RatSWD

Working Paper Series

Working Paper No. 58

Measuring social competencies

Ingrid Schoon

March 2009

Federal Ministry of Education and Research

Working Paper Series of the Council for Social and Economic Data (RatSWD)

The *RatSWD Working Papers* series was launched at the end of 2007. Since 2009, the series has been publishing exclusively conceptual and historical works dealing with the organization of the German statistical infrastructure and research infrastructure in the social, behavioral, and economic sciences. Papers that have appeared in the series deal primarily with the organization of Germany's official statistical system, government agency research, and academic research infrastructure, as well as directly with the work of the RatSWD. Papers addressing the aforementioned topics in other countries as well as supranational aspects are particularly welcome.

RatSWD Working Papers are non-exclusive, which means that there is nothing to prevent you from publishing your work in another venue as well: all papers can and should also appear in professionally, institutionally, and locally specialized journals. The *RatSWD Working Papers* are not available in bookstores but can be ordered online through the RatSWD.

In order to make the series more accessible to readers not fluent in German, the English section of the *RatSWD Working Papers* website presents only those papers published in English, while the the German section lists the complete contents of all issues in the series in chronological order.

Starting in 2009, some of the empirical research papers that originally appeared in the *RatSWD Working Papers* series will be published in the series *RatSWD Research Notes*.

The views expressed in the *RatSWD Working Papers* are exclusively the opinions of their authors and not those of the RatSWD.

Measuring social competencies

Ingrid Schoon

Abstract

What are social competencies, how can they be measured, and do they remain stable over time. This contribution examines the difficulties in conceptualising and measuring social competencies at different developmental stages and in a changing social context. Existing measures and available data sources are reviewed and recommendations for future developments in data provision, data usage and access are made.

Keywords: Social competence, social skills, social relationships and interaction

Measuring social competencies

Social competencies have been identified by the European Commission as one of the key benchmark indicators to be targeted in order to improve prosperity and well-being in its Member States (EU 2005). Social competencies can be broadly defined as the capabilities enabling individuals 'to live together in the world' (Arendt 1958) comprising aspects of interpersonal, intercultural, social and civic competencies. Beyond such a broad definition, general social competences are however difficult to define because the skills and behaviours needed for living together in the world, and for achieving social tasks and outcomes vary with age and with the demands of particular situations. The notion of social competence is of interest to social scientists across disciplines, as it is relevant for the adaptive functioning in a variety of contexts and across the life span. Social competencies reflect adjustment in the family, school, work, in society at large, and in old age, requiring more context specific definitions of the construct , as well as a focus on particular facets of social competence, such as empathy, self control, trust, respect for other people, or civic engagement. In recent years, the study of social competencies has received increased attention from policy makers and social scientists across disciplines, partly due to increased concerns about the lack or erosion of social competencies in modern society (see for example Putnam 2000).

Conceptual Issues

A major concern for empirical research is that social competencies are generally not well defined or measured. Social competencies comprise interactions between individual characteristics, social demands, and situative characteristics. They have to be understood as relativistic, as very different social competencies are required and valued in different contexts (Argyle et al. 1985). Behaviours which are functional in one context might be dysfunctional in another, implying that the assessment of social competencies involves culturally based value judgments. These values are however subject to change. For example, as a consequence of the massive economic transformations in China new behaviours and qualities, such as assertiveness and autonomy, are required for achieving success, whereas characteristics that used to be beneficial for adjustment, such as obedience to authority, are perceived as problematic (Chen and French 2008).

Social competencies are conceptualized differently across disciplines, and even within disciplines there is no agreed consensus of their definition. Within psychology social

competencies are defined as personality traits (Sarason 1981) which can manifest in different capabilities such as empathy, tolerance, conscientiousness; ability for cooperation; as a dynamic construct involving the ability to adjust to and interact in given social conditions (Argyle 1994; Tajfel 1981); as peoples belief about their efficacy (Bandura 1997), as social (Gardner 1999) or even emotional intelligence (Goleman 1995). Within pedagogy it refers to lifelong, intercultural and social learning. In economics social competencies are sometimes used to refer to 'soft skills' comprising abilities such as flexibility, working in a team, motivating colleagues and clients. Economic terms such as social 'capital' are used in sociology and the social sciences in general to describe resources arising from social relationships (Putnam 2000; Halpern 2005). Given this variety of definitions it is necessary to establish a unifying working definition that acknowledges differences in focus, and specifies particular domains of manifestation as well as specific components and skills. To avoid confusion researchers must be clear about their theoretical orientation and must identify the context and focus of their assessments.

