Validating Global Competency Scale for Indian Business and Management Education

Juthika KONWAR, Arup BARMAN

The online version of this article can be found at:

http://revistaromaneasca.ro

Validating Global Competency Scale for Indian Business and Management Education

Juthika KONWAR[1]
Arup BARMAN[2]

Abstract

　　When the organizations started to expand their business across the globe, with the opening up of markets, the issues of international management strategies and competencies of international mangers got more and more attention. Researchers along with the business houses started their quest for identifying, defining and framing a set of competencies necessary for a successful international manager. In this process throughout the years a number of models and construct have been developed to address the issue of competencies required for globalized management era. In the context of management educations the issues global competency development is yet in the stage of infancy, developing very sluggishly, un-professionally and irrelevantly. Considering the state of pseudo showcasing the global competency development practices in the B-schools in India, the authors attempted to develop a scale for facilitating assessment among the students of b-schools for Indian educational set-up. The present attempt has identified the variables from various models and constructs and checked the validity and reliability of the scale proposed.

Keywords: *Global Competencies, India, B-Schools, Validity and Reliability Check*

[1] Asst. Professor, Department of Business Administration, Assam University, Silchar-788011 (India), Email: juthikakonwar@gmail.com

[2] Associate Professor, Department of Business Administration, Assam University, Silchar-788011 (India), Email: abgeet@gmail.com

Introduction

Globalization is a reality that no one can deny, whether in the management of business enterprises, the conduct of government affairs or the exploration of the frontiers of science and technology or education. Our highly interdependent global society is as much a result of the need to address major worldwide challenges, such as sustainability, health and security, as it is the result of important advances in the conduct of international commerce, e.g. the European Union, NAFTA, and the creation of nearly instantaneous worldwide communications using cell phones and the Internet (Lohmann, and et.al, 2006). Increased global activity has led firms around the world to collaborate with partners (foreign), seek new markets for their products, new sources of raw materials, parts and components, and new, more cost-effective locations for manufacturing and assembly operations. Some of these foreign ventures succeed, but many do not, and the inability of firms and their managers to adjust to the demands of the international business environment has been advanced as a primary cause of international business failures (Johnson and et.al, 2006). These challenges and opportunities are dramatically and rapidly changing the role of mangers and, consequently, the nature of management practices. There is a consensus among academicians, researchers and business houses around the globe that managers today need a specific set of skills, attitude and knowledge to compete and survive in the ever changing and shrinking world.

Since, the time, from when the organizations started to expand their business across the globe, with the opening up of markets, the issue of international management strategies and competencies of international mangers got more and more attention. Researchers along with the business houses started their quest for identifying, defining and framing a set of competencies necessary for a successful international manager. In this process throughout the years a number of models and construct have been developed to address the issue of competencies required for globalized management era. In the present study an attempt has been made to develop a scale with variables identified from various models and constructs addressing the issue and check the validity of the scale developed.

Global Competency

The use of competencies model has been widely applied for the identification of competences required by global (international) managers and other key employees. Lambert (1994) reviewed the internationalization literature and constructed the concept of global competence, which describes the qualities necessary for professional practice in an international setting (as cited by Keršien and Savanevicien, 2005). He conceptualized global competence as consisting of five components: world knowledge, world language proficiency, empathy (the ability to recognize validity in other points of view), approval (the ability to appreciate aspects of other cultures), task performance (the ability to achieve specific goals in a different cultural environment). Working in the same direction, Olson and Kroeger (2001) had drawn the definition of a globally competent person as the one who has enough substantive knowledge, perceptual understanding, and intercultural communication skills to effectively interact in our globally interdependent world. They considered substantive knowledge as the Knowledge of cultures, languages, world issues and global dynamics as well as Knowledge of human choices (i.e. knowledge and the ability to analyze how what one does at home has relevance elsewhere). Open mindedness, resistance to stereotyping, complexity of thinking and perspective consciousness (i.e. the recognition that one's worldview is not a universal perspective) were clustered under perceptual understanding and components grouped under intercultural communication skills were; adaptability, empathy, cross-cultural awareness, intercultural relations and cultural mediation. McCall and Hollenbeck (2002) mentioned about seven competencies required for developing global executives which are as follows:

- Be open-minded.
- Show an interest in other cultures.
- Get used to complexity
- Develop a resilient spirit.
- Act honestly.
- Create a stable personal life
- Develop expertise.

