Abstract:

This article describes a new research project and introduces a new theoretical framework for the relationship of social networks to subjective well-being (SWB). The framework explains why social networks are important and what kinds of positive and negative effects they might have. We argue that network characteristics including properties of network locations and social ties work through different mechanisms to influence SWB. The four positive (i.e. associated with beneficial outcomes) mechanisms are social attachments, nonredundant information, skill knowledge and social support. Negative network effects are associated with relational constraints and costs of maintaining relationships. By directly measuring different network mechanisms, this theoretical framework aims to address criticisms that previous research does not attempt to test alternative network-based explanations and fails to control for potentially confounding network variables. Informed by the theoretical framework, a quantitative project is designed to conduct a national survey of social networks and subjective well-being in Australia and to use comparable secondary datasets from China and the UK, which will test the explanatory power of the new theory in three societies that vary on key cultural and socio-demographic dimensions.

Keywords: social networks, subjective well-being, research design, contextual analysis, survey

(Word count: 3,421)
Social Networks and Subjective Well-being: From Theory to Research Design

Introduction

Economic growth is not an end in itself, but an instrument for creating better life conditions. Consistent with this understanding, national and international agencies increasingly consider well-being as the ultimate goal of societal development and the yardstick to measure quality of life (Trewin 2001; Noll 2004). The Sarkozy Report (Stiglitz et al. 2009) further asserts the need to place the measurement of social and economic well-being squarely at the centre of societies’ attempts to assess their own social progress and compile statistical information for policy development. Both objective and subjective well-being provide key information about people’s quality of life. Subjective well-being (SWB) refers to people’s cognitive (life satisfaction) and affective (happiness) evaluations of their lives.

In the social sciences, SWB has become an emerging research focus that attracts interdisciplinary attention (Diener et al. 2009). Psychological approaches address internal determinants related to psychological dynamics such as personality traits and emphasize the link between health and SWB. Sociologists have recognised the need to examine SWB alongside objective well-being linked to inequalities of condition, opportunity and outcomes. SWB has also been increasingly important in comparative sociology and social indicators research (Veenhoven 2008). Sociological inquiry into SWB has two distinctive characteristics: it emphasizes the role of demographic and socioeconomic correlates of well-being; it highlights the impact of social networks on well-being.

From social network perspectives, previous social network research has extensively examined objective well-being, e.g., educational attainment (Furstenberg and Hughes 1995) and employment (Bian and Huang 2009; Huang and Western 2011) but very few studies (mainly from a psychological approach) have looked at subjective well-being. Among the existing network research, much research on social networks uses loose definitions, encompassing things like formal
and informal social relationships (Coleman 1988), the norms (trust, reciprocity) that characterise these relationships (Putnam 1995), and the positive outcomes (e.g. economic output, social cohesion) (Putnam et al. 1993) that arise from these structures and/or norms. As Durlauf and Fafchamps (2005) note, this research fails to clearly distinguish elements within bundles of related concepts (norms, trust, networks, positive outcomes), specify the mechanisms through which networks have effects, and develop rigorous measures and appropriate empirical analyses where network variables are tested alongside alternatives. In addition, some network researchers (Coleman 1988) do not allow for negative outcomes of networks such as social exclusion or inefficiency.

This article introduces a new theory for the relationship of social networks to subjective well-being, explaining why networks are important and what kinds of positive and negative effects they might have, and presents research designs of a quantitative project which examines the proposed theoretical framework in three developed and developing societies: Australia, China and the United Kingdom.¹

Theoretical Framework and Hypotheses

Why social networks matter?

A social network (Granovetter 1973) is a set of connections of social ties between actors. These actors have personal and social resources which can be used for action. Personal resources are owned or held by actors. Social (or embedded) resources are accessible to actors through their social connections to others. Actors use networks to engage in instrumental (to acquire new objective resources) and expressive (to maintain current resources) actions. Instrumental actions seek to acquire economic (e.g. income, job, promotion), political (e.g. improved position in a group) and social (e.g. reputation) rewards. Expressive actions seek to maintain outcomes such as physical and mental health, life satisfaction and happiness (Lin 2001; Hauberer 2011).

Networks provide actors with resources to pursue desired outcomes. However, researchers disagree about why social networks matter (Lin 2001). One dispute is whether personal resources
associated with network locations or embedded resources associated with network connections bring effects. Within the network locations account, Bourdieu (1986) and Coleman (1988) hold that network closure leads to social benefits by maintaining group solidarity and enabling mutual recognition and reward. In these theories social capital is a resource of actors based on group membership. Coleman (1988) for example, describes how Cairo market traders use their group membership and social ties to pursue economic activity. Alternatively Burt (1992) emphasizes the importance of a strategic location or “structural hole”, such as a bridge linking networks, through which occupants gain advantages by accessing more diverse resources and influences. Granovetter (1973, 1995) likewise stresses how an individual’s weak ties serve as information bridges between networks in job searches. In these accounts network are individual attributes.