Research Questions

Development of competencies. Social competences change over the life course, and depend on the development of capabilities such as social awareness, social skills, and self confidence. For example, young children learn to play games with others, such as peekaboo or pretend games, but also learn important forms of self-control, including patience, sharing and temper management, and empathy with others. Later on they have to develop more integrated forms of self regulation, with an emphasis on 'fitting in' and achieving, as well as increased coordination of social skills and understanding of social scripts as they unfold (Saarni 2000; Waters and Sroufe 1983). Certain behaviours may be appropriate at particular ages, but not at others. We still know relative little about the developmental antecedents, or about outcomes of social competencies in areas such as health, well-being, socio-economic attainment and social integration. Questions to be addressed concern how social competencies are expressed at different periods of the life course, but also whether there are stages in life where it is too early to expect a sense of social responsibility or empathy. Are there particularly sensitive periods of heightened awareness, and what is the potential for developing social competencies throughout the life course. To answer questions about the development and growth of social competencies, and to assess continuity and change in development over time, it is vital to be able to draw on longitudinal data following individuals from an early age onwards. Furthermore, agreement on key indicators of social competencies at different life stages has to

be gained, based on a thorough theoretical understanding of human development in context.

Biological aspects. There might be links between social competencies and other enduring personality characteristics as well as genetic factors that shape social interactions. However, there is still little understanding of the association of social competencies and genetic factors or physiological measures of neural efficacy (Flashman et al. 1998; Grigorenko 2000; Bechara et al. 2000). Nor do we yet know whether there are some basic physical and psychological needs that have to be fulfilled, before social competencies can be developed.

Social change. In recent years concerns have been raised about the erosion of social competencies as a consequence of socio-historical change and increasing globalization. It has been argued that there had been an increasing instrumentalisation and individualization of social relationships (Putnam 2000), while others have emphasized the emergence new values and lifestyles with greater tolerance for ethnic, cultural, and sexual diversity, more issue-oriented forms on participation, greater emphasis on self-expression, and search for meaning and purpose of life (Inglehart 1997). Until recently it has not been possible to analyse the linkages between macro-social change and individual level attitudes, due to the lack of reliable time series data measuring certain concepts repeatedly across many different societies, or large scale longitudinal studies following the development of social competencies within individuals over time and across different birth cohorts. Today a number of large scale longitudinal studies following individual lives over time as well as international panel studies are available for access, as for example the European Value Survey (EVS) and the World Value Survey (WVS), both of which had been used to test assumptions about changing social values and competencies (Arts and Halman 2004; Inglehart 1997).

Context dependency. Social competencies are essentially relational, describing how individuals behave within the context of interpersonal and group relationships. Characteristics of the relationships engaged in and the context encountered provide opportunities to acquire and express social competencies. How are competencies influenced through interactions with family members, peers, in the school or work context, or one's neighbourhood? What are the factors and processes that foster and promote social competencies? To answer these questions it is vital to assess information about contextual as well as individual characteristics. Questions regarding the transgenerational transmission of social competencies and values, which are not yet fully understood, require assessment of social competencies across generations as well as consideration of socialization practices and availability of social support.

Another concern are questions regarding general versus context specific manifestations of social competence. To what extent do social competencies generalize across groups and communities? How do opportunities, norms, and expectations for social connectedness and participation influence the development of social competencies over the life course? Crucial context related indicators to be considered are measures of social status (comprising socio-economic as well as family status, education, and income), gender, culture and ethnicity, formal and information settings, as well as age. Questions to be addressed by researchers are for example, whether gender or cultural differences often noted in the expression and/or manifestation of social competencies are an artifact of measurement, norms and socialization influences, or something else.