McCall and Hollenbeck (2002) had not made categories of the competencies and competencies related to communication and language was not included in the list. In 2004 Hunter in his quest for developing a

working definition of global competency constructed a comprehensive set of competencies under three categories; they are knowledge, skills and attitudes. Paul Hunter and et.al had markedly included the need for understanding of concept of 'globalization' under knowledge category which was not highlighted in previous works.

Specifically focusing in the area of developing global competency in engineering graduates, Downey *et al.* (2006) proposed learning criterion for the global competency of engineering students that included three components; Knowledge, ability, and predisposition (A predisposition to treat co-workers from other countries as people who have knowledge and value, may be likely to hold different perspectives than they do, and may be likely to bring these different perspectives to bear processes of problem definition and problem solution.) . Researching in the same area Gordon and Lohmann (2006) prescribed more detailed learning goals for engineering students with following five categories:

- *Second language proficiency*
- *Comparative Global Knowledge*
- *Intercultural assimilation*
- *Global disciplinary practice*
- *Intercultural sensitivity*

Paul (2008) proposed a construct of global competency for developing global executives for world stage which included three areas- a set of business knowledge competencies, a set of personal competencies and a range of interpersonal competencies. Again, at the same time, Reimers (2008) proposed tri-dimensional nature of global competency as a necessity of global education with almost same variable as mentioned by previous researchers but he termed the three categories – they are affective dimension, action dimension, and academic dimension. The affective dimension included the attitude or personal attributes, the action dimension included the skills or abilities while academic dimension incorporated the knowledge part. In this emerging area of developing global competency as a part of attaining global education, the Asia Society (2009) have developed a global competency matrix. The four main components of the matrix incorporated student's ability to; investigate the world beyond their immediate environment, recognize

their own and others' perspective, communicate their ideas effectively with diverse audiences and translate their ideas and findings into appropriate actions to improve conditions. Each of these components is further divided in four elements with more detail variables to help the educators to implement and evaluate global competency among students. Similarly, the Binghamton University (2010) have enlisted twenty skills/qualities required by a student to become globally competent graduates which are more or less same with the variables of global competency proposed in previous works.

Variables selection from literature review

The review of literature reveals that diverse models and constructs have been developed throughout the years to address the issue of globalization in management. The research in the areas of cross-cultural, intercultural, global, international and multicultural competence represents separate parallel lines which have not yet merged together (Keršien and Savanevicien, 2005). Several different key-words were used, forming combinations of the terms 'competence' or 'competency', and 'cultural', 'intercultural', 'cross-cultural', 'global', 'international', or 'transnational' (Johnson et al ,2006) **.** While some studies have looked specifically at global knowledge, attitudes, or behaviors, most research looks at some combination of these different traits (Keršien and Savanevicien, 2005).

A thorough study of the various constructs and models reveals that though focus areas of various studies ranges from global leadership, global executives/managers (McCall and Hollenbeck , 2002; Bird et al ,2010; Adler and Bartholomew ,1992; Johnson et al ,2006) , general and higher education (Olson and Kroeger ,2001; Hunter, 2004; Reimers , 2008; Asia Society, 2009) to more specific areas like engineering education (Downey *et al. ,* Gordon and Lohmann, 2006). In these studies the contents or the variables incorporated for studies are converge at various points. The various components and variables of constructs and models proposed for transnational competence, cross-cultural competence, inter-cultural competence, multicultural competency and global competency shows similarity in various aspects. All the literature reviewed here admits a need of specific set of competence/competency to perform and excel in the globalized world.

The various models or construct developed for the purpose have one or more common variable or components may be under different terminology. The convergence in the constructs and models is presented in Table 1.

