the system will keep on doing what it is supposed to do to maintain homeostasis (Leydesdorff, 1997).

The most decisive evidence indicating the community's entrapment in a first-order systems paradigm emerged from an analysis of responses to vignette 5. In essence vignette five explored residents' perceptions of outside recreation providers. A comment made by a mother in one of the focus groups represented several reactions to this particular vignette:

*“I do not need recreation events. I don’t need fun and games.  
I need food and money for my children.”*

In general participants were reluctant to respond to this particular vignette suggesting evidence of how focus group participants blocked and denied information that could threaten the boundaries of their first-order systems’ social existence. Focus group participants tried to ensure that their responses were consistent with the premise that they still needed food and clothing. Recreation activities had to take second place.

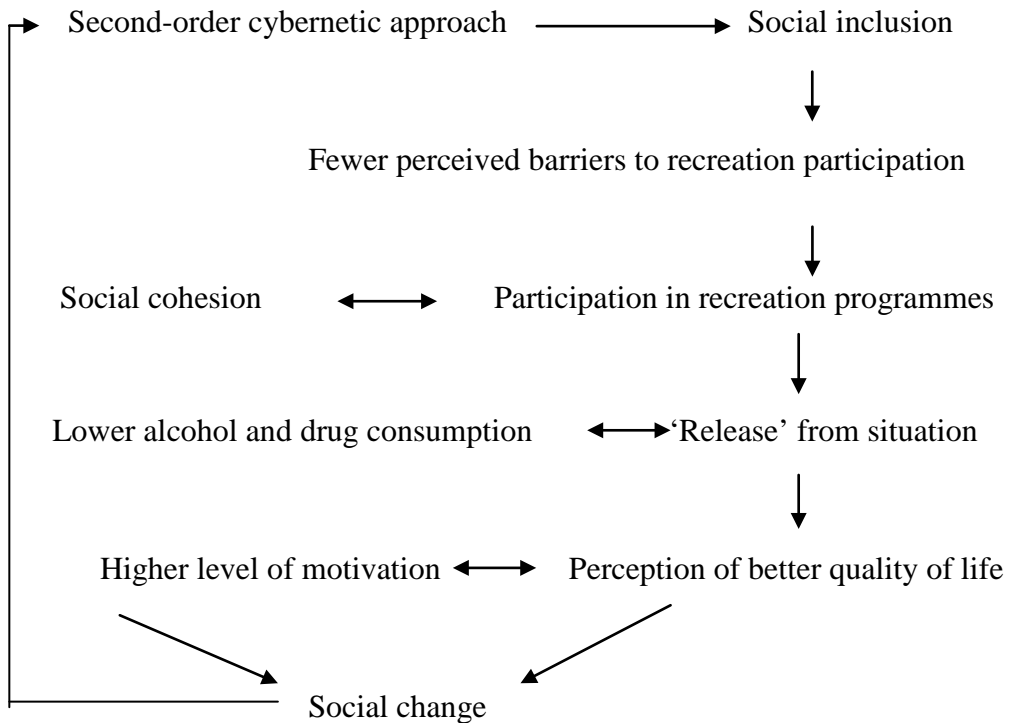
### **Conclusion and recommendations**

Current recreation provision in the researched communities concurred with a first-order systems approach reinforcing a perception of social exclusion. A definite pattern of learned helplessness, shifting of responsibility and comfort with their current social existence emerged substantiated by evidence from focus group discussions and community observations. The first-order systems approach excluded residents from participation in recreation activities where they have input in form and function and relegated them to helpless victims in their social context. Residents themselves transferred responsibility for the current state of morphostasis to external parties and factors demonstrating a fundamental attitude and endemic feedback pattern of a first-order systems approach: *“It is not my fault that I am unemployed... there are no recreation facilities because we are poor”*. As such, the *status quo* of being needy and helpless is maintained.

