Resolving the Quality of Life/Well-being Puzzle: Toward a New Model*

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The quality-of-life/well-being literature is both bounteous and wide ranging, especially in the regional sciences where a multidisciplinary approach has historically been privileged, despite its origins within the economic sciences (Polèse 1999). However, it is precisely because of this that the literature has been plagued by conceptual diversity, measurement differences, the absence of theoretical underpinnings, and, perhaps more often than not, a colloquial use of the terms quality of life and well-being such that any specific conceptual or theoretical sense (if indeed one is intended) is often difficult to ascertain. In this paper, we attempt to address some of the challenges that are faced by regional scientists by presenting a new model of quality of life/well-being that we hope will constitute a better conceptual tool than has been presented previously. We begin by briefly considering the thornier aspects of existing quality of life/well-being research -- its diversity, lack of conceptual clarity, and various foci -- to underline the inadequacy of the conceptualizations offered to date. We then propose a model in which we integrate what we believe should appropriately be considered in regional sciences as two distinct concepts, i.e. quality of life and well-being. In doing so, we also identify conceptual links between two frequently contrary approaches in the study of

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quality of life: the objective and the subjective.

The Quality of Life/Well-being Literature: Challenges to a Coherent Whole

As noted above, there are a number of challenges to developing a meaningful understanding of the quality-of-life and/or well-being literature. The first is to ascertain what, exactly, the terms mean (Clarke 2000 et al; Farquhar 1995); the use of the plural is deliberate because we believe they are distinct concepts. Almost 30 years ago, in one of the seminal geographical studies in this field, Smith (1973) proposed that well-being be used to refer to objective life conditions that apply to a population generally, while quality of life should more properly be limited to individuals' subjective assessments of their lives because of what Smith felt to be the evaluative nature of the term. Today, this distinction has been lost: the term's are often undefined or used inconsistently or interchan geably within studies; in some instances, one term is even used to define the other (De Leo et al 1998). The lack of distinction can in part be traced to the multiple conceptualisations of quality of life that have evolved over the years (Beesley and Russwurm 1989), starting with the economic approaches popular in the late 1960s and 1970s when quality of life/well-being was assessed by quantitative measures such as GDP, GNP, and unemployment rates (Liu 1976). In reaction to this rigidly quantitative approach to the subject, researchers began inquiring into individuals' subjective experiences of their lives in the belief that objective measures alone were incomplete measures of 'quality of life' (Andrews and Withey 1976; Campbell et al 1976). Over the years, these types of measures gave rise to what has been called the social indicators movement, an approach to quality of life based on the belief that carefully selected indicators can serve as surrogate measures of the components conceptualised as representing quality of life and/or well-being. The difficulty with this work is that much of it has in fact lacked a clear conceptual or theoretical framework, with the result that the selection of variables is criticised as being (or at least appearing to be) arbitrary (Diener and Suh 1997).

A second reason for the loss of distinction between the terms is the acknowledgement that quality of life/well-being has both objective components - i.e., components external to an individual and measurable by 'others' -- and subjective components - i.e., personal assessments of one's own life or of particular aspects of life using measures of satisfaction, happiness, or other self-assessment scales (Campbell et al 1976). Thus, although researchers such as Smith (1973) maintained a conceptual distinction between the two types of measures, it is clear that those who followed did not.

Perhaps compounding the difficulty of defining the terms is that researchers from many disciplines have engaged in quality of life research, each from within a particular disciplinary perspective. Thus, although there is gen-

eral agreement that the quality-of-life concept is multidimensional and multifaceted (Evans et al 1985), there remains a surprising insularity amongst researchers, with those from one discipline rarely showing interest in the work of colleagues from other disciplines. In our own investigations of the well-being of the elderly, for example, we have often noted that what falls under the rubric of 'quality of life' research is more often than not squarely focused on a single dimension of quality of life/well-being (such as physical health) (Stewart and King 1994) rather than on the many dimensions which many researchers consider it to be comprised of (Campbell et al 1976; Evans et al 1985; Raphael et al 1996a, 1996b). As Farquhar (1995: 1440) explains, "[W]here many papers refer to 'quality of life' in medical and nursing journals, what they are in fact referring to is 'health-related-quality-of-life', and not 'quality of life' itself, that is they are measuring just one domain of quality of life, usually physical functioning." Andrews (2001) has recently made a similar point in distinguishing quality of place from quality of life (quality of place giving rise to or permitting a certain quality of life, but not being synonymous with it).

