

Community wellbeing: applications for a disaster context

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ABSTRACT

The concept of resilience has become a guiding principle for preparedness, management and recovery. This paper argues that community wellbeing provides a broader means to understand disaster affects and outcomes and recognises that the cultural and social history and future of the community is more than just its experiences of disasters. The concepts that underpin community wellbeing approaches are explored, as are potential approaches to assessment that hold significant value in the reframing of communities beyond their experiences, offering the potential for both empowerment and strengths-based reflection.

Background

Following multiple, large scale disasters in recent years, the international research focus has shifted to theoretical and applied aspects of how resilience relates to community reaction to disasters and the effectiveness of the subsequent response (Council of Australian Governments 2011). In Australia, the Council of Australian Governments noted that the common characteristics of resilient communities, individuals and organisations are functioning well while under stress, successful adaptation, self-reliance, and social capacity.

The *Australian National Principles for Disaster Recovery* (Community and Disability Ministerial Advisory Council 2009) highlight the need to understand the community context. This is also reflected in disaster recovery guidelines and texts published in the USA (Alesch, Arendt & Holly 2009, Natural Hazards Centre 2005). Consideration of context in the post-event environment also requires understanding community processes and how best they can be measured. The relevance of community wellbeing measures to understanding context, however, has been largely under-recognised. This paper argues that wellbeing is a highly relevant but under-used concept in assessments and understanding of community responses to disasters.

Community wellbeing

The term 'community' is widely used but because it is difficult to define and has been extensively debated (Blackshaw 2010, Delanty 2003), it is valuable within each study to define the characteristics of the community involved. The status of communities has been measured in terms of resilience, wellbeing, wellness, sustainability, level of function, and quality of life (Auh & Cook 2009, Davis, Cook & Cohen 2005, Hancock, Labonte & Edwards 1999, Maybery *et al.* 2009, Norris & Stevens 2007, Ryan-Nicholls & Racher 2004). Although terms such as 'wellbeing', 'quality' and 'level of function' have been used interchangeably, they have different meanings and are sometimes philosophically polarised. An individual's satisfaction with their community does not necessarily reflect the health of the community in terms of factors such as sustainability or the equitable provision of goods and services to all. Wiseman and colleagues use the term 'wellbeing' to refer to community level experience (Wiseman *et al.* 2006). They ascribe a holistic quality to wellbeing, encompassing:

'...the interrelationships between economic, social and material wellbeing; the downsides of economic growth, as well as the benefits; the limits of natural assets; the value of heritage and environment; the need to keep natural systems in balance; the importance of non-material aspects of wellbeing such as cultural, spiritual and psychological considerations; the benefits of strong communities and of social inclusion; and participation and the need to keep sight of benchmark values such as democracy, human rights and active citizenship.' (Wiseman *et al.* 2006, p. 19)

This perspective is pertinent for disasters as the effect is often community-wide involving dislocation, economic disruption, and challenges to the social fabric and psychological wellbeing of the group. Wiseman and fellow authors also attribute a dynamic quality to wellbeing with its description as 'a state of healthy development' linked to ongoing progress (Wiseman *et al.* 2006).

The relationships between community wellbeing and resilience

In contrast to definitions of wellbeing, definitions of resilience have focused on the ability to adapt or respond to risk (Davis, Cook & Cohen 2005, Norris & Stevens 2007, Price-Robertson & Knight 2012). Individual, community or society's resilience in response to a stressor has been well-established (Bonanno 2004, Godschalk 2003, Hill, Weiner & Warner 2012), yielding extensive theory dealing with response to and recovery from disasters (Atkinson, Eyal & Hornik-Lutie 2010, Walsh 2007, Agani, Landau & Agani 2010, Stevens, Berke & Song 2010, Cox & Perry 2011, Norris & Stevens 2007).

Norris and colleagues defined resilience as 'a process linking a set of adaptive capacities to a positive trajectory of functioning and adaptation after a disturbance', while community resilience derives from these capacities being networked (Norris *et al.* 2008). They suggest that resilience is a *process* rather than the *outcome*, reflecting adaptability rather than stability; but this is a contested view (Cox & Perry 2011).