In contrast, in the embedded resources account (Lin 2001) network resources are a meso-level network property accessible through direct and indirect ties. Network resources may include things like the number of ties or the resources available at the end of ties but these are network not actor properties (Lin 2001). Network locations facilitate access to better embedded resources but such resources are a property of the whole network, not an actor’s position in it.

**An integrated theory of social network effects on SWB**

The above accounts call attention to factors like network closure or density, strategic position and resources accessed or mobilized. However, no research has incorporated them comprehensively to investigate network effects on SWB. To fill this gap we propose a new theoretical framework incorporating network characteristics and network mechanisms (Figure 1) including those that may adversely affect SWB. It is an open question whether social networks are beneficial or not (Portes 1998). Network characteristics include properties of network locations and of ties. These factors work through different network mechanisms to influence SWB. The four positive (i.e. associated with beneficial outcomes) mechanisms are social attachments, nonredundant information, skill knowledge and social support. Negative network effects are associated with relational constraints and costs of maintaining relationships. This theoretical framework distills arguments of researchers
such as Granovetter, Lin, and Coleman, and posits separate directly measured network mechanisms, to address criticisms that previous research does not theorise or attempt to test alternative network-based explanations. By directly measuring different network mechanisms we also address methodological criticisms about the failure to control for potentially confounding network variables (Durlauf and Fafchamps 2005).

Hypotheses

The theoretical framework implies several overarching research hypotheses which will organise our analyses over the life of the project. These hypotheses are as follows:

H1: Dense networks of strong ties increase social attachments (family, kinship, residential community, workplace, etc), making people feel valued and socially integrated (cf Headey 2007), thus enhancing life satisfaction and happiness. This hypothesis builds on arguments about the importance to well-being of social supports and social connectedness.

H2: Sparse networks of weak ties with socially diverse others increase the likelihood of obtaining nonredundant information, making people well informed about opportunities and resources, thus leading to optimism, and life satisfaction. This hypothesis specifically picks up on one of the key insights of social network analysis, that weak, rather than strong ties, are important for valued outcomes such as getting a job (Granovetter 1973) because of the access they enable to new information.

H3: Network ties with close others in similar social roles increase opportunities to learn relevant skill knowledge, making people more able to deal with problems and promoting satisfaction, and happiness. This hypothesis acknowledges that networks that entail role similarity can provide access to role-specific information that assists in performing a role effectively.
H4: Networks ties to resourceful others, of similar or higher socioeconomic status than the ego, offer (material and non-material) social support, enabling people to cope more effectively, thereby maintaining life satisfaction and happiness.

H5: Strongly bound relationships with nearly all network others induce dependence of one’s behaviours and attitudes upon network contacts, leading to feelings of relational constraint, unhappiness, and dissatisfaction.

H6: Being involved in social networks may have economic, physical and emotional costs, such as spending time and money on maintaining relationships (Li et al. 2005), leading to dissatisfaction and unhappiness.

By identifying these mechanisms we hope to elucidate the causal processes by which networks influence life satisfaction and happiness while addressing criticisms that prior research does not specify or test different network-based explanations.

Research Design
To examine the theoretical framework, we have designed a quantitative project which includes implementation of a new national survey of social networks and subjective well-being in Australia and use of secondary datasets from China and the UK. In this section, we present our contextual framework taking into account how cultural and social background may have impact on the effects of social networks across difference countries. We also outline main variables based on the Australian survey and Chinese and British datasets.

Contextual framework: relational culture and social closure
The extent to which social networks affect SWB potentially depends on cultural and structural variations in the efficacy of social networks. To examine this we propose a three-way comparison of Australia, China and the UK. These countries vary theoretically on two salient dimensions, the degree of relationalism in a society and the rigidity of social closure that shapes social interactions.
(Wright 1997). These dimensions potentially enhance or suppress network effects. Similar arguments motivate some recent comparative analyses of network effects on socioeconomic attainment (Son 2013) and the role of values on East Asian family structures and processes (Yi 2013).

Relationalism refers to the legitimacy of the emotional and instrumental value of social relationships. In a strong relational culture social relationships are widely valued, and collectives and interdependence are emphasized over individuals and independence, as in China (Gold et al. 2002). In contrast, Australia and the UK are strong rationally-oriented cultures in which individuals’ interests and values assume greater priority. Strong and widespread relational understandings contribute to shared expectations that linked actors will behave predictably and normatively. Therefore, we expect the six relational mechanisms to exert greater impacts on people’s SWB in China than in Australia and the UK.

The rigidly of social closure refers to the extent that boundaries to social interaction are open or closed. Australia has relatively high levels of social mobility (Western 1994) and social barriers to the formation of friendship and marriage ties are comparatively weak (Western 1991), meaning that social relationships are relatively unstructured. Weak social boundaries are associated with more heterogeneous social relationships (Blau and Schwartz 1984), providing access to more diverse network resources. We thus expect network effects on SWB to be enhanced in less rigid societies such as Australia as compared to Britain.