Pacione (1984) highlighted an important dimension of quality of life research by pointing out that the concept of quality of life must necessarily engage elements external and internal to the individual. External elements of the world (i.e., objective measures of quality of life) must be experienced internally by an individual (i.e., subjective measures of quality of life) for either measure -- objective or subjective -- to have any value. This critical link between the two is, in our opinion, all too often lacking in the quality-of-life research, regardless of the discipline from which it comes.

In sum, we believe that a distinction between the terms quality of life and well-being (such as that proposed by Smith) is conceptually useful, and should be reinstated. We also believe that the objective and subjective (i.e., external and internal) dimensions of life need to be better accommodated in conceptualisations of these terms, both to facilitate and integrate research on what is clearly a multidisciplinary (if not transdisciplinary) concept. We now attempt to do this by proposing a new model that is predicated upon just such an integrated point of view. Although we present this model in the context of our own research on the quality-of-life and well-being of the elderly, we feel that the conceptual basis on which it is built is sufficiently general in nature to be applicable to other age groups, whether individually or in the aggregate.

Models of Quality of Life or Well-being: A Short Review

Before presenting our own model, we being by briefly reviewing models that have been proposed to explain well-being in later life, highlighting a number of issues that have been, or should have been, addressed to improve research in this field. One early concern was the neglect of the impact of age

differences on the contribution of the environment (the objective dimension of quality of life) to well-being, especially in an urban context (Bohland and Davis 1979). In general, relatively little attention has been given to the role of the environment on well-being, particularly among seniors. Yet, according to Barresi et al (1983-1984), recognition of characteristics of both individuals and their environment is indispensable to understanding well-being among the elderly.

A second issue concerns the rather paradoxical nature of quality of life/well- being when the concept is applied to the aged. Ageing is often associated with chronic health problems and increasing disability; nonetheless, older people often report a high level of satisfaction with their lives. This suggests that well-being in later life extends far beyond mere physical functioning.

A third problem stems from the factthat research on well-being among the elderly has more often than not been oriented toward special, vulnerable populations despite evidence demonstrating that the vast majority of the elderly live independently in their communities (Carp and Carp 1984). Raphael et al (1996a) have offered the same argument, noting that research on the elderly has tended to focus on illness and disability, while important elements such as personal control and the potential for change and improvement, have been ignored.

All of these issues highlight the fact that well-being is still an elusive concept whose definition depends heavily upon the individuals being studied, their particular milieux, and their stage within the life-cycle. In the following paragraphs, we present five models of quality of life/well-being that have all attempted to address some of the problems discussed here. However, as we believe each is still inadequate in some respect, we propose a new model of well-being that attempts to resolve, among others issues, the ambiguity in the quality of life/well-being literature discussed in the first part of the paper.

One of the first efforts at a model of the well-being of the elderly was proposed by Bohland and Davis (1979). They developed a model of residential satisfaction to assess the contribution of safety, neighbourliness, physical condition and convenience, to neighbourhood satisfaction. They were also interested in evaluating the stability of these relationships across different age groups. Using a causal structure, they linked neighbourhood satisfaction to respondents' evaluations of these four neighbourhood attributes. According to their findings, neighbourliness and physical conditions were key dimensions of neighbourhood satisfaction for all age groups but were most important for the elderly. Surprisingly, they found a weak relationship between the satisfaction of the elderly with their neighbourhood, and safety. Overall, they stressed the fact that there were more similarities than differences between the elderly and younger age groups, and in fact, the most important age differential was between the elderly and the 55-65 age group (supporting the idea that the age prior to retirement is a period of considerable adjustment).