Norris and colleagues also suggest that wellness results from community adaptation due to the process of resilience (Norris *et al.* 2008). By contrast, Murray (2004) considers wellbeing as part of resilience that affects the efficacy of the resilience response. In a further variation, Maybery and co-authors consider the terms are interdependent, with wellbeing being both a determinant and result of resilience (Maybery *et al.* 2009). Furthermore, it has been suggested that community resilience requires an ability to change rather than maintain the *status quo* (Steiner & Markantoni 2013, Zautra, Hall & Murray 2008). Community wellbeing is also primarily driven by social change. There is obviously no single endpoint when a community is 'well'. Thus, resilience and wellbeing deal with processes, with goal-setting and outcome attainment inherent in both systems.

A model is offered for the use of adaptive capacities to enhance community resilience, specifically in reference to disaster response (Norris *et al.* 2008). This involves five actions:

- addressing social inequities and vulnerabilities and buffering economic resources
- community participation in assessing and generating problem lists and solutions
- the capacity of support services to respond with efficacy to a crisis
- establishing buffers for existing social supports
- establishing trusted and flexible communication networks to enhance community response to future unknown insults.

These actions highlight the focus on preparing for or responding to a crisis event. The limitation of this focus following disasters is that they may ignore or subsume broader historical, social and cultural experiences of the community. Paradoxically, a community resilience focus may therefore limit the potential of a community to recognise and build on all its strengths.

Community wellbeing assessments

Assessment of community wellbeing is an emergent field that has arisen in response to the recognition of an individual's context within the wider community and the impact of this on wellbeing (Hancock, Labonte & Edwards 1999, Sirgy 2011, Sirgy *et al.* 2010, Mowbray *et al.* 2007, Holden & Phillips 2010, Jorgensen, Jamieson & Martin 2010, Hur, Narsar & Chun 2010, Florida, Mellander & Stolarick 2011, Wiseman *et al.* 2006). Assessment can support shared reflection on community strengths and opportunities, guide action, and allow for monitoring of change over time. The application of this field to community disaster response can be charted reasonably clearly, whereby the wellbeing of the community is considered in terms of its inherent and historical, as well as its enduring and emerging, attributes and characteristics in the context of a disaster.

Assessments of community wellbeing recognise that wellbeing at a community level does not necessarily equal the sum of the individual parts (Hancock, Labonte & Edwards 1999, Sirgy 2011). The factors that determine individual fulfillment do not always translate to benefits at the community level. Standard survey methods and subsequent statistical techniques may be inadequate to understand communities if they treat people in communities (i.e. respondents) as individual and independent cases—thus as isolated and unrelated 'units of analysis' rather than 'actors in social relations' (Abbott 1997). A number of authors have highlighted the need to expand analysis beyond the individual to the wider context of the community and the social interactions that they involve (Hancock, Labonte & Edwards 1999, Harms 2010, Hooghe & Vanhoutte 2011, Ryan-Nicholls & Racher 2004, Sirgy 2011).

While indicators and frameworks for understanding community wellbeing (Zautra, Hall & Murray 2008) incorporate different measures, there are common features including social assets, service provision, economic, environmental, and information and exchange (see Table 1). Evidence of the fundamental effects of these assets on community wellbeing is well established (Kutek, Turnbull & Fairweather-Schmidt. 2011, Maybery *et al.* 2009, Auh & Cook 2009, Mowbray *et al.* 2007, Norris *et al.* 2008, Davis, Cook & Cohen 2005, Hancock, Labonte & Edwards 1999, Cox & Perry 2011).

A framework of analysis comprised of a range of indicators is at the heart of many assessments of community wellbeing (Besleme & Mullin 1997). Hancock, Labonte and Edwards (1999) identified five factors to guide the choice of indicators:

- local involvement
- use of multiple stakeholders
- accessibility and relevance of the indicator
- measurement of factors that are significant, comparable and open to change
- applicability to the defined community and to community level analysis.