Table 1

Competencies Constructs	Adopted from the Work	Contents /items
Transnational Competency	Generalized from Adler & Bartholomew(1992)	Awareness and understanding of global business environment and interdependence of economic, political, social forces.
		Awareness and knowledge about own culture and cultural differences around the globe.
		Ability to adapt in many foreign cultures.
		Social flexibility and ability to use cross-cultural interaction skills
Cross-cultural Competency	Generalized from Black & Mendenhall (1990); Leiba-O' Sullivan (1999); Johnson et al (2006)	Tolerance of ambiguity.
		Honesty, values, beliefs, norms and perseverance as a part of personal attributes
		Personality traits-flexibility, perseverance, self-efficacy
Intercultural Competency	Generalized from Dinges, (1983); Bird et a (2010)	Non- judgementalness
		Self- confidence, optimism, ability to handle stress
		Emotional sensitivity
Multicultural Competency	Generalized from Howard-Hamilton (2003); Kersien & Savanevivien (2005)	Empathy, Approval, Agreeableness
		Conflict resolution skills
		Task performance
		Openness to experience
Global Competency	Generalized from Lambert (1994); Olson &Kroeger (2001); McCall	Knowledge of world history
		World language proficiency
		Knowledge of human choices
		Understanding the concept of

	&Hollenback (2002); Hunter (2004); Downey et al 2006; Gordon &Lohmann (2006); Reimers (2008)	globalization
		Perspective consciousness
		Develop a resilient spirit
		Celebrating diversity
		Successful participation on project-oriented academic or vocational experience with people from other cultures and traditions
		Ability to assess intercultural performance in social or business settings
		Ability to live outside one's own culture
		Ability to identify cultural differences in order to compete globally
		Ability to collaborate across cultures

Although different terms have been used by various authors a detail study of these pieces of literature indicates that all are taking about competencies required by individuals to perform efficiently and effectively in an ever shrinking global village. Although various constructs were developed so far, it has been found that the concept of globalization is specifically address only under Global Competency construct/model. It has been also observed that Global Competency being more recent concept has incorporated most of the contents of previous constructs. There for it can be safely concluded that, as the organizations evolving from transnational to multinational to global enterprise the concept of competencies required for global village also evolving towards Global Competencies.

All variables set by the previous literature are merged together with special consideration to the overlapping variables and a final list of 31 (thirty one) variables have been prepared for the purpose of developing a scale for Global Competency. In addition to that three new variables are added to this list which we found very important to address the issue Global Competency in the present era. These three newly added variables are namely;

- Mindfulness - Mindfulness practice means to be constantly aware or conscious of what we do (*Barman, 2011*)

- Compassionate -sympathetic consciousness of others' distress together with a desire to alleviate it.

- Networking - an ability to increase an individual's network of professional contacts worldwide.

Together with these three variables a final list containing 34 (thirty four) variables have been prepared for scale development. The final list of selected variables is tabulated below:

Table 2: Literature Sources of Selected Contents of Global Competency

Knowledge of world issues and global dynamics, issues, processes, trends and systems *(Lambart,1994; Olson and Kroeger, 2001; Hunter, 2004; Gordon & Lohmann, 2006; Reimers, 2008)*	Open mindedness *(Olson and Kroeger, 2001; McCall and Hollenbeck ,2002)*
Knowledge of world history *(Hunter, 2004; Reimers, 2008)*	Resistance to stereotyping *(Olson and Kroeger, 2001)*
World language proficiency *(Lambart,1994; Olson and Kroeger, 2001; Gordon & Lohmann, 2006; Reimers, 2008)*	Complexity of thinking *(Olson and Kroeger, 2001)*
Knowledge of human choices *(Olson and Kroeger, 2001; Downey et al., 2006)*	Perspective consciousness *(Olson and Kroeger, 2001; Hunter, 2004; Downey et al., 2006; Gordon & Lohmann, 2006; Reimers, 2008)*
Understanding of one's own cultural norms and expectations *(Hunter, 2004)*	Adaptability *(Olson and Kroeger, 2001; McCall and Hollenbeck ,2002; Hunter, 2004; Gordon & Lohmann, 2006)*
Knowledge about cultures within a globe and comparative context *(Olson and Kroeger, 2001; McCall and Hollenbeck ,2002; Hunter, 2004; Gordon & Lohmann, 2006)*	Cross cultural awareness *(Olson and Kroeger, 2001)*
Understanding the concept of globalization *(Hunter, 2004; Reimers, 2008)*	Intercultural relations *(Olson and Kroeger, 2001; Hunter, 2004; Gordon & Lohmann, 2006)*
Empathy *(Lambart,1994; Olson and Kroeger, 2001)*	Cultural mediation *(Olson and Kroeger, 2001)*
Approval *(Lambart,1994; Gordon & Lohmann, 2006)*	Act honestly *(McCall and Hollenbeck ,2002)*
Task performance/ develop expertise *(Lambart,1994; McCall and Hollenbeck ,2002)*	Create stable personal life (McCall and Hollenbeck ,2002)
Develop a resilient spirit *(McCall and*	Ability to identify cultural differences in