Measurement

There is no widely held consensus about how to measure social competences. The assessment of social competencies can comprise a variety of methods, ranging from self ratings or self reports of behaviour, values, and motivations; direct behavioural observations (in natural situations or under experimental conditions); behavior rating scales (to be completed by parents, teacher, employer, subordinates, or self); use of vignettes; interviewing; make belief tasks and role play; hypothetical scenarios; interpretation of video clips; social network analysis and sociometric approaches; as well as computer simulations.

A widely used instrument to assess personality characteristics such as agreeableness, conscientiousness, or extraversion is the 'Big Five' inventory and its abbreviated forms (Costa and McCrae 1992; Gosling et al. 2003; McCrae and Costa 2004). Other widely used self reported measures are the Rosenberg self esteem scale (Rosenberg 1979), measures of self-efficacy (Bandura 1997; Schwarzer 1993), locus of control (Rotter 1990), or the Interpersonal Reactivity Index (Davis 1983) measuring both cognitive and affective aspects of dispositional empathy. Useful scales to assess social adjustment in children and adolescents are the social competence inventory (Rydell et al. 1997), the self control rating scale (Kendall and Wilcox 1979), the child behavior check list (Achenbach and Howell 1993), or the Strengths and Difficulties Questionnaire (SDQ) which contains subscales measuring peer problems and prosocial behavior (Goodman 2001). These questionnaires are by no means a complete list of available instruments. They are meant as examples of the many ways in which to conceptualise and operationalise social competencies. Generally it is best to select measures that are geared to the context being addressed. There are also widely used single item measures, which are often included in large scale surveys, tapping into conceptions of

generalised trust (most people can be trusted), reciprocity, social networks and support, or social participation.

Concerns have been raised about the consistency and reliability of self assessments as well as biases in reporting (Hagerty et al. 2007). Single item measures, although attractive, are only suitable to assess constructs that are simple and unambiguous. They provide only one chance to capture a complex concept, are likely to miss differences at the individual level, and might be 'contaminated' by the context in which they are collected. Psychometric scales comprising multiple items to measure a specific dimension, such as social intelligence, social responsibility, assertiveness, or empathy, are more reliable, yet often take longer time to complete, and without abbreviation are not suitable for large scale surveys. The same applies to attempts to measure social competencies on the basis of assessments in experimental settings, make belief scenarios, or interpretations of video clips, which usually take more time to collect. A compromise might be to use or to develop brief multi-item scales for specific competencies. Another major concern is the lack of clarity or agreement on relevant indicators to establish construct validity. Definitions sometimes focus on internal processes or external outcomes, although both aspects are important. Ideally the measurement of social competencies should involve different assessment modes, combining self reports, rating scales completed by others, as well as observational data to obtain reliable and valid measures. Instead of direct assessments, multiple measures could be used as indicators of latent constructs, which would also facilitate comparative approaches of assessment and research.

Status Quo: Data Bases and Access

Free web based access to national and international studies is available through a variety of social science data archives across Europe and the US:

The UK based ***Economic and Social Data Service (ESDS)*** provides support for secondary use, and facilitates access to an extensive range of both quantitative and qualitative key economic and social data. The ESDS Qualidata archive provides access to qualitative data, such as the study on 'Inventing Adulthoods', exploring social relationships and interactions of young people living in the UK (http://www.esds.ac.uk/findingData/snDescription.asp?sn=5777), or the study on 'Quality of Life in Oder Age', providing information on social networks and support (http://www.esds.ac.uk/findingData/snDescription.asp?sn=5237).

ESDS also provides help for users in locating and acquiring international survey data (http://www.esds.ac.uk/international/), as well as longitudinal data (http://www.esds.ac.uk/longitudinal/). Data collections include, for example the 1958 National Child Development Study (NCDS), the 1970 British Cohort Study (BCS70), the British Household Panel Survey (BHPS), the English Longitudinal Study of Ageing (ELSA), the Families and Children Study (FACS), the Longitudinal Study of Young People in England (LSYPE), and the Millennium Cohort Study (MCS). These studies contain a wide range of data on social competences, comprising assessments in early childhood, adolescence, and adulthood. The MCS, for example, a study of over 18,000 children born between 2000-02 includes measures of early social competence, using the Strength and Difficulties Questionnaire as well as a make belief task (Sally-Anne task). NCDS and BCS70 contain measures of early behavioural adjustment, using the Rutter A-scale (http://www.data-archive.ac.uk/doc/5805/mrdoc/ pdf/RutterBehaviourQuestions. pdf). NCDS at age 50 contains measures of the Neo 'Big Five' personality inventory. Most of the studies include assessments of social attitudes in adulthood, such as attitudes towards equality and fairness, information about social networks and civic activities – although mostly as single item statements.

