Exploring the Impact of Demographic Variables on Intercultural Sensitivity of University Students

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Globalisation leads to increasing multiculturalism in societies. Preparing university students to recognise the growing diversity and to engage positively with one another in contemporary societies is therefore of paramount importance. However, the variables affecting the development of intercultural sensitivity have hardly been assessed. This study analysed the degree to which the influence of sex, year of study, and mobility experiences of university students influence the advancement of intercultural sensitivity. To this end, a scale was applied to Spanish university students (N = 645). The results showed a significant gap between the students’ perceived orientation of their intercultural sensitivity and their actual orientation. In addition, there were some differences across sex, year of study, and mobility experiences in favour of females, final-year students, and students who had undergone some sort of mobility experiences. Four profiles were also identified according to intercultural sensitivity: initial, mid-initial, medium, and advanced. The findings demonstrate the need to incorporate an intercultural approach into higher education institutions in pro of more inclusive societies.

Keywords: intercultural sensitivity, intercultural competencies, intercultural development, higher education, internationalisation

INTRODUCTION

Globalisation leads to intensifying relationships between people of different cultures (Borgström 2015; Deardorff, Wit, Heyl 2012). Thus, several studies emphasise the development of intercultural sensitivity (hereinafter IS) as one of the crucial competencies in multicultural societies where communication with people of different backgrounds have become a vital issue to avoid easily falling into stereotypes about how individuals think about others and their behaviour (Eslava-Suanes, González-López, de-León-Huertas 2018; Messelink, Van Mael, Spencer-Oatey 2015).

In North America, IS has received increasing attention from researchers from different fields with the sociological realm taking central stage (Deardorff, Wit, Heyl 2012). Most studies associated IS with experiences of exchange programmes abroad (Anderson, Lawton, Rexeisen, Hubbard 2006; Borghetti, Beaven 2018; Zhang, Han 2019). Nonetheless, it is all university students who will execute their future professional activities in multicultural...
contexts wherein the youth is expected to have a pivotal role considering the enhanced employability skillset and awareness of European values gained while at a higher education institution (Heriard, Prutsch, Thoenes 2021; Mitchell, Tyne 2021; Ogden, Streitwieser, Van Mol 2021).

In Europe, there is a dearth of research in the field. However, there is no agreement in the results regarding the variables that can influence the IS development. In this context, studies like the one presented here become a research objective with remarkable theoretical and practical value.

THE CURRENT STUDY

Spain, the country on in this study is focused, is one of the countries with greater university students exchange within Europe (Rodríguez-Izquierdo 2018). Despite the increasing internationalisation, IS has hitherto received little attention in the context of Spanish higher education, and few studies are based on Bennett’s model (1986a, 2004). It is still uncertain whether higher education institutions help students to become interculturally competent. This article aims to fill these gaps.

Against this backdrop, the study has a triple purpose: (1) to compare the university students’ IS perceived orientation (identifies where students believe to be) with the developed orientation (reflects the actual IS), (2) to analyse the influence of sex, year of study, and mobility experiences on there is, and (3) to identify IS profiles. Our hypothesis was that there might be some changes across sex, year of study, and mobility experiences in favour of final-year students, females, and students who have undergone some sort of mobility experiences.

This paper tries to further the knowledge on intercultural education in higher education and to explore which sorts of variables enhance students’ IS. Such information might have broad implications for administrators and professors involved in supporting the effectiveness of intercultural programmes among university students.

THE THEORETICAL FRAMEWORK

The idea of IS began in the sphere of intercultural communication (Bennett, 1986a). IS is a complex and polysemic term, which has led to different approaches (Arasaratam-Smith 2017). This study opted for Bennett’s model (2004).

For Bennett (1986b, 1998), IS is a fundamental element for intercultural competence. Scholars acknowledge IS as the ability to recognize and respect relevant cultural differences and similarities (Hammer, Bennett, Wiseman 2003) and intercultural competence as the ability to think and act interculturally appropriately in each context (Bennett, Castiglioni 2004).

Using concepts of cognitive psychology and constructivism, Bennett (1998) organised the Developmental Model of Intercultural Sensitivity (DMIS) in three ethnocentric stages (denial, defense, and minimization) and three ethnorelative stages (acceptance, adaptation, and integration). Individuals who are *ethnocentric* understand the world and structure their reality, with their own culture as their frame of reference. Individuals who are *ethnorelative* feel their personal cosmovision as merely a part of a universe of numerous cultures. Each stage has a particular cognitive structure and a type of orientation towards cultural differences (see Table 1).
The model explains how the change from one stage to another takes place and is based on three assumptions:

a. IS is process-oriented (Paige, Jacobs-Cassuto, Yershova 2003).
b. Development from one to another is not linear (Hammer, Bennett 2003).
c. When IS expands, the understanding of cultural difference becomes more sophisticated and complex (Hammer, et al. 2003).

