Assessing intercultural communication competence as a relational construct using social network analysis

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ABSTRACT

This paper explores assessment of intercultural communication competence (ICC) from a relational perspective using social network analysis. ICC is defined as the ability to develop meaningful intercultural relations with host and other nationals, and is operationalized in measures derived from the social network of a multicultural community with 280 members. Three hypotheses are tested to see how measures that account for local and global relational structure are related to socio-cultural adaptation, and how relations with specific cultural groups (i.e., host and home cultures) relate to acculturation outcomes. Findings indicate that the more social relations one has (i.e., well-connected locally) within the community, the less difficulty one experiences in acculturation. In addition, the more social relations one's friends have (i.e., well-connected globally), the less difficulty one experiences. However, contrary to expectations, in this given community, social relations with co-nationals and host-nationals do not have significant impacts on one's socio-cultural adaptation. These findings support the conclusion that ICC is distributed throughout members of a community rather than being strictly an individual attribute. When the community is cohesive, the number of other members one can directly or indirectly reach is important for adaptation, but it does not matter whether or how many are from the host or home countries. The findings point to the need for theorizing and measuring ICC as residing in actors' social networks as well as individual characteristics. Implications for developing and designing intervention and training programs are discussed.

1. Introduction

There are many models that help explain and predict the outcomes of intercultural communication in various contexts (e.g. Chen & Starosta, 1996; Deardorff, 2006; Gudykunst, 1993; Martin & Hammer, 1989; Spitzberg, 1994; Ting-Toomey, 2007; Wiseman, Hammer, & Nishida, 1989). These models focus on individual level variables like personality, attitude, knowledge, and skills; and assessment of intercultural communication competence (ICC) is primarily based on such factors (Ang et al., 2007; Bhawuk & Brislin, 1992; Earley & Ang, 2003; Fantini, 2009; Gamst, 2004; Lustig & Spitzberg, 1993; Matsumoto &

Hwang, 2013; Portalla & Chen, 2010). Some attempt has been made to include contextual factors to explain human behavior (e.g. Arasaratnam & Doerfel, 2005; Bhawuk, Sakuda, & Munusamy, 2008; Chiu & Hong, 2005; Deardorff, 2006; Hong, Fang, Yang, & Phua, 2013; Ong & Ward, 2005; Rubin & Martin, 1994). But individuals are still the fundamental locus of explanation, while interactants and contextual factors are often left out of assessments (Spitzberg & Changnon, 2009: 7). This problem is not unique to the field of ICC studies, but common in social psychology. In order to minimize confounding variables and increase generalizability of conclusions, variables of interest are often decontextualized (i.e., manipulated or controlled) and data are aggregated to demographic groups regardless of complex relations that individuals have with others (i.e., independent observations). Acknowledging these methodological limitations, Robins and Kashima (2008) advocated the integration of social network analysis (SNA) with social psychology so as to benefit from both individualist and structuralist perspectives. Social network analysis is a structural approach, as it sees social actors in a system as interdependent and seeks to understand relational patterns and their resulting social outcomes. This study is a step in that direction.

1.1. Social network analysis

Social network analysis (SNA) refers to research that seeks explanations of how social structure is collectively constructed through interactions or relations between individuals and the impacts of the resulting social structure on these and other phenomena. Network analysis has emerged as a powerful interdisciplinary approach to the study of relational structure in both social and natural sciences (Borgatti, Mehra, Brass, & Labianca, 2009; Butts, 2008, 2009; Easley & Kleinberg, 2010; Freeman, 2000, 2004; Marin & Wellman, 2010; Monge & Contractor, 2003; Newman, 2010; Oliveira & Gama, 2012). In SNA, a network is constructed by a set of actors as nodes and a set of relational ties of certain types defined by the researcher. The ties could represent (1) shared location, membership, or attitude (e.g., co-citation, co-participation); (2) relations due to roles (e.g., supervisor and supervisee, parent and child); (3) relations due to perceptions (e.g., likes, knows); (4) interactions (e.g., talk to, get advice from); or (5) flows of things (e.g., information, disease). Nodes can have attributes that are innate to the individual actor only (e.g., gender, age, nationality) and not dependent on the network. In other words, the same set of actors can be characterized by the same attributes across different networks, but the ties linking them in each of the networks could be defined differently as representing friendship, collaboration, or communication. The relations studied can be reciprocal (e.g., A and B are friends) or directional (e.g., A borrows money from B). They can also be valued to indicate the strength of the relationship.

Networks may be studied at multiple levels or granularities. Monge and Contractor (2003) describe individual, dyadic, triadic, subgroup, and global network levels of analysis. A common distinction is between ego-centric (individual) and full-network (global) analyses. In an ego-centric approach, networks surrounding each node are analyzed to draw conclusions about the individual actors that the nodes represent. In a full-network approach, metrics are applied to the entire network to draw conclusions about the social system (or other type of system) represented by the network. Dyadic, triadic and subgroup analyses examine the corresponding subgraphs of the network to study the embedded social entities that they represent.

The claims made in network research are often about (1) what leads to specific relational patterns (i.e., structure) observed in a network and (2) what impacts (e.g., opportunities and constraints) the network has on the group or individual outcomes (Borgatti & Halgin, 2011). SNA is a valuable addition to individual-focused measures because "[s]ocial networks evolve from individuals interacting with one another but produce extended structures that they had not imagined and in fact cannot see" (Kadushin, 2012: 11). A network analysis can help reveal characteristics of the social environment (i.e., ethnic diversity or cohesiveness of the hosting community) and identify structural patterns that might be conducive or constraining for individuals' cultural adaptation. It provides a means for developing more comprehensive measures of ICC that include contextual factors. In this study, network measures are used to assess ICC of participants undergoing acculturation in a multicultural community of graduate students, most of whom have many years of work experience in their native countries.

1.2. Exploring ICC assessments in the context of acculturation

Acculturation refers to the "phenomena which result when groups of individuals having different cultures come into continuous first-hand contact, with subsequent changes in the original cultural patterns of either or both groups" (Redfield, Linton, & Herskovits, 1936: 149). As this classic definition suggests, mutual adaptation is theoretically a necessary condition of competence in models derived from this context (Spitzberg & Changnon, 2009).

Previous studies have consistently found the indicative and instrumental value of social relations to people in acculturation (Black & Gregersen, 1991; Lakey, 2003; Sakurai, McCall-Wolf, & Kashima, 2010; Ward & Kagitcibasi, 2010; Zhang & Goodson, 2011). The importance of relationships in conceptualizing and theorizing about ICC is also commonly acknowledged by researchers from the east and the west (Deardorff, 2009). But the literature lacks studies that assess ICC from a relational perspective and recognize the role of social structure as a contextual variable. A network analysis perspective can help look for explanations of varied cultural adaptation outcomes in the structural properties of the social relation networks, beyond what one is able to establish given individual characteristics (e.g., personality, empathetic ability, conflict management skills) and the social context of acculturation (e.g., ethnic diversity and cohesiveness of the community). For example, the size and composition of one's social network, the position that an individual occupies in a network, and the strength of relations with others can all reveal one's competence in establishing and maintaining social relations in an intercultural