The ***Council of European Social Science Data Archives (CESSDA)*** is an umbrella organisation for social science data archives across Europe. The CESSDA Portal (http://damad.essex.ac.uk/portal/cessda.html) is a gateway to many kinds of research data and metadata, including for example international panel studies that have adopted a collaborative effort among several countries to provide comparative data. Studies accessible via this portal include: the International Social Survey Programme (ISSP); the European Social Survey (ESS); the European Values Study (EVS); the World Values Surveys (WVS); and the International Social Justice Project (ISJP). All of these surveys contain items assessing generalized social trust (using a question such as 'most people can be trusted'), frequency of contact with friends and relatives, strengths of social networks, taking part in social and civic activities, social attitudes, attitudes towards gender equality and social justice.

The Inter-university Consortium for Political and Social Research (ICPSR), based at the University of Michigan (http://www.icpsr.umich.edu/), is an organization of member institutions working together to acquire and preserve social science data; to provide open and equitable access to these data; and to promote effective data use. ICPSR is the world's largest archive of digital social science data. It provides, for example, access to the following longitudinal data sets that contain data on competencies, attitudes, values, and behaviours:

The Panel Study for Income Dynamics (PSID), the National Longitudinal Survey of Youth 1979 and 1997 (NLSY79; NLSY97); data on the children of the National Longitudinal Survey of Youth (NLSYC); the National Longitudinal Study of Adolescent Health (Add Health); and Monitoring the Future. The NLSY studies, for example, contains information about self esteem (Rosenberg scale), self efficacy (Pearlin scale) of both mother and children, as well as information about behavior adjustment (Achenbach Youth Report), delinquency, social relationships and social networks. The Child Development Supplement of the PSID and the Add Health Study also contains information about self esteem and self efficacy, as well as information on social support and social attitudes. The PSID CDS provides time use diary data accounting for the social context of daily social activities. The Add Health Study contains information on dyadic relationships and social networks, enabling a close analysis of relationship symmetry, the strengths of friendship ties, and social integration.

Future Developments

Data Provision

Given the stock of available data resources, and the multiple perspectives and approaches in operationalising social competences future challenges for provision of data should address a. the integration and consolidation of existing data resources and measures of social competencies; b. cataloging and documentation of topic specific resources; c. promoting re-use of data; d. addition of data sources to the archives that have not yet been made available; e. attempts towards harmonization of future data collection.

Integration and consolidation: so far only very few attempts have been made towards stock taking and evaluation of existing resources. Future efforts should attempt to provide an overview and integration of existing measures and approaches. Similarities and differences in approach, as well as unifying conceptual issues have to be identified, enabling the development of integrative research.

Cataloging and documentation: currently documentation exists for separate studies (most of which are multipurpose), yet there is a lack of topic specific documentation of measures and approaches across different studies. Combining topic specific evidence from different studies, different countries, different populations and age groups will facilitate comparative research and contribute towards a more integrative conceptualization of research. Evidence to be provided includes information about type of assessment, age group and population under investigation, psychometric properties of assessment (i.e. reliability and validity), interlinked

context variables, relevant publications, strengths and weaknesses in approach.

Promoting re-use of data: to date not all relevant studies have been made available for public access via data depositories. This includes large scale multipurpose longitudinal data, as well as focused specialist investigations. To gain a better understanding of different approaches and contexts of assessment it is necessary to overcome 'proprietary' models of publicly funded social science research and a move towards more openness and collaborative efforts in obtaining as complete an overview as possible, drawing on existing evidence. Of course studies should be vetted and evaluated for criteria of research excellence before they are added to the depositories.