In the early 1980s, Barresiet al (1983-1984) proposed a model of environ-

mental satisfaction and sociability in an urban context, also using a causal framework. These authors wanted to explore the relationship between environmental perception and well-being, and to evaluate the impact of personal and occupancy characteristics, and personal resources, on this relationship. They identified endogenous as well as exogenous variables to operationalise their framework. Among the former, they included housing satisfaction, perceived neighbourhood safety, neighbourhood sociability and neighbourhood interaction, while among the latter were personal characteristics (race, age, marital status), personal resources (income, education, health status) and occupancy characteristics (homeownership, length of residence). They applied their model to elderly women and men separately because of the salient nature of the gender variable in the understanding of well-being among the elderly. They found that race (non-white), marital status (married) and age were positively related to well-being for elderly women, although these relationships were more ambiguous for the aged men. In both cases, however, environmental characteristics (such as safety, or sociability) played a major role in the determination of well-being.

At about the same time, Carp and Carp (1984) offered a model that underscored the importance of the concept of congruence in their complementary/congruence model of well-being. Given that conceptual models of well-being of the elderly had focused almost exclusively on special populations, they proposed a more general model applicable to the vast majority of independently dwelling elderly. Based on Maslow's needs hierarchy (Maslow 1970), they conceived of well-being as being the result of the satisfaction of needs by available environmental resources. They identified two levels of need: lower-order or life-maintenance needs, and higher-order needs. The satisfaction of both types of needs was dependent on the congruence (complementarity or similarity) between the needs of the individual (based on competence, personality or life style) and the resources offered by the environment.

In a more recent effort to understand the determinants of well-being among the elderly, Clarke et al (2000) used Ryff's (1989) work on positive psychological functioning to identify the main dimensions by which quality of life/well-being should be measured. According to the authors, self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life and personal growth should be all considered in a model of well-being. They applied their approach to a representative sample of Canadians aged 65 years and older, and found that all dimensions declined with age except self-acceptance. Women scored higher than men for positive social relations and personal growth, although the opposite was the case for environmental mastery and purpose in life.

In contrast, Le Com ité scientifique de Santé Québec (2000) has adopted a system ic approach to their model of well-being, based on the theory of needs as proposed by Maslow (1970) and the ecological-systemic approach proposed

by Bronfenbrenner (1977, 1986). First, they defined well-being as 'un état agréable, positif, de plus ou moins longue durée, lié à la satisfaction des besoins fondamentaux, matériels ou non matériels, correspondant au stade d'évolution ou de développement de la personne concernée.' Using this definition, they developed a model that suggests that well-being is determined by a set of interrelated systems in which individuals behave. These systems include the ontosystem (individual characteristics, human capital), the microsystem (neighbourhood), the mesosystem (social network), the exosystem (social structures) and the macrosystem (values, ideology).

A final example of a quality-of-life model for elderly populations is that proposed by Raphael et al (1996a, 1996b). Raphael and his colleagues have developed a multidimensional conceptual framework based on three life domains: being (who one is), belonging (one's fit with one's environment) and becoming (one's purposeful activities in life). Each one of these domains contains three subdomains: physical, psychological and spiritual subdomains for being; physical, social and community subdomains for belonging; and practical, leisure and growth subdomains for becoming. According to the authors, a person's quality of life is determined by two factors linked to these domains: importance and enjoy ment. A quality-of-life questionn aire based on this framework was administered to a sample of elderly individuals in Toronto, with the result that the being domain was discovered to have disproportionate importance in the determination of quality of life, particularly the physical subdomain.

Towards an Integrated Model of Quality of Life and Well-being

Based on the preceding section, we propose a new model (Figure 1) for three reasons. First, as we will demonstrate, we believe that it is conceptually useful to distinguish between the term quality of life, and the term well-being to clarify the ambiguities identified earlier in this paper (i.e., because it allows for greater precision in the investigation of these multidimension al concepts). As most authors do not make this distinction, including the five we have reviewed here, we have proposed a model in which it is clearly stated. Second, we believe that it is vitally important to recognise what we have earlier referred to as the critical link between the external dimensions of quality of life, and the internal dimensions; we have done this in our model. Finally, and related to the previous concern, is our explicit connection in the model between the objective and subjective aspects of quality of life and well-being which other models have inadequately addressed (or om itted altogether).