It has been suggested that these indicators should also be theoretically robust (Wiseman *et al.* 2006), include both objective and subjective measures, and be feasible

Table 1. Community wellbeing indicator domains.

Reference	Framework categories	Wellbeing indicators	Suggested domain(s)				
			Social assets	Service provision	Environmental	Economic	Information and exchange
Wiseman <i>et al.</i> 2006 <i>Measuring wellbeing, engaging communities: developing a community indicators framework for Victoria. The final report of the Victorian Community Indicators Project.</i>	Healthy, safe and inclusive communities	30	Yes	Yes	Yes		
	Dynamic, resilient local economies	10				Yes	
	Sustainably built and natural environments	19			Yes		
	Culturally rich and vibrant communities	8	Yes	Yes			
	Democratic and engaged communities	4	Yes	Yes			Yes
Maybery <i>et al.</i> 2009 <i>Resilience and wellbeing of small inland communities: community assets as key determinants.</i>	Social assets	11	Yes	Yes			
	Neighbourhood and economic resources	5		Yes		Yes	
	Community risks	4			Yes	Yes	
Davis, Cook & Cohen 2005 <i>A community resilience approach to reducing ethnic and racial disparities in health.</i>	Built environment	7			Yes		
	Social capital	5	Yes	Yes			
	Services and institutions	5		Yes			
	Structural factors	3	Yes		Yes		Yes
Hancock, Labonte & Edwards 1999 <i>Indicators that count! Measuring population health at the community level</i>	Sustainability	7			Yes		
	Viability	5			Yes		
	Livability	8			Yes		
	Conviviality	6	Yes	Yes			
	Equity	4				Yes	
	Prosperity	5				Yes	
	Education	4		Yes			
	Governance	6		Yes			

and parsimonious (Chrvala & Bulger 2010, Steiner & Markantoni 2013).

A range of indicators is essential to simplify and segment larger, more impenetrable issues (Steiner & Markantoni 2013). For example, the efficacy of the education system in a community may be assessed through school attendance and numeracy and literacy indicators. The challenge is to select indicators that address the concerns and values of the target communities, the information needs of governing bodies, and research requirements (Hancock, Labonte & Edwards 1999).

There is no single agreed measure or method of assessing community wellbeing. The studies listed in Table 1 provide some examples of community level assessments. They use a range of measures

and methods including extracting regional results of community wellbeing indicators from existing population-level surveys (Wiseman *et al.* 2006), conducting surveys of individual members to assess their perceptions of community (Maybery *et al.* 2009), and inviting key community representatives to use an indicators tool to score their own community against a set of community factors and priorities (Davis, Cook & Cohen 2005).

Questions about social ties between community members in individual surveys are an important inclusion in community assessment. Social network analysis is a specific, local-level relational method (Emirbayer & Goodwin 1994) that focuses on the 'relationships among social entities, and on the patterns and implications of these relationships'

(Wasserman & Faust 1994, p. 3). This analysis examines how social ties and individual attributes are associated (Robins, Elliott & Patterson 2001a, 2001b). Social network analysis, in conjunction with standard surveys, potentially offers greater opportunities for understanding communities as 'people in social interaction' than is possible by standard statistical methods alone.

Other community level options can be derived from ethnographic methods such as the use of local government and observational data. For example economic indicators could include number and type of local businesses, healthy environment indicators could include number and type of local recreational and community facilities, or social indicators could include details about local groups and their membership.