Data harmonization: future data collection should build on existing evidence base and strive towards a coordinated collaborative effort of best practice, ideally involving several countries to provide comparative data.

Data Usage

Data usage in the future is likely to involve interdisciplinary teams and international research networks sharing and consolidating existing knowledge, working towards a coordinated, comparative approach, and preparing strategies for collecting new evidence. To facilitate such developments it is necessary to improve the infrastructure of international data provision, such as data documentation across studies, training, and possibly the creation of innovative examples of how to use data from different studies.

Data Access

Access to data should be expanded via remote access sites and coordinated data archives. Investments have to be made to protect confidentiality of data, and consideration has to be given to different levels of access, depending on security clearance. Given the attractiveness of personal data for different interest groups, financial or market organizations, safeguarding access to bonafide users is vital.

European and International Challenges

A key concern for collaborative data use is to strive towards international comparability of data, and to provide internationally harmonized data sets. Such an endeavor has to build on collaborative agreements between contributors and joint research projects. Every effort should be made to preserve existing data and to enable its reuse, even with a different purpose or research question in mind. Language barriers have to be acknowledged and overcome, as for

example in coordinated efforts in data collection and documentation. Another concern are culture specific norms and expectations about what constitutes social competencies, making it necessary to identify a common denominator, or to develop culture sensitive or culture free measures.

Furthermore, existing data sources should be integrated, creating multipurpose studies. This might involve the linkage of panel and cohort studies to administrative data, expanding the scope of studies to assess predictors and outcomes of development across domains, such as education and health. Innovative tools for data collection and analysis have to be developed, making use of modern technology. For example, data collection can be conducted via mobile phones or the internet, using even advanced methods of assessment, such as computer simulation or time use diaries. Further consideration should be given to the development of new analytic approaches, enabling the analysis of mechanisms and processes across and within domains, contexts, cohorts, and countries, and over time. Moving beyond population statistics, there is scope for adopting new methodologies enabling the identifications of patterns and comparison of functioning between as well as within subgroups of the population.

Recommendations

The measurement of social competencies involves the study of a complex phenomenon that occurs over time and in context. In order to advance our understanding and assessment of social competencies the following recommendations are made:

- Conceptual clarity and focus of what is going to be measured should be achieved through efforts towards the development of an interdisciplinary, culture sensitive relevant working definition of social competencies, reflecting general as well as specific components and skills.

- Appropriate methods are needed to map development over time, across domains and contexts. This implies the need for age-, domain- and context appropriate measures, enabling the assessment of growth and development over time, as well as the development of methods suitable to examine continuity and change in the acquisition and expression of competencies over time and in different contexts.

- Since the effectiveness of social behaviour can only be determined within the context of a particular social environment it is necessary to include both individual and contextual

characteristics in the assessment.

- The acquisition of social competencies is a developmental process, yet there is still too little knowledge about how individuals learn and acquire social competencies in different contexts and settings, and how competencies develop and diversify over time. It is thus vitally important to increase the availability of longitudinal data starting from early age, and providing information on different manifestation of competencies, as well as information on potential factors and processes facilitating the acquisition and expression of social competencies and promoting adaptive interpersonal and person environment interactions at different life stages.

- There is a need for a better understanding of intergenerational transmission of social competencies, as well as their biological foundations.

- To consolidate the research evidence there have to be efforts to continuously update and advance the integration of existing data resources as well as the promotion of their re-use. Collaborative agreements to submit data to a publicly accessible data depository for the purpose of secondary analysis would pave the way for future collaborative research and training. Working towards the cataloging and topic specific documentation of resources will provide the necessary infrastructure.

- To improve the possibility of collaborative and comparative research there should be integrated and harmonized approaches of data collection, drawing on modern technology.

- Confidentiality of data has to be safeguarded, and specific modes of access to data depositories to be considered.

References:

Achenbach, Th.M. and Howell, C.T. (1993): Are American children's problems getting worse? Journal of the American Academy of Child and Adolescent Psychiatry, (32), 1145-1154.

Arendt, H. (1958): The Human Condition. Chicago.