In addition, our proposal corresponds to concerns that have started to make their appearance within the regional science literature, concerns that highlight the multidisciplinary and multidimensional nature of current reflection on the quality-of-life concept. In particular, it distinguishes the

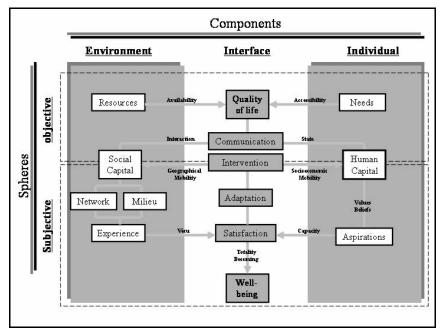


FIGURE 1 Proposed Model

environmental components (Lui 1976; Pacione 1984; Smith 1973) of quality of life from those which are more psychosocial in nature (Clarke 2000 et al; Farquhar 1995; Ryff 1989). Moreover, included within this holistic structure are newer concepts such as social capital (Glaeser 2001; Putnam 1995, 2001; Woolcock 2001) and quality of place (Andrews 2000, 2001; Greenberg 1999), in an attempt to resolve the ambiguity with which the classic quality-of-life concept is surrounded, and render the concept more malleable to practical application as well as concrete policy development.

In an effort to portray the holistic nature of the quality-of-life concept, we, paradoxically, start with its deconstruction; in so doing, we identify and integrate the dimensions addressed by scholars in an array of disciplines, and reveal how they form a whole that is greater than the sum of the parts. We begin by differentiating three broad domains (environment, individual, interface) and two points of view (objective, subjective) in a two-way structure. Within this structure we find an interrelated set of concepts that allows us to identify the processes which play a role in shaping quality of life and well-being. As it is proposed, this model is a way to integrate in one conceptual framework what we believe to be two distinct concepts: quality of life and well-being. The concept of quality of life is seen as the result of the convergence between the resources offered by the environment and the needs expressed by individuals. This convergence is conditioned by processes related to availability (quantity) and accessibility (resource/population location), and

occurs in the objective (or external) sphere because of the nature of the information used to assess this convergence. It should be noted that this convergence does not define quality of life perse, but rather defines a potential quality of life that is revealed through the receipt of, and reaction to, information: what we refer to in the model as an information process. The impact of the information process is twofold: it acts not only on the individual through their capacity to understand and use the information for their own needs (human capital), but it also acts in the environment to facilitate interaction between the individual and the milieux/ networks in which the individuallives (social capital). Human capital (Côté 2001; Schuller 2001) on one side of the model, and social capital (Glaeser 2001; Putnam 2001) on the other, are both a porte d'entrée, or entryway, to penetrate the subjective sphere where, through the processes of personal reflection, evaluation, satisfaction, intervention and adaptation, the individual's life conditions are experienced. Two feedback loops illustrate the adaptation processes. They are included in the model to take into consideration the capacity of individuals to change and to improve their life conditions. The first feedback loop, identified as geographical mobility, is seen as an effort to find a better place to live, i.e., to find more adequate social networks or supportive milieux. On the other side, socioec onom ic mobility (through education, for example) is considered to be a means to improving human capital and the individual's abilities to exploit environmental resources. Both feedback loops eventually lead to a certain level of satisfaction which, if judged to be adequate, determines a state of well-being. In this manner, quality of life remains conceptually distinct from well-being. Finally, our model shows that well-being is not only the result of the processes taking place in the objective and subjective spheres and which are linked to past or present situations, but is also the result of the perceived future (what Raphael et al (1996a) referred to as their becoming domain).

We feel that this model produces both a more integrated and a more holistic perspective than the models presented earlier. Although this model has not yet been operationalised or tested, we think that it nevertheless constitutes an appropriate conceptual framework for future research in the domain of well-being and quality of life.

