

The Measurement of Students' Intercultural Sensitivity: Reflections from a Mixed Methods Correlational and Qualitative Research

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Abstract

The complexity of human relations more clearly emerges between people of different cultures, often involved in misunderstandings or even conflicts. It is necessary to dedicate pedagogical attention, plans and policies to improving intercultural relations supported by scientific research. In order to have positive intercultural relations, a fundamental element turns out to be intercultural sensitivity, according to the Developmental Model of Intercultural Sensitivity (DMIS) by M. Bennett. The assessment of intercultural sensitivity is a fundamental step in understanding how to direct educational practices even if it is complex to realise. This proposal is part of an ongoing doctoral research, a multivariate correlational and qualitative study with integrated sequential mixed methods. The research explores intercultural sensitivity and its correlations in a non-probabilistic reasoned convenience sample of students (N:137) in Italian secondary schools. Not having found an accessible validate tool using the DMIS and suited for the context, this study has implemented a new tool, the intercultural sensitivity questionnaire for Italian schools (ISQIS). Discussion groups with students (N:80) will enrich the quantitative data and a questionnaire for one teacher in each class (N:7), about context information, was implemented. Reliability and exploratory factor analysis demonstrate the validity of the instrument to measure two stages at the extremes of intercultural sensitivity, defense (α :.755) and acceptance (α :.605). Interesting results are found in the stages of minimization and reversal but with low reliability (α :.545; α :.532). It is considered essential to have quantitative data in educational research, even when there is a need to deepen it with qualitative data.

Keywords: intercultural pedagogy; DMIS; intercultural competence; secondary school; assessment.

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1. Introduction

This contribution originates from pedagogical reflections carried out in the field, reflections about the need and difficulty, to build positive and profound relationships between people with radically different interpretations of the world, attitudes, and traditions. Long-term work experiences made, as in the case of the writer of this article, in Cameroon and Senegal, can change the way of thinking. During this time, a few questions arose that influenced the research work, such as, for instance:

how pedagogical research could contribute to facilitating the development of harmonious relationships and mutual understanding? This paper aims to focus the attention on the possibility of measuring the intercultural sensitivity of students, the importance of doing this, and the possibility of doing it through quantitative instruments. This contribution is part of an ongoing doctoral research, a multifactorial correlational and qualitative study with integrated sequential mixed methods. The main objectives of this research are:

To measure the intercultural sensitivity of students in secondary schools in Italy; to realise a tool for the assessment of intercultural sensitivity with quantitative and pedagogical purposes; to analyse the correlations emerged between the identified variables and intercultural sensitivity; exploring students' opinion about the intercultural sensitivity and the meaning associated with it and to raise awareness of this topic in the schools. The article starts with a presentation of the main aspects in the research background and its objectives, continues with the presentation of the methodological part then presents the main steps taken to construct the new quantitative research tool: the Intercultural Sensitivity Questionnaire for Italian Schools (ISQIS).

2. Research background

This research is an empirical and pragmatic research towards practical problem solving (Varisco, 2002; Dewey, 2019) with the student voice perspective (Cook-Sather, 2006). A fundamental frame comes from the intercultural pedagogy, the recently global competence (AFS 2019; OECD 2018, 2020; Portera, 2020) and the intercultural sensitivity. Intercultural sensitivity as a part of intercultural competence (Guner et al. 2022) who have assumed a central importance, whit also the global competence (OECD, 2020). We need this competence to leave positively in an interdependent and interconnected world (Surian et al. 2018; AFS 2019). Intercultural competences are not innate but are constructed (Bennett, 2015) and intercultural pedagogy can support this task (Portera, 2020). There are several theoretical models for intercultural competence and intercultural sensitivity. In this research, the Developmental Model of Intercultural Sensitivity (DMIS) by Bennett (Bennett, 1986, 2017) was chosen for its relevance, for the possibility of being measured and for pedagogical adherence. It is bases in a constructivist view of reality where the subject is one active participant in making meaning of his /her experience.

2.1 We need intercultural competence

Bennett defines intercultural sensitivity as a process with non-automatic but recognisable transitions (Bennett, 1986, 2017) along a continuum from ethnocentric to ethnorelative stages. In the ethnocentric perspective we find the stages of denial, defense and minimization. According to Bennett, in these stages one's own point of view is the only reference of reality. There is also the reversal, identified as a variant of defense, stage where people have a defensive attitude towards one's culture of origin. In the ethnorelative perspective, which acceptance, adaptation and integration are part, the person is able to decentralise himself and understands that it is possible to perceive the world in different ways (Bennett, 2017).