Research aimed at documenting the impact of the efforts of higher education institutions to increase students’ IS shows conflicting outcomes. For example, several studies (Fabregas, Kelsey, Robinson 2012; Holmes, O’Neill 2012) did not discover substantial differences in the advancement of IS among university students who studied abroad and those who did not. In a study with 1300 students who participated in international experiences in North America, Vande Berg, Connor-Linton and Paige (2009) found that the mere contact with a different culture was not enough for improving the cultural competence of students, and some even displayed a decline in the progress of IS over time. Thus, critical studies such as Pedersen (2010) highlighted that just sending students abroad is not enough for the progress of IS. Similarly, Bennett (2012) emphasised that simple intercultural contact does not generate ‘international sophistication’ in students.

On the other hand, Jacobone and Moor (2015) indicated that IS development is positively influenced by factors such as mobility experiences. Likewise, Rodríguez-Izquierdo (2018) found differences in all stages of the students’ IS between those who joined exchange programmes abroad and those who did not, except in the denial/defence stage, and that most of the students were still in the minimisation stage. In a recent study, Rodríguez-Izquierdo (2022) observed negative correlations with the number of intercultural exchanges and language expertise while there were positive correlations between IS and international experiences and intercultural bonds.

Works such as Engle and Engle (2004) uncovered discrepancies depending on the duration of the programme and indicated that longer-term programmes developed a higher level of IS. Rather, Keefe (2008) observed no significant differences in the IS of pupils who participated in short-term programmes.

Anderson et al. (2006) and Vande Berg (2007) described greater IS in women. Margarethe, Hannes and Wiesinger (2012) and McMurray (2007) also analysed the impact of sex

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Table 1. **Bennett and Bennett model (2004)**

<table>
<thead>
<tr>
<th>ETHNOCENTRIC PHASE</th>
<th></th>
<th>ETHNORELATIVE PHASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denial</td>
<td>Deny cultural disparities due to lack of contact, indifference, or concern.</td>
<td>Acceptance</td>
</tr>
<tr>
<td>Defence</td>
<td>Recognise cultural differences but regarding culture itself as outstanding.</td>
<td>Adaptation</td>
</tr>
<tr>
<td>Minimisation</td>
<td>Emphasise similarities between individuals from different cultures and trivialise differences.</td>
<td>Integration</td>
</tr>
<tr>
<td>Acceptance</td>
<td>Accept the complexity of other cultures and recognise them as different interpretations of life.</td>
<td>Continuous process of redefining identity with the aim of unifying the different cultural frameworks giving rise to a new one.</td>
</tr>
</tbody>
</table>
on IS and the results of his study did not reveal significant differences in IS between men and women. However, the latter noticed that women tended to get higher scores than men.

**METHODOLOGY**

A quantitative research paradigm was employed via a correlational survey model as it provides data that was collected through a scale.

**Participants**

The sample consisted of 645 university students. The majority were women (77.7%) with ages ranging from 18 to 47 years. Of these, 23.8% ($n = 154$) were first-year, 23.1% ($n = 149$) second-year, 28% ($n = 181$) third-year, and 24.9% ($n = 161$) final-year students. Of the total sample, 21% ($n = 136$) had some international mobility throughout their studies compared with 79% ($n = 509$) who had not.

To select the random sample, a simple, stratified, conglomerate and polyetapic sampling technique was conducted (Cea 2004) dividing the people into layers by sex, year of study, and mobility experiences to make the participant group broadly echoed the student populations from which they were drawn. The conglomerates were the universities. Three Andalusian public universities have been considered in the sample selection process.

**Study Variables**

The dependent variable was the level of IS improvement of the students. The independent variables of the SI were: sex, year of study and mobility experiences.

**Instrument**

An original scale developed by the author and adapted to Spanish culture was used to measure students’ IS (Rodriguez-Izquierdo 2018). It is a 5-point Likert-type scale composed of 36 items.