Hollenbeck ,2002; Hunter, 2004)	order to compete globally (Hunter, 2004)
Openness to new experiences, including those that could be emotionally challenging *(Hunter, 2004)*	Ability to collaborate across cultures *(Hunter, 2004; Gordon & Lohmann, 2006)*
Non-judgmentalness *(Hunter, 2004)*	Effective participation in social and business settings anywhere in the world *(Hunter, 2004)*
Celebrating diversity *(Hunter, 2004)*	Tolerance of ambiguity *(Gordon & Lohmann, 2006)*
Successful participation on project-oriented academic or vocational experience with people from other cultures and traditions *(Hunter, 2004)*	Compassionate
Ability to assess intercultural performance in social or business settings *(Hunter, 2004)*	Networking
Ability to live outside one's own culture (Hunter, 2004)	Mindfulness *(Barman, 2011)*

Scale Administration (Methodology)

The variables selected from the literature have been combined to develop a questionnaire for evaluating global competencies. The questionnaire consisted of 38 items representing the 34 variables. This item number 38 is represented by 5 (five) sub items. A five-point Likert scale was used in the questionnaire throughout. For administrating the scale a survey conducted via the questionnaire among the students of B-schools of India.

Sample selection: Seven B-schools of India have been selected on convenience basis for the survey. Special care has been taken to involve all categories of B-schools in the survey; therefore B-schools selected from top ranks, middle levels and rest. For the study 20 (twenty) students from each B-schools are being selected for the survey on convenient basis. The sampling plan is being tabulated below:

Table 3: Sample Respondents

	Top Ranked B-Schools	Middle Ranked B-Schools	Rest	Students sample
Sample numbers	3	2	2	20 per B-school
Total		07		140

After the survey a final usable sample of 132 students are being collected and then processed for testing validity of the scale.

Reliability Test

The data of social sciences and education is derived from human behavior therefore the results obtained from data and the conclusions drawn are not acceptable, if the reliability and validity of the data is not known. To know the extent to which data yield is dependable; one must determine first to what extent measuring instrument contains errors of measurement. Therefore reliability test is a must to establish the validity of developed scale of measurement to measure reliability for evaluating *accuracy* and *precision* of the instrument (Kerlinger, 1995) prepared for further study.

To check the validity of the scale is necessary to measure the reliability of contents and items for the scale. Therefore, usable responses were processed for reliability check with the help of SPSS-15. We applied reliability analysis first for 42 items for the sample N= 132.

Table 4: Reliability of Scale

For Items	Sample	Statistics for Scale			Intra-class Correlation Co-efficient				Reliability co-efficient (Cronbach Alpha)	Cronbach's Alpha Based on Standardized Items
		Mean	Variance Deviation	Std.	Single Measure		Average Measure			
					ICC (SMICC)	Sig.	ICC (AMICC)	Sig.		
42	132	151.51	384.511	19.609	0.175	0.000	0.899	0.000	.899	.903

From the reliability analysis (table 4) of the overall scale and contents of the scale for the sample (N=132), the reliability co-efficient i.e. Cronbach Alpha=0.899 and Cronbach Alpha on standardized items=0.903 where items=42. The value of Cronbach Alpha and standardized item Alpha indicated a high reliability of the whole scale with 42 items because the items are perfectly reliable and measures the same thing (true score), then coefficient alpha is near to 1(Statsoft, 2002-08). The test results (Table-1) revealed single measure intra-class correlation co-efficient (SMICC) and average measure intra-class correlation co-efficient (AMICC) with reliability co-efficient. The value of SMICC explains inter item correlation co-efficient for single respondents- SMICC=0.175. The AMICC values explain average correlation of whole items of the scale i.e. 42 numbers of items those revealed from the responses of 132 respondents.