Conclusion

There are significant parallels in the principles and approaches used to measure both resilience and wellbeing, although there has been a greater focus on resilience in the disaster literature. Community resources, such as economic resources and service assets, have been highlighted as key factors in both wellbeing and resilience. The interrelationship between the two concepts is apparent, although the nature of that relationship is debated. Recognition of the wellbeing of a community, beyond its disaster experience, affords the potential for empowerment and self-reflection through a strengths-based lens. This provides a richer description of context than is gained by only using a resilience framework, which references the community assessment specifically to disaster preparedness and response. Holistic models and indicators are evolving to measure key characteristics of community wellbeing with scope to incorporate characteristics of resilience. This link between the theory and application of measures of wellbeing and resilience at a community level has only very recently been recognised. The potential is clear for researchers to integrate resilience and wellbeing to produce research that makes a significant contribution to both the literature and to communities; particularly in a disaster context.

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References

- Abbott A 1997, *Of time and space: The contemporary relevance of the Chicago School. Social Forces*, 75, pp. 1149-1182.
- Agani F, Landau J & Agani N 2010, *Community-building before, during, and after ties of trauma: the application of the LINC model of community resilience in Kosovo. American Journal of Orthopsychiatry*, 80, pp. 143-149.
- Alesch DJ, Arendt LA & Holly JN 2009, *Managing for Long-Term Community Recovery in the Aftermath of Disaster, Public Entity Risk Institute*.
- Atkinson M, Eyal E & Hornik-Lurie T 2010, *Exposure to Terror Attacks Continues to Effect Community Resilience after more than Five Years. Injury Prevention*, 16, A245.
- Auh SC & Cook CC 2009, *Quality of Community Life Among Rural Residents: An Integrated Model Social Indicators Research*, 94, pp. 377-389.
- Besleme K & Mullin M 1997, *Community indicators and healthy communities. National Civic Review*, 86, 43.
- Blackshaw T 2010, *Key Concepts in Community Studies, Los Angeles Sage*.
- Bonanno GA 2004, *Loss, trauma, and human resilience - Have we underestimated the human capacity to thrive after extremely aversive events? American Psychologist*, 59, pp. 20-28.
- Chrvla C & Bulger RE 2010, *Leading Health Indicators for Healthy People 2010: Final Report. Washington: National Academy of Sciences*.
- Community and Disability Ministerial Advisory Council 2009, *National Principles for Disaster Recovery. Canberra: Australian Government*.
- Council of Australian Governments 2011, *National Strategy for Disaster Resilience. Attorney-General's Department*.
- Cox RS & Perry KME 2011, *Like a Fish Out of Water: Reconsidering Disaster Recovery and the Role of Place and Social Capital in Community Disaster Resilience. American Journal of Community Psychology*, 48, pp. 395-411.
- Davis R, Cook D, & Cohen L 2005, *A community resilience approach to reducing ethnic and racial disparities in health. American Journal of Public Health*, 95, pp. 2168-2173.
- Delanty G 2003, *Community, Abingdon. OX: Routledge*.
- Emirbayer M & Goodwin J 1994, *Network analysis, culture, and the problem of agency. American Journal of Sociology*, 99, pp. 1411-1454.
- Florida R, Mellander C & Stolarick K 2011, *Beautiful Places: The Role of Perceived Aesthetic Beauty in Community Satisfaction. Regional Studies*, 45, pp. 33-48.
- Godschalk DR 2003, *Urban Hazard Mitigation: Creating Resilient Cities. Natural Hazards Review*, 4, pp. 136-143.
- Hancock T, Labonte R & Edwards R 1999, *Indicators that count! Measuring population health at the community level. Canadian Journal of Public Health-Revue Canadienne De Sante Publique*, 90, S22-S26.
- Harms L 2010, *Understanding human development: A multidimensional approach., South Melbourne, Oxford University Press*.
- Hill H, Wiener J & Warner K 2012, *From fatalism to resilience: reducing disaster impacts through systematic investments. Disasters*, 36, pp. 175-194.

Holden M & Phillips R 2010, *Best Research from the Community Indicators Consortium 2009: Introduction to the Special Issue. Applied Research in Quality of Life*, 5, pp. 261-272.

Hooghe M & Vanhoutte B 2011, *Subjective Well-Being and Social Capital in Belgian Communities. The Impact of Community Characteristics on Subjective Well-Being Indicators in Belgium. Social Indicators Research*, 100, pp. 17-36.