Conclusion

In this paper, we have underlined what we feel are conceptually problem atic aspects of the existing quality of life/well-being literature. These include the lack of conceptual clarity between these terms, the need to accommodate both objective and subjective dimensions of the concepts, and the interdisciplinary yet essentially insular nature of the research to date. In an effort to overcome these difficulties and generate greater holism in the field, we have proposed a more integrated model of quality of life/well-being than those that have until now been offered. Our model not only provides a clear integration of the two

concepts while ensuring they remain conceptually distinct, it also identifies new conceptual links between the objective and the subjective approaches to quality-of-life research.

The model clearly finds its origins in the work of earlier scholars. The model offers a means of integrating conceptually what we believe to be two distinct concepts: quality of life, and well-being. Within this framework, we have defined the concept of quality of life as the result of the convergence between the resources offered by the environment and the needs expressed by the individual. This definition is close to the notion of congruence as proposed by Carp and Carp (1984) which stresses not only the importance of the availability of resources and the needs expressed by the individuals, but also and above all the appropriate fit (or congruence) between them. As such, quality of life can be seen as setting the stage for a potential well-being. It follows that we can define well-being as the interpretation of quality of life through the subjective experience of environmental as well as personal filters. In this way, well-being is viewed as not only state, but also as a dynamic process leading to better life conditions.

Our model is still a conceptual proposition that has been developed based on our reading of the existing literature, particularly as it concerns the elderly and the environment. While it has not yet been tested, we are currently doing so by applying it to a study of the elderly in a regional context, a context which, exhibiting both cultural and environmental diversity, offers a good benchmark to test what we have proposed here. We believe the model has general applicability in both urban and rural areas, in peripheral regions, and in contexts of change -- be they migratory, demographic, economic, political, or ecological (for examples of these types of change, see the special issues of the Canadian Journal of Regional Science in 1997 (Vol. 20 (1&2)) on changes in metropolitan regions and in 2000 (Vol. 23 (1) on municipal and provincial restructuring). Moreover, we believe the model can be applied both to assessments at the level of the individual or the group, and would be of use to practitioners from a variety of disciplines. We welcome feedback from other scholars grappling with these and similar concerns.

References

Andrews, C.J. 2000. "Analyzing Quality-of-place". Working Paper presented at the workshop Quality of Place Workshop to Assess Our State of Knowledge, Nov. 12. Dept. of Urban Planning and Policy Development, Rutgers University.

_____. 2001. "An alyzing Quality-of-place". Environment and Planning B: Planning and Design, 28: 201-217.

Andrews, F.M. and S.B. Withey. 1976. Social Indicators of Well-being: Americans' Perceptions of Life Quality. New York: Plenum Press.