Contribution for the Future Research

In the context of Indian business and management education development of global competency is an essential dimension for pushing towards the global excellence. It is found that only few business schools premier few IIMs and few private sectors are offering global competencies but not in the fuller scale. There is lack of systematic attempts for development of global competency in the B-Schools. But in the age of international of education especially in business education need more systematic study and research. This scale will be able to fill ever increasing gap of global competence development. Along with this, this scale can help the pedagogic developer and educators for initiating innovation of management education for global consciousness development among the students, which perhaps would demand by the immediate future management educations in India.

References:
Adler J. Nancy and Bartholomew Susan (1992), "Managing Globally competent people", *Academy of Management Executive,* Vol. 6, No.3, pp52-65.

Anne Marie Delaney (2002), 'Enhancing Support for Student Diversity through Research'', *Tertiary Education and Management,* Vol. 8; pp.145–166.

Asia Society, available at http://www.asiasociety.org/education-learning/partnership-global-learning/making-case/what-global-competency, browsed on November 19 2009.

Asia Society, available at http://www.asiasociety.org/education-learning/partnership-global-learning/making-case/what-global-competency- browsed on November 19 2009.

Barman. Arup (2011), 'Mind…to Mindfulness' as a Conjugative Science. An Apparition on Position of It's in Advanced Business Curriculum and Social Research Postmodern Openings, 2011, Year 2, No. 8, December, pp: 117-135 The online version of this article can be found at: http://postmodernopenings.com

Binghamton University, (2010), "Global Competency", Career of Students Affairs, Division of Students Affairs, updated 10/10

Bird A., Mendenhall M., Stevens J. M. And Oddou G. (2010), "Defining the content domain of intercultural competence for global leaders', *Journal of Managerial Psychology,* Vol. 25, No 8, pp 810-828

Bucker, Joost and Poutsma, Erik (2010), "Global management competencies: a theoretical foundation", *Journal of Managerial Psychology*, Vol. 25 No. 8, 2010, pp. 829-844.

Burnouf Laura (Spring 2004), 'Global Awareness and Perspectives in Global Education" *Canadian Social Studies*, Volume 38 Number 3, Special Issue: Graduate Work in Social Studies Education.

Crawford O. Elizabeth and Kirby M. Misty (January 2008); "Fostering Students' Global Awareness: Technology Applications in Social Studies Teaching and Learning", *Journal of Curriculum and Instruction* (JoCI), Volume 2, Number 1, pp. 56-73.

Curran, K. (2003); "Global Competencies that Facilitate Working Effectively Across Cultures, browsed from http://content.monster.com.sg/management/5808/ on 20 December 2009.

Dainty Paul (2008), "Leading and Managing in a Global Environment: Developing Executive Competencies for the World Stage", in Murray, P. & Poole, D., *'Contemporary Issues in Management'* Thompson.

Denise DeGarmo, & Marci Daniels; "The Problems of Assessment: Conducting a Surveyto Determine the "Global Competence" of Students at So uthern Illinois University Edwardsville, Presented at the Southern Political Science Association Conference New Orleans, January 8-10, 2009.

Downey, G.L. *et al.* (2006)*, "*The Globally Competent Engineer: Working Effectively with People Who Define Problems Differently," *Journal of Engineering Education,* Vol. 95, 2006, pp. 1-17.

Educating for Global Competence: The Report of the Advisory Council on the International Educational Exchange. (1988). Retrieved on December 10, 2009 from the Council on International Exchange website: http://www.sredecc.org /secciones/experto/ documentos /Educating_for_global_competency.pdf

Educator Support Programs for Global Education. (2004). Retrieved on December 10, 2009 from Stanley Foundation website: http://www.stanleyfoundation.org/programs /esp/index.html.

Gary Holmes & Nick Hooper (Oct., 2000); "Core competence and education", *Higher Education,* Vol. 40, No. 3, pp. 247-258.

Gebbie K, Merrill J, Hwang I,Gupta M, Btoush R and Wagner M (September 2002) "Identifying Individual Competency in Emerging Areas of Practice: An Applied Approach"; *Qualitative Health Research*, Vol. 12 No. 7, pp. 990-999.

Global Competence Task Force Report, Presented to Provost Patrick Farrell by the members of the Global Competence Task Force, August 2008, Retrieved on 26 February 2010 from http://www.scribd.com/doc/6203902/Global-Competence-Task-Force-Report.