Hur M, Nasar JL & Chun B 2010, *Neighborhood satisfaction, physical and perceived naturalness and openness. Journal of Environmental Psychology*, 30, pp. 52-59.

Jorgensen BS, Jamieson RD & Martin JF 2010, *Income, sense of community and subjective well-being: Combining economic and psychological variables. Journal of Economic Psychology*, 31, pp. 612-623.

Kutek SM, Turnbull D & Fairweather-Schmidt AK 2011, *Rural men's subjective well-being and the role of social support and sense of community: Evidence for the potential benefit of enhancing informal networks. Australian Journal of Rural Health*, 19, pp. 20-26.

Maybery D, Pope R, Hodgins G, Hitchener Y & Shepherd A 2009, *Resilience and wellbeing of small inland communities: Community assets as key determinants. Rural Society*, 19, pp. 326-339.

Mowbray CT, Woolley ME, Grogan-Kaylor A, Gant LM, Gilster ME & Shanks TRW 2007, *Neighborhood research from a spatially oriented strengths perspective. Journal of Community Psychology*, 35, pp. 667-680.

Murray J 2004, *Making Sense of Resilience: A Useful Step on the Road to Creating and Maintaining Resilient Students and School Communities. Australian Journal of Guidance and Counselling*, 14, pp. 1-15.

Natural Hazards Centre 2005, *Holistic Disaster Recovery: Ideas for Building Local Sustainability After a Natural Disaster. Boulder, Colorado, USA*.

Norris F & Stevens S 2007, *Community resilience and the principles of mass trauma intervention. Psychiatry-Interpersonal and Biological Processes*, 70, pp. 320-328.

Norris F, Stevens SP, Pfefferbaum B, Wyche KF & Pfefferbaum RL 2008, *Community resilience as a metaphor, theory, set of capacities, and strategy for disaster readiness. American journal of community psychology*, 41, pp. 127-150.

Price-Robertson R & Knight K 2012, *Natural Disasters and Community Resilience CFCA Paper no. 3. Australian Institute of Family Studies*.

Robins G, Elliott P & Pattison P 2001a, *Network models for social selection processes. Social Networks*, 23, pp. 1-30.

Robins G, Pattison P & Elliott P 2001b, *Network models for social influence processes. Psychometrika*, 66, pp. 161-189.

Ryan-Nicholls K & Racher F E 2004, *Investigating the health of rural communities: toward framework development. Rural and Remote Health*, 4.

Sirgy MJ 2011, *Societal QOL is More than the Sum of QOL of Individuals: The Whole is Greater than the Sum of the Parts. Applied Research in Quality of Life*, 6, pp. 329-334.

Sirgy MJ, Widgey RN, Lee DJ & Yu GB 2010, *Developing a Measure of Community Well-Being Based on Perceptions of Impact in Various Life Domains. Social Indicators Research*, 96, pp. 295-311.

Steiner A & Markantoni M 2013, *Unpacking community resilience through Capacity for Change. Community Development Journal, Advance Access*.

Stevens MR, Berke PR & Sing Y 2010, *Creating disaster-resilient communities: Evaluating the promise and performance of new urbanism. Landscape and Urban Planning*, 94, pp. 105-115.

Walsh F 2007, *Traumatic Loss and Major Disasters: Strengthening Family and Community Resilience. Family Process*, 46, pp. 207-227.

Wasserman S & Faust K 1994, *Social Network Analysis: Methods and Applications, Cambridge, Cambridge University Press*.

Wiseman J, Heine W, Langworthy A, McLean N, Pyke J, Raysmith H & Salvaris M 2006, *Measuring Wellbeing, Engaging Communities: Developing a Community Indicators Framework for Victoria. The Final Report of the Victorian Community Indicators Project. Victoria: VicHealth*.

Zautra A, Hall J & Murray K 2008, *Community Development and Community Resilience: An Integrative Approach. Community Development Journal*, 39, pp. 130-147.

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