Barresi, C.M., K.F. Ferraro and L.L. Hobey. 1983-1984. "Environmental

- Satisfaction, Sociability, and Well-being among the Urban Elderly". *International Journal of Aging and Human Development*, 18: 227-293.
- Beesley, K.B. and L.H. Russwurm. 1989. "Social Indicators and Quality of Life Research: Toward Synthesis". *Environments*, 20: 22-39.
- Bohland, J. and L. Davis. 1979. "Sources of Residential Satisfaction Amongst the Elderly: An Age Comparative Analysis", in S. Golant (ed.). *Location and Environment of Elderly Population*. Washington, DC: Winston and Sons. 95-109.
- Bronfenbrenner, U. 1977. "Toward an Experimental Ecology of Human Development". *American Psychologist*, 32: 513-531.
- _____. 1986. "Ecology of the Family as a Concept for Human Development: Research Perspectives". *Development Psychology*, 22: 732-742.
- Canadian Journal of Regional Science. 1997. Special Issue "Metropolis", vol 20 (1&2).
- _____. 2000. Special Issue "Provincial and Municipal Restructuring in Canada: Assessing Expectations and Outcomes", vol 23 (1).
- Campbell, A., P.E. Converse and W.L. Rogers. 1976. The Quality of American Life: Perceptions, Evaluations and Satisfaction. New York: Russell-Sage.
- Carp, F.M. and A. Carp. 1984. "A Complementary/Congruence Model of Well-being or Mental Health for the Community Elderly", in I. Altman, M.P. Lawton, and J.F. Wohlwill (eds.). Elderly People and the Environment. New York: Plenum Press, 279-336.
- Clarke, P., V. Marshall and C. Ryff. 2000. "Well-being in Canadian Seniors: Findings from the Canadian Study of Health and Aging". *Canadian Journal on Aging*, 19: 139-159.
- Côté, S. 2001. "The Contribution of Human and Social Capital". ISUMA, 2: 29-36.
- De Leo, D. R. Kiekstra, J. Lonnqvist, M. Trabucchi, M. Cleiren, G. Frisoni, M. Dello Buono, A. Haltunen, M. Zucchetto, R. Rozzini, F. Grigoletto and J. Sampaio-Faria. 1998. "LEIPAD: An Internationally Applicable Instrument to Assess Quality of Life in the Elderly". *Behavioural Medicine*, 24: 17-27.
- Diener, E. and E. Suh. 1997. "Measuring Quality of Life: Economic, Social and Subjective Indicators". *Social Indicators Research*, 40: 189-216.
- Evans, D.R., J.E. Burns, W.E. Robinson and O. Garrett. 1985. "The Quality of Life Questionnaire: A Multidimensional Measure". *American Journal of Community Psychology*, 13: 305-322.
- Farquhar, M. 1995. "Elderly People's Definitions of Quality of Life". Social Science and Medicine, 41: 1439-1446.
- Glae ser, E.L. 2001. "The Form ation of Social Capital". ISUMA, 2: 34-40.
- Greenberg, M. 1999. "Improving Neighborhood Quality: A Hierarchy of Needs". *Housing Policy Debate*, 10: 601-624.
- Le Comité Scientifique de Santé Québec. 2000. Annexe 1: Un modèle systémique pour l'analyse de la santé et du bien-être. Working paper prepared by

- May Clarkson and Lucille Pica.
- Liu, B.C. 1976. Quality of Life Indicators in US Metropolitan Areas: A Statistical Analysis. New York: Praeger.
- Maslow, A.H. 1970. Motivation and Personality. New York: Harper and Row. Pacione, M. 1984. "The Definition and Measurement of Quality of Life", in M. Pacione and G. Gordon (eds.). Quality of Life and Human Welfare. Norwick: Geoboks. 1-14.
- Polèse, M. 1999. "From Regional Deve lopment to Local Development: On the Life, Death and Rebirth (?) of Regional Science as a Policy Relevant Science". Canadian Journal of Regional Science, 22: 299-314.
- Putnam, R. 1995. "Bowling Alone: America's Declining Social Capital". Journal of Democracy, 6:65-78.
- _____. 2001. "Social Capital: Measurement and Consequences". ISUMA, 2:1, 41-51.
- Raphael, D. I. Brown, R. Renwick, M. Cava, N. Weir and K. Heathcote. 1996a. *Measuring the Quality of Life of Older Persons: A Model with Implications for Community and Public Health Nursing*. Toronto: Centre for Health Promotion, University of Toronto.
- Raphael, D. R. Renwick and I. Brown. 1996b. *Quality of Life Profile: Seniors*. Toronto: Centre for Health Promotion, University of Toronto.
- Ryff, C.D. 1989. "Beyond Ponce de Leon and Life Satisfaction: New Directions in Quest of Successful Aging". *International Journal of Behavioural Development*, 12: 35-55.
- Smith, D.M. 1973. The Geography of Social Well-being in the United States: An Introduction to Territorial Social Indicators. New York: McGraw-Hill.
- Schuller, T. 2001. "The Complementary Roles of Human and Social Capital". *ISUMA*. 2:1, 18-24.
- Stewart, A.L. and A.C. King. 1994. "Conceptualizing and Measuring Quality of Life in Older Populations", in R.P. Abeles, H.C. Gift, and M.G. Ory (eds.). Aging and Quality of Life. New York: Springer Publishing, 27-54.
- Woolcock, M. 2001. "The Place of Social Capital in Understanding Social and Economic Outcomes". *ISUMA*, 6:1, 11-17.