Gordon Jonathan & Lohmann Jack (2006), "Producing a Globally Competent Engineer: Evaluation and Assessment of the Georgia Tech International Plan" *European Journal of Engineering Education,* Vol. 31, No. 1,pp. 119–131, , March 2006.

Green, M.F. & Olson, C. (2003). Internationalizing the Campus: A User's Guide. Washington, D.C: ACE (American Council on Education). Retrieved on 19th December, 2009; available at

http://www.ciee.org/research_center/archive/
Global_Competence/1988GlobalCompReport.pdf

Hunter Bill, White P. George & Godbey Galen (2006), "What Does it Mean to Be Globally Competent?" Journal of Studies in International Education, Vol. 10, No. 3, pp.267-285.

Johnson P James, Lenartowicz and Apud (2006), "Cross-Cultural Competence in International Business: Toward a Definition and a Model", *Journal of International Business Studies*, Vol. 37, No. 4, pp. 525-543, Published by: Palgrave Macmillan Journals.

Kerlinger N. Fred (1995), "Foundation of Behavioral Research", 3rd Edition, Priam Books Pvt. Ltd., India.

Keršien, Kristina and Savanevicien, Asta (2005), "Defining and Understanding Organization Multicultural Competence", ISSN 1392-2785 *Engineering Economics*.Vol.42 No 2 Work Humanism

King, M. Patricia and Howard-Hamilton, Mary (2003), "An Assessment of Multicultural Competence" NASPA Journal, Vol. 40, no. 2, Winter 2003, pp 119-133

Lambert, R. D. (Ed.). (1994). Educational exchange and global competence. New York: Council on International Educational Exchange.

Leiba-O'Sullivan, Sh. (1999), "The distinction between stable and dynamic crosscultural competencies: implications for expatriate trainability", *Journal of International Business Studies*, 30 (4), pp. 709-725.

Lohmann, Jack R. , Rollins, Howard A. And Hoey, J. Joseph(2006) 'Defining, developing and assessing global competence in engineers', *European Journal of Engineering Education*, Vol.31, No. 1, pp. 119 -131.

McCall Morgan and Hollenbeck George (2002), "Developing Global Executives: The Lessons of International Experience", Harvard Business School Press, Boston, Massachusetts

Ogrean Claudia, Herciu Mihaela and Belascu Lucian (June 2009); "Competency-Based Management and Global Competencies – Challenges for Firm Strategic Management", *International Review of Business Research Papers* , Vol. 5 No. 4, pp. 114-122.

Olson L. C. and Kroeger R. K. (2001); "Global Competency and Intercultural Sensitivity" *Journal of Studies in International Education*, Vol. 5 No. 2, pp. 116-137, Summer 2001.

Powers. Richard L. & Engle. Allen D., "The Misalignment of Management Education and Global Strategies and Competencies" retrieved on February 22nd,2010 from http://people.eku.edu/englea/powersIBET227.htm

Reimers Fernando (2008), "Educating for Global Competency", *International Perspectives on the Goals of Universal Basic and Secondary Education,* Edited by Joel E. Cohen and Martin B. Malin, Routlege Press

Reimers M. Fernando (Winter, 2009), "Global competency: educating the world.(PERSPECTIVES)(Viewpoint essay)", *Harvard International Review* , Retrieved on December 14, 2009 from http://www.entrepreneur.com/tradejournals /article/195774199.html

Reimers. Fernando (September 2009), "Leading for Global Competency", *Teaching for the 21st Century* , Volume 67, Number 1, pp. 15-23.

Shams Ashley and George Camille MN (Winter 2006),"Global Competency: An Interdisciplinary Approach", *Academic Exchange Quarterly* , ISSN 1096-1453 Volume 10, Issue 4.

Sherman, Hugh D.(1999) 'Pursuing Global Competence In Undergraduate Business Education', *Journal Of Teaching In International Business*, Vol:10, no:3, pp.29 -41.

Widmann James & Vanasupa Linda (2008); 'Work in Progress - Attaining and Measuring Global Competency for Engineering Graduates", October 22-25, Saratoga Springs, NY, 38th ASEE/IEEE Frontiers in Education Conference.

William D. Hunter (Spring 2004); "Got Global Competency", International Educator, Pg 6-12 retrieved from http://www.nafsa.org/_/File/_/go_global_competency.pdf on 22 February 2010.