These dimensions suggest a 2 by 2 typology of four ideal-types (Table 1). The first ideal type has a weak relational culture and low social closure; Australia is close. The second ideal type has weak relational culture and stronger social closure; the UK is closer to this. The third ideal type has a strong relational culture and a high social closure; rural China is closest to this type. And finally, the fourth ideal type has a strong relational culture and low social closure; urban China under rapid economic and social change is potentially closest. Assuming that relationalism and closure have similar impacts, we would expect network effects to be strongest in urban China (strong
relationalism, weak closure), weakest in the United Kingdom (weak relationalism, strong closure), and intermediate in Australia and rural China.

[Table 1 about here]

Main variables

Our empirical analysis will rely on having direct measures of network characteristics and the intervening mechanisms through which networks are assumed to operate. We intend to measure the following network characteristics and mechanisms.

(1) Independent variables: network characteristics

Network locations. We will measure network characteristics with name generators. Name generators ask about a respondent’s contacts in certain role relationships (e.g. neighbourhood, friends), content areas (e.g. work matters, household chores), or intimacy (e.g. confidential, most intimate interactions). Social network measures reflect the contacts’ diversity, range of resources, and other characteristics (Marsden 1987; McPherson et al. 2006). Name generators allow measures such as “overall network size”, “network composition”, “network density”, “network centrality”, “age heterogeneity”, “gender heterogeneity”, and “occupational heterogeneity”.

Strength of social ties. The strength of social ties was conceptualised by Granovetter (1973, 1995) in terms of four dimensions: frequency of contact, emotional intensity, intimacy (confiding) and reciprocal services. Bian (1997) added measures of role relationships such as kin, friends and acquaintance. We will combine these approaches for a more comprehensive measure.

(2) Intervening variables: relational mechanisms

The network mechanisms we will focus on are the following:

Social attachment. We will ask respondents if and to what extent they feel valued and integrated in their family, workplace, local community, networking groups and social clubs using scalable five point Likert items.
Nonredundant information. Diverse personal networks imply access to rich and heterogeneous information. We use “position generators” (Lin 2001; Bian and Li 2000; Verhaege et al. 2012) to measure if respondents can access this. The position generator uses a sample of structural positions (e.g. occupations, authorities, classes) and asks respondents to indicate contacts in each. We will use the Australian Socioeconomic Index 2006 (a vertical status scale) to draw occupations at different points in the occupational hierarchy (McMillan et al., 2009). This scale correlates highly with international status measures, enabling comparison. We construct measures of “occupational range”, “occupational ceiling”, “number of occupations accessed”, and “total status scores of occupations accessed”. Similar work has been carried out in Britain (Li et al. 2008).

Skill knowledge. Respondents will be asked whether any people provide them with knowledge or advice when they have problems in work and home life.

Social support. We will use scenario questions about home and work to ask if respondents can access support (e.g. financial, physical and emotional) when in need.

Relational constraint. Respondents will be asked if they feel restrictions on personal freedom and autonomy from the demands of family or organisations, groups or clubs; whether they exclude any people or are excluded by any groups; and whether they have been coercively asked for help by family members, friends, colleagues, or other contacts.

Cost of maintaining relationships. Respondents will be asked about the economic, physical and emotional costs of network interactions and activities (Li et al. 2005).

(3) Dependent variables – SWB

The measurement of SWB draws on psychological research (Cummins and Nistico 2002; Cummins et al. 2003; Diener 2009) that identifies three sets of variables capturing overall affective (happiness) and cognitive (life satisfaction) SWB and domain-specific life-satisfaction.
The Australian data will be collected using a new national survey that is administered by telephone and online. The international datasets for comparative analysis include three Chinese datasets with nationwide and regional coverage, and a number of British datasets including the British Household Panel Study, and the Understanding Society household panel. Our analysis strategy involves building and testing key network variables using exploratory and confirmatory factor models, item response theory, and latent class analysis, and then testing factor structures across the three societies. We will also then targeted cross-national comparisons of Australia, China and the UK in terms of relational culture and social closure, based on significance tests of differences in parameters from our theoretical model. This strategy enables formal testing of all elements of the theoretical framework.

**Summary**

Social well-being is increasingly a major objective of social development with the UN, the OECD and many countries (including Australia) setting national and international targets, putting in place official classifications and statistical monitoring to develop programs and policies. Social network effects on SWB are asserted by researchers and policy makers, and research shows some social network variables are correlated with SWB. However, systematic, well theorised and well-designed studies of social network effects are rare especially in Australia. Our project is intended to contribute by developing a comprehensive theory of how social networks affect SWB while allowing for different network mechanisms, positive (beneficial) and negative (adverse) network effects and moderate effects of culture and social closure. It thus reflects an emerging recognition of how cultural and institutional processes moderate network processes (e.g., Son 2013).

**Note:**

1. This is a Discovery Project granted by the Australian Research Council (DP130100690), entitled “Social networks and subjective wellbeing in Australia, China and the United Kingdom”.
References


Figure 1 Proposed social network mechanisms on SWB

Positive mechanisms
- Social attachments
- Nonredundant
- Skill knowledge
- Social support

Negative mechanisms
- Relational constraints
- Cost of maintaining relationships

Network characteristics
- Network locations (Density & centrality)
- Strength of social ties

SWB
- Life satisfaction
- Happiness
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