The values of Cronbach’s Alpha, Composite Reliability ($CF$), and Maximum Reliability ($H$) were found to exceed the lowest threshold in all cases (.70), while the percentages of the Extracted Average Variance ($EAV$) were acceptable, all of them over .50. After assessing various explanatory models, a factorial structure was found with five factors that together accounted for 70.01% of the total variance (Table 2). The Cronbach Alpha obtained amounts to .85 for the entire scale and the AFC adjustment was extremely suitable ($x^2/df = 1.64$, $GFI = .86$, $RMR = .07$ and $RMSEA = .03$). The values of the coefficient of discrimination of the items of the concluding instrument ranged from .753 to .479. The results will be interpreted from the average points obtained from the analyses.

**Table 2. Percentage of total variance explained by each factor**

<table>
<thead>
<tr>
<th>Factor</th>
<th>Number of items</th>
<th>% Variance explained</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denial/Defence</td>
<td>8</td>
<td>30.26</td>
</tr>
<tr>
<td>Minimisation</td>
<td>7</td>
<td>15.51</td>
</tr>
<tr>
<td>Reversal</td>
<td>6</td>
<td>10.82</td>
</tr>
<tr>
<td>Acceptance/Adaptation</td>
<td>8</td>
<td>8.49</td>
</tr>
<tr>
<td>Cultural marginality</td>
<td>7</td>
<td>4.93</td>
</tr>
</tbody>
</table>
Procedure
The scale was completed online. Participants were sent e-mails notifying about the aims of the study, ensuring them of confidentiality and requesting informed consent while supplying them the link to access the scale. The students who agreed to be part of this investigation participated voluntarily and anonymously. The estimated average response time was thirty minutes. Data were collected at the end of 2019/2020.

Ethical Issues
This research complies with international ethical principles contained in the Declaration of Helsinki and was authorised by the Ethics Committee of University.

Data Analysis
Descriptive and contrast techniques such as Student’s t-test, ANOVA, and K-media cluster analysis were applied. The statistical software SPSS V.25.0 and SPAD 8.2.8 (conglomerate analysis) were used for data analysis.

RESULTS

Comparison Between the Perceived Orientation and the Developed Orientation
The sample presented a distribution ranging from 74 points to 117 points. In almost all variables there was a significant overestimation of IS. The difference was bigger in final-year students and males, and nearly the same between students with and without mobility experiences (Figure).

![Figure](image-url) Comparative scores by sex, year of study, and mobility experience
Essentially, first-year students had perceived orientation that qualifies their ability to understand cultural differences within the *minimisation* stage, which is characterised by appreciating cultural similarities rather than differences and by being able to recognise cultural differences superficially (food, customs). People in this position tend to overvalue their tolerance while underestimating the effect of their own culture.

However, the developed orientation of first-year students was the *defence* stage. At this level, individuals do not perceive differences. Using the terminology of Jokikokko (2010) and Borgström (2015), differences are invisible. Thus, the challenge for the first-year students is to raise their cultural awareness.

Compared to first-years students, final-year students made progress. However, such score is still equivalent to the *minimisation* stage. At this stage, human beings are perceived as basically equal highlighting the common aspects of all cultures indicated by statements such as ‘there are things that work everywhere’.

Notably, only some participants in the sample were in the stage of *cultural marginality* of cultural differences being a stage to which university students barely arrived. In brief, students show great ignorance about the complexity of the recognition of cultural differences.

By disaggregating this score by sex and mobility experiences, the information indicates that men have a higher IS self-perception level than women. Similarly, the difference between the average score perceived by students who had mobility experiences with respect to those that did not is significant.

**Differences by Sex, Year of Study, and Mobility experiences**

Using contrast techniques, identifying variables showed significant differences, as shown below.

**Sex.** Mean contrast (Student’s t-test for independent samples) revealed significant differences ($p \leq .014$). The disparity was in favour of women who showed greater IS development than men. The results are consistent with those found by Vilà (2006) at the secondary level and with those of Spinthourakis, Karatzia-Stavlioti and Roussakis (2009) in initial teacher training.

**Year of study.** T-test results (for independent samples) uncovered that the difference was significant ($p \leq .013$) with a confidence level of 95%. The change in favour of final-year students confirmed that students improved their IS at the end of their studies.