Current recreation provision initiatives in the research area are undoubtedly operating according to the first-order systems principle of recursion. Organisations and volunteers from outside the community did not question what is happening within the system but rather asked why it is happening, thereby searching for a linear cause-effect solution to a complex social situation. It is predicted that the current pattern of learned helplessness will perpetuate unless it is replaced by a second-order systems approach to recreation provision.

It is, therefore, recommended that a second-order systems approach to recreation provision in lower socio-economic communities be implemented. A second-order systems approach could provide experiences of social inclusion and higher order community development effects as indicated in Figure 2.

Following a second-order systems approach, recreation providers will no longer observe the community from the outside but will instead interconnect with the community thereby attempting recreation provision in collaboration with the community.



**Figure 2:** Effects of a first-order systems approach on recreation provision in the research area.

A second-order approach feeds on higher levels of recursion and changes the interaction between recreation provider and the receiving community from dominant-submissive to mutually beneficial. Residents are no longer receivers of charity but take ownership of their own destiny. This could be achieved by encouraging community-enhancing behaviour allowing for growth and change culminating in community morphogenesis as opposed to morphostasis according to a first order systems approach. Recreation programmes in lower socio-economic communities are often initiated without consultation with the residents of the community. Responses suggested that community members perceived taking part in *ad hoc* recreation programmes provided by external agents as an obligation. External agents, in turn, perceived community members as ungrateful clearly indicating a dissonance of shared reality. Approaching recreation service provision from a second-order systems approach perceived non-systemic barriers should decrease as residents will no longer feel powerless. With the occurrence of higher levels of personal motivation and claimed control over personal situations, systems change within a lower socio-economic community could become a reality.

## References

- Allison, M.T. (2000). Leisure, diversity and social justice. *Journal of Leisure Research*, 32(1), 2–6.
- Arai, S. & Pedlar, A. (2003). Moving beyond individualism in leisure theory: A critical analysis of concepts of community and social engagement. *Leisure Studies*, 22, 185–202.
- Babbie, E. (2008). *The Basics of Social Research*. Belmont: Thomson Wadsworth.
- Baker, D.A. & Palmer, R.J. (2006). Examining the effects of perception of community and recreation participation on Quality of Life. *Social Indicators Research*, 75, 395–418.
- Becvar, D.S. & Becvar, R.J. (2000). *Family Therapy: A Systemic Integration*. Boston, Massachusetts: Allyn and Bacon.
- Bittman, M. (2002). Social participation and family welfare: The money and time costs of leisure in Australia. *Social Policy and Administration*, 36(4), 408–425.
- Caldwell, L.L. (2005). Leisure and health: why is leisure therapeutic? *British Journal of Guidance and Counselling*, 33(1), 7–26.
- Collins, M. (2004). Sport, physical activity and social exclusion. *Journal of Sports Science* [Online], 22. Available from: <http://0-find.galegroup.com.innopac.up.ac.za:80/itx/start.do?prodId=AONE> [Accessed 06/ 09/ 2008].
- Cresswell, J.W. (2008). *Qualitative Inquiry and Research Design. Choosing Among Five Approaches* (2<sup>nd</sup> ed). London: Sage Publications.
- Dawson, D. (1988). Leisure and the definition of poverty. *Leisure Studies*, 7, 221–231.
- Dubberly, H. & Pangaro, P. (2007). Cybernetics and service-craft: Language for behaviour-focused design. *Kybernetes*, 9, 1–23.
- Duffy, K.G. & Wong, F.Y. (1996). *Community Psychology*. Boston, Massachusetts: Allyn and Bacon.
- Edginton, C.R. & Chen, P. (2008). *Leisure as Transformation*. Champaign, IL: Allyn and Bacon.
- Edginton, C.R. (2008). World Leisure seeks proposals to establish World Leisure Centres of Excellence. *World Leisure Journal*, 50(2), 150-151.
- Geyer, F. & van der Zouwen, T. (2001). *Sociocybernetics: Complexity, Autopoiesis and Observation of Social Systems*. London: Greenwood Publishing Group.
- Heylighen, F. & Joslyn, C. (2001). Cybernetics and Second-Order Cybernetics. In R.A. Meyers (Ed.), *Encyclopedia of Physical Science & Technology* (3<sup>rd</sup> ed.) (pp.1-24). New York: Academic Press.
- Iwasaki, Y. (2006). Leisure, the Quality of Life, and Diversity: An International and Multicultural Perspective. In E.L. Jackson (Ed.), *Leisure and the Quality of Life: Impacts on Social, Economic and Cultural Development, Hangzhou Consensus* (pp.25–39). Zhejiang: University Press.