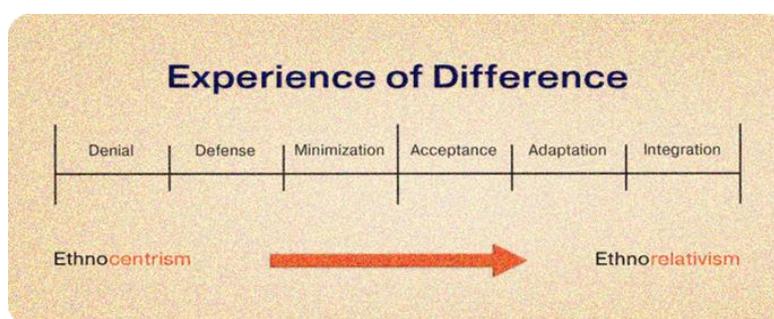


Figure 1: The Developmental model of intercultural sensitivity by Milton Bennett, source Wikimedia commons.

Intercultural competences are not innate, but we must construct them (Bennett, 2015) and intercultural pedagogy can support this task (Portera, 2020). It is essential to measure the level of intercultural sensitivity possessed by students in order to design educational practices that can increase it. The author of the DSMI theoretical model, suggests understanding in which stages each person is, for more effective educational planning (Bennett, 1998). There are validated instruments to measure intercultural sensitivity, one of the most important is the Intercultural Development Inventory® (IDI®) (Hammer, 2013) which started on Bennett's theory then modified it's through the results of field research². Although valid and used internationally, the scale is not easily accessible, requiring a cost for using it.

3. Methodology

This is a multivariate correlational and qualitative study (Lucisano, Salerni, 2002; Barbaranelli, 2007; Fraenkel et al. 2019) with integrated sequential mixed methods (Amaturo, Punziano, 2016; Mortari, Ghirrotto 2019; Mauceri, 2019). The research explores and measures the intercultural sensitivity of a non-probabilistic reasoned convenience sample in Italian urban secondary schools and the identified variables related to it. Particular

²The IDI® now differs from the initial theory and its author has created a new model, see the author's website for further details <https://idiinventory.com/generalinformation/the-intercultural-development-inventory-idi/>.

attention is given to the contribution of art practice. Although art is recommended to increase global competence (Gardner, 2020), there are few contributions that detect whether a relationship exists without the framework of intercultural projects (Bosuwon, Takwa 2017). The final research sample was formed by:

secondary students (N:138) which used the new tool ISQIS; teacher (N:7) involved in filling in the teachers' questionnaire, one for each class. More than half of the students (N:88) were also involved in guided discussion groups about the topic; discussion groups representing the qualitative part of the research.

Table 1: gender characteristics of the research sample students³.

Possible type of answer	N	Percentage
Female students	107	76,5%
Male students	26	18,6%
I prefer not to answers	3	2,1 %
Others	3	2,1%
No response	1	0,7%

The ISQIS tools was built starting from the revision of the Finnish Intercultural Sensitivity Scale Questionnaire ICSSQ (Holm et al. 2009; 2011; Kuusisto et al., 2016) and some items from the ISS scale (Chen, Starosta, 2000). In the ISQIS tool has been inserted also the I-TIPI⁴(Chiorri et al., 2014) for measuring the Big five personality dimensions (McCrae, & Costa,1999). Instead, the questionnaire for teachers was built from the context section of the "I quaderni dell'integrazione" by Favaro (Favaro, 2008). The aims of the questionnaire for teachers were:

- To obtain contextual information on the student's sample;
- To involve teachers and allow them to express themselves on the subject;
- To obtain information about pedagogical approach and projects present in the class.

4. Results and discussion

In this contribution, focusing on the measurement of intercultural sensitivity, the results reported are on the new quantitative scale used to explore intercultural sensitivity: the ISQIS. The process that led to the construction of the ISQIS questionnaire, more than the questionnaire for teachers, was a long and delicate process. The first step was to start with the literature review about the instruments for measuring intercultural sensitivity in secondary

³ The number of respondents was reduced at the analysis stage from 140 to 138 because two respondents had not completed the questionnaire consistently.