Argyle, M. (1994): The psychology of interpersonal behaviour (5th edition). London.

Argyle, M./Henderson, M. and Furnham, A. (1985): The rules of social relationships. British Journal of Social Psychology, (24), 125-139.

Arts, W. and Halman, L. (Eds.) (2004): European values at the turn of the Millennium. Leiden.

Bandura, A. (1997): Self-efficacy: the exercise of control. New York.

Chen, X. and French, D.C. (2008): Children's social competence in cultural context. Annual Review of Psychology, (59), 591-616.

Costa, P.T. and McCrae, R.R. (1992): Revised NEO Personality Inventory (NEO-PI-R) and NEO Five-Factor Inventory (NEO-FFI) professional manual. Odessa, Fl.

Davis, M.H. (1983): Measuring individual differences in empathy: Evidence for a multidimensional approach Journal of Personality and Social Psychology 44, 113-126.

EU (2005): Working together for growth and jobs: A new start for the Lisbon Strategy. European Commission, Communication 33. Brussels.

Flashman, L.A./Andreasen, N.C./Flaum, M. and Swayze, V.W. (1998): Intelligence and regional brain volumes in normal controls. Intelligence, (25), 149-160.

Gardner, H. (1999): Intelligence Reframed. Multiple intelligences for the 21st century. New York.

Goleman, D. (1995): Emotional intelligence. New York.

Grigorenko, E.L. (2000): Hertitablility and intelligence. In: Sternberg, R.J. (Ed.): Handbook of Intelligence. Cambridge, 53-91.

Goodman, R. (2001): Psychometric properties of the strengths and difficulties questionnaire (SDQ). Journal of the American Academy of Child & Adolescent Psychiatry, (40), 1337-1345.

Gosling, S.D./Rentfrow, P.J. and Swann, W.B. Jr. (2003): A Very Brief Measure of the Big Five Personality Domains Journal of Research in Personality, (37), 504-528.

Hagerty, M.R./Cummins, R.A./Ferriss, A.L./Michalos, K.L.A.C./Peterson, M. et al. (2007): Quality of life indices for national policy: Review and agenda for research. Social Indicators Research, (55), 1-96.

Inglehart, R. (1997): Modernization and postmodernization. Cultural, economic, and political change in 43 societies. Princeton, NJ.

Kendall, Ph.C. and Wilcox, L.E. (1979): Self-control in children: Development of a rating scale Journal of Consulting and Clinical Psychology, 47(6), 1020-1029.

Kihlstrom, J.F. and Cantor, N. (2000): Social intelligence. In: Sternberg, R.J. (Ed.): Handbook of intelligence. Cambridge, 359-379.

McCrae, R.R. and Costa, P.T. (2004): A contemplated revision of the NEO Five-Factor Inventory. Personality and Individual Differences 36 (3), 587-596.

Putnam, R.D. (2000): Bowling alone: the collapse and revival of American community. New York.

Rampus, K. (1947): Social Competence. Journal of Abnormal and Social Psychology, (26), 681-687.

Rosenberg, M. (1979): Conceiving the self. New York.

Rotter, J.B. (1990): Internal verus external control reinforcement. American Psychologist, (45), 489-493.

Rydell, A.-M./Hagekull, B. and Bohlin, G. (1997): Measurement of two social competence aspects in childhood Developmental Psychology, 33 (5), 824-833.

Saarni, C. (2000): Emotional competence: A developmental perspective. In: Bar-On, R. and Parker, J.D.A. (Eds.): The handbook of emotional intelligence. San Francisco, 68-91.

Sarason, B.R. (1981): The dimensions of social competence: Contributions from a variety of research areas. In: Wine, J.D. and Smye, M.D. (Eds.): Social competence. New York.

Schwarzer, R. (1993): Measurement of perceived self-efficacy: Psychometric scales for coss-cultural research. Berlin.

Tajfel, H. (1981): Human groups and social categories. Cambridge.

Walker, R.E. and Foley, J.M. (1973): Social intelligence: its history and measurement. Psychological Reports, (33), 839-864.

Waters, E. and Sroufe, A.L. (1983): Social competence as a developmental construct. Developmental Review, 3(1), 79-97.