- Jackson, E.L. (2006). Setting the Stage: Introduction to the World Leisure Consensus Symposium on Leisure and the Quality of Life. In E.L. Jackson (Ed.), *Leisure and the Quality of Life: Impacts on Social, Economic and Cultural Development, Hangzhou Consensus* (pp. 17–24). Hangzhou: Zhejiang University Press.
- Leydesdorff, L. (1997). Sustainable technological developments and second-order cybernetics. *Technology Analysis & Strategic Management*, 9(3), 329–341.
- Mannell, R.C. (2006). Health, well-being and leisure. In E.L. Jackson (Ed.), *Leisure and the Quality of Life: Impacts on Social, Economic and Cultural Development, Hangzhou Consensus* (pp.17–24). Hangzhou: Zhejiang University Press.
- Muller, G.P. (2002). Explaining poverty: On the structural constraints of income mobility. *Social Indicators Research* [Online], 59(3). Available from: <http://0-proquest.umi.com.innopac.up.ac.za/pqdweb?did=204673191&sid=2&Fmt=3&clientId=15443&RQT=309&VName=PQD> [Accessed 18 /12/ 2008].
- Park, J., Turnbull, A.P., Rutherford & Turnbull, H. (2002). Impacts of poverty on Quality of Life in families of children with disabilities. *Exceptional Children*, 68(2), 151–170.
- Piercy, P. & Thomas, V. (1998). Participatory evaluation research: An introduction for family therapists. *Journal of Marital and Family Therapy*, 24(2), 165–176.
- Raphael, D., Renwick, R., Brown, I., Steinmetz, B., Sehdev, H. & Phillips, S. (2001). Making the links between community structure and individual wellbeing: community quality of life. *Health and Place*, 7(3), 179–196.
- Reid, C., Ponc, P. & Frisby, W. (2002). Promoting women’s health, equity, and inclusion: The role of accessible community recreation in reducing social isolation. In E.L. Jackson (Ed.), *Abstracts of Papers presented at the 10th Canadian Congress on Leisure Research* (pp. 278-281). Edmonton, Alberta: Canadian Association for Leisure Studies.
- Russell, R.V. & Jamieson, L.M. (2008). *Leisure Program and Planning*. Champaign, IL: Human Kinetics.
- Shaw, S.M. (2006). Re-framing Questions: Assessing the Significance of Leisure. In E.L. Jackson (Ed.), *Leisure and the Quality of Life: Impacts on Social, Economic and Cultural Development, Hangzhou Consensus* (pp. 40–46). Hangzhou: Zhejiang University Press.
- Stromquist, N.P. (2001). What poverty does to girls’ education: the intersection of class, gender and policy in Latin America? *Compare*, 31(1), 39–56.
- Terre Blanche, M. & Durrheim, K. (1999). *Research in Practice: Applied Methods for the Social Sciences*. Cape Town: University of Cape Town Press.
- Tseng, V., Chesit-Teran, D., Becker-Klein, R., Chan, M.L., Duran, V., Roberts, A. & Bardoliwalla, N. (2002). Promotion of Social Change: A Conceptual Framework. *American Journal of Community Psychology*, 30(3), 401–427.
- Vanderstraeten, R. (2001). Observing systems: A cybernetic perspective on systems/ environment relations. *Journal for the Theory of Social Behaviour*, 31(3), 297–311.