⁴ Italian version of the Ten Item Personality Inventory (Gosling et al., 2003).

schools and the analysis of the instruments found. There are many tools for the measurement of intercultural competences, also but less for intercultural sensitivity. The need, however, was specifically to use a free and validated quantitative tool, in Italian language, and suitable for secondary school students in Italian context. After this step and a brief but important email exchange with the author of the model Milton Bennett, it was decided to try to construct, test and implement a new tool, the ISQIS. As mentioned above, this tool has been built starting from the Finnish questionnaire ICSSQ (Holm et al. 2009; 2011; Kuusisto et al., 2016); integrated with the I-TIPI scale (Chiorri et al., 2014) and some items from the ISS scale (Chen & Starosta, 2000). The I-TIPI scale is the Italian version of the TIPI (Gosling et al., 2003), the validated scale for measuring the Big Five personality dimensions (McCrae, & Costa, 1999). The ISS scale is an accessible and interesting tool for measuring intercultural sensitivity, but it was used in a limited way in this research because it was realised that it did not correspond to the Bennett's model. In fact, the definition of intercultural sensitivity for the authors of the ISS scale, is not the same as the Developmental Model of Intercultural Sensitivity (Chen & Starosta, 2000). After careful evaluation of this scale for research purposes, it was decided to use only two items, but it is considered important to mention it in the research process.

Starting from a translation work, every single item of the Finnish questionnaire ICSSQ was checked in relation to the DMIS model and to the Italian context to have as much adherence as possible. For these reasons, some questions are different from the original Finnish scale, making the results of the two scales not comparable, at least for the stages with questions that were changed. One must also consider that the process of translation from one language to another is a risky step that can change the meaning of the sentences themselves. Finally, questions were included in the ISQIS questionnaire to capture target variables of interest for the research and socio-demographic indicators. After the creation of the questionnaire in google form and the graphic dispositions of the items, one important step through the triangulation process was implemented. The validity and correctness of the items was checked by three researchers and professors from Bicocca University:

the PhD supervisor Prof. Giulia Pastori, the co-supervisor Prof. Alessandro Pepe and Prof. Valentina Pagani. After the triangulation process, one try-out with debriefing of the instrument has been implemented in the field with 19 students and 1 teacher. The testing of the questionnaire and the discussion that followed, were crucial in correcting some of the problems with the questionnaire. The students were participative and interested in the proposed topic.

5. Conclusion and recommendation

Measuring the intercultural sensitivity of students is a complex and important process to do. Use a tool such as the ISQIS questionnaire, allowing students to stop and think critically about important issues such as those about intercultural relations. It is essential to understand the level of intercultural sensitivity of our students, but also to talk to them about these issues, stimulate critical reflection and help them decentralise themselves towards ethnorelative

approaches. It is possible to measure intercultural sensitivity and it is also possible to do with quantitative toll.

Forthcoming work about statistical results on the ISQIS tool that supported its ability to measure some, not all, stages of intercultural sensitivity will be proposed in future publications. One of the objectives and research questions, related to the ability of the new scale to measure the intercultural sensitivity of Italian secondary school students has been achieved but with the awareness of course of its weaknesses. It is legitimate to analyse the correlations between the stages that the instrument could effectively measure and the target variables. Another objective of the research, exploring students' opinion about the intercultural sensitivity and to raise awareness of this topic in the schools, has also been attained. Further work also about the data emerging in correlation analysis, qualitative analysis of guided discussions and finally the mixed methods analysis, will be proposed in upcoming works. In an outlook, if it will be possible in a new research project, the intention will be to test the ISQIS instrument in a larger sample, correct it and make it available for teachers and researchers, as an accessible tool for measuring intercultural sensitivity in Italy.

It is considered essential to have quantitative data in educational research even if it isn't sample to do, especially for researchers who have a humanistic background. It is also important to integrate quantitative data with qualitative data, especially when working on a latent variable such as the intercultural sensitivity.

References

- AFS (2019). Global Conference on Active Global Citizenship and How to Educate for It, AFS program, creating global citizens: the AFS effect, November 2019, *Editor Martinez R.*, pdf. online,
<https://d22dvi4p3fop3.cloudfront.net/wpcontent/uploads/sites/27/2019/11/01155446/AFS>
- Amaturo, E; Punziano, G., (2016). *I mixed methods nella ricerca sociale*, Carocci: Roma.
- Barbaranelli C. (2007). *Analisi dei dati. Tecniche multivariate per la ricerca psicologica e sociale*, 2° edizione, Edizioni Universitarie di Lettere Economia e Diritto: Milano.
- Bennett, M., J. (1986). A developmental approach to training for intercultural sensitivity, *Journal of Intercultural Relations*, (v.10), pp.179-196, [http://doi.org/10.1016/0147-1767\(86\)90005-2](http://doi.org/10.1016/0147-1767(86)90005-2).
- Lucisano, P., Salerni, A. (2002). *Metodologia della ricerca in educazione e formazione*, Carocci: Roma.
- Bennett, M. J. (2015). *Principi di comunicazione interculturale*, Franco Angeli: Milano.
- Bennett, M. J. (2017). *Developmental Model of Intercultural Sensitivity*. 10.1002/9781118783665.ieicc0182.

- Bosuwon, Takwa, (2017). *Social Intelligence and Communication Competence: Predictors of Students' Intercultural Sensitivity English Language Teaching*, v10, n2, pp. 136-149.
- Cook-Sather A. (2020). *Student voice across contexts: Fostering student agency in today's schools, Theory into practice*, 59(2), 182-191.
- Chiorri, C., Bracco, F., Piccinno, T., Modafferi, C., Battini, V. (2014). Psychometric Properties of a Revised Version of the Ten Item Personality Inventory. *European Journal of Psychological Assessment*. 1. 10.1027/1015-5759/a000215.
- Chen, G. M., & Starosta, W. J. (2000). The development and validation of the intercultural sensitivity scale. *Human Communication*, 3, 1-15.
- Fraenkel, J.R, Wallen N., Hyun, H., (2019). *Come progettare e valutare la ricerca in educazione*, Roma: LAS.
- Gardner, H. (2020). Children's Global Competence Education Virtual Summit. <https://www.frchildren.org/en/howard-gardner-global-education>.
- Ghirotto, L., Mortari, L. (2019). *Metodi per la ricerca educativa*. Carocci: Roma.
- Gosling, S. D., Rentfrow, P. J., & Swann, W. B., Jr. (2003). A Very Brief Measure of the Big Five Personality Domains. *Journal of Research in Personality*, 37, 504-528.
- Hammer, M. (2012). The Intercultural Development Inventory: A new frontier in assessment and development of intercultural competence. In M. Vande Berg, R.M. Paige, & K.H. Lou (Eds.), *Student Learning Abroad* (Ch. 5, pp. 115-136). Sterling, VA: Stylus Publishing.
- Holm, K.; Nokelainen, P.; Tirri, K. (2009). Relationship of gender and academic achievement to Finnish students' intercultural sensitivity. *High Ability Studies*. 20. 187- 200. 10.1080/13598130903358543.
- Holm, K., Nokelainen, P., Tirri, K. (2011). Intercultural and Interreligious Sensitivity Scales. In: Tirri, K., Nokelainen, P. (eds) *Measuring Multiple Intelligences and Moral Sensitivities in Education. Moral Development and Citizenship Education*, vol 5. SensePublishers. https://doi.org/10.1007/978-94-6091-758-5_6.
- Lucisano, P., Salerni, A. (2002). *Metodologia della ricerca in educazione e formazione*, Carocci: Roma
- Ocak Akturk, S., Oner Aydın, S., & Karaca Saydam, B. (2022). Investigation of intercultural sensitivity and ethnocentrism levels of midwife candidates in turkey sample: a cross-sectional study. *Journal of Transcultural Nursing*, 33(2), 208–218. <https://doi.org/10.1177/10436596211057914>
- OECD, (2018). *Preparing Our Youth for an Inclusive and Sustainable World: The OECD PISA Global Competence Framework*. <http://www.oecd.org/pisa/Handbook-PISA-2018-Global-Competence.pdf>,

- OECD (2020), PISA 2018 Results (Volume VI): Are Students Ready to Thrive in an Interconnected World?, PISA, *OECD Publishing*, Paris, <https://doi.org/10.1787/d5f68679-en> Kuusisto, E., Kuusisto, A., Rissanen, I., Holm, K.
- Tirri, K. (2016). Finnish teachers' and students' intercultural sensitivity. *Journal of Religious Education*. 63. 10.1007/s40839-016-0018-0.
- Mauceri, S. (2019). *Qualità nella quantità. La survey research dei mix method*, Milano: Franco Angeli
- McCrae, R. R., & Costa, P. T., Jr. (1999). A Five-Factor theory of personality. In L. A. Pervin & O. P. John (Eds.), *Handbook of personality: Theory and research* (pp. 139–153). Guilford Press.
- Portera A. (2020). *Manuale di pedagogia interculturale: risposte educative nella società globale*, nuova edizione, Urbino: Laterza <https://www.info-cooperazione.it/wp-content/uploads/2018/02/Strategia-ECG.pdf>.
- Surian A., Berbeglia P., Delrio P., Vanoni F. (2018). *Strategia italiana per l'educazione alla cittadinanza globale*, pdf online <https://www.info-cooperazione.it/wp-content/uploads/2018/02/Strategia-ECG.pdf>.
- Varisco, B.M. (2002). *Costruttivismo socioculturale*. Carocci: Roma.