**Mobility experiences.** This variable had three categories: students without mobility experiences (group 1), those who intend to participate in some future experience (group 2) and those who had already participated (group 3). The ANOVA test was employed to differentiate the means of these three groups. Levêne’s test proved the criterion of variances homogeneity with a $p \leq .311$. In the ANOVA analysis, the $p$ obtained was $\leq .000$, so, admittedly, there were significant differences at 99% confidence between the three groups. Tests showed that group 1 was the one with the lowest development of IS compared to group 2 and group 3. There were also differences between group 2 in relation to group 3, in this case also in favour of group 3. In sum, group 3 is the one who showed the highest IS. These outcomes endorsed the results of previous investigations (Anderson et al. 2006) suggesting that mobility experiences not only improved IS but also provided plasticity and curiosity about other cultures (Rodríguez-Izquierdo, 2018).
IS Profiles
The analysis of K-media clusters aimed to establish homogeneous groups based on the results obtained. The variable classification criterion was the results of the scale. The classification of K-medias maximised the variance between groups and minimised variance within each profile, allowing for a clearer characterisation of the typology of the groups.

Four profiles were identified (see Table 3) depending on IS: initial, initial-medium, medium, and advanced. First, the initial sensitivity group and the initial-medium sensitivity group represented 89.7% of the total sample of students indicating that most students had little awareness of cultural differences. Secondly, the mean sensitivity group represented a small group (7.6%). Finally, there was a group of around 2.7% that had an advanced orientation with respect to cultural differences.

Table 3. Number of cases, percentage, and average scores in each conglomerate

<table>
<thead>
<tr>
<th>Group</th>
<th>No. of students</th>
<th>%</th>
<th>Average score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial</td>
<td>291</td>
<td>45.1%</td>
<td>67.0</td>
</tr>
<tr>
<td>Initial-medium</td>
<td>287</td>
<td>44.6%</td>
<td>81.4</td>
</tr>
<tr>
<td>Average</td>
<td>49</td>
<td>7.6%</td>
<td>87.3</td>
</tr>
<tr>
<td>Advanced</td>
<td>18</td>
<td>2.7%</td>
<td>102.2</td>
</tr>
<tr>
<td>Total</td>
<td>645</td>
<td>100%</td>
<td>84.4</td>
</tr>
</tbody>
</table>

The Kruskal Wallis test proved that there were significant differences ($p \leq .000$) between the profiles. Subsequently, the structure of each profile was observed, in terms of the data provided from the fundamental explanatory. Initially, assessments were conducted with the entire sample and then it was separate in two in relation to the year (first and final). The groups were portrayed as follows:

Profile 1. Initial sensitivity: The age range was from 18 to 30 years, it consisted of 32.8% of first-year students; 12.3% in the final-year were men and 33.7% were women; 7.9% had mobility experiences.

Profile 2. Initial-medium sensitivity: In this group, 11.7% were first-year students and 32.8% in the final year. The age range was from 19 to 34 years; 35.2% were women and 17% were men. Sixteen per cent of cases had mobility experiences.

Profile 3. Average sensitivity: It consisted of 3% of first-year students and 4.6% of students in the final year in the age range of 30 to 38 years; 19.8% were women and 7.2% were men. In terms of mobility experiences, 25% had this experience.

Profile 4. Advanced sensitivity: The majority were women in the final year, their age range was between 31 and 42 years. They had mobility experience. This profile was the only one that had frequent relationship with ‘people of other cultures’.

To conclude, the results indicated that the three variables examined showed statistically significant variations in relation to the enhancement of IS.

DISCUSSION
This study showed the results of students’ IS levels, the impact of sex, year of study, and mobility experiences using the Bennett’s model deemed to be a significant addition in expanding this subject in the Spanish context.
Firstly, the fact that the participants seemed to be in the ethnocentric stages is consistent with previous research (Paige et al. 2003) and it is not astonishing since acknowledging the worth of cultural discrepancies can be highly complex (Bennett 1993; Deardorff 2006; Hammer, Bennett 2002).

Secondly, there is a significant disparity between students’ perceived orientation and developed orientation which needs to be addressed in further research. Overall, students believed to having achieved higher levels of IS levels than they really developed. These idealistic outcomes might result in students not taking the opportunities to maximize the intercultural learning experiences while at university seriously enough.

Nevertheless, sex, the year of study, and previous mobility experiences seemed to influence the boost of IS, but not enough. Women showed greater sensitivity to differences, as did students in their final year and those who had mobility experiences. These findings echo the outcomes of Anderson et al. (2006) and Vande Berg (2007). One potential reason to justify the higher levels of IS among women could be related to the different models of socialisation used traditionally in the upbringing of women. However, this is a matter that should be further examined in future research.

Finally, considering that only 2.7% of the sample were in the advanced sensitivity group pose significant challenges to universities. We argue that there exists an important training gap given the students’ low IS improvement (European Commission 2015; Deardorff, Wit, Heyl 2012) and that higher education institutions may trust excessively on involvement as a supposition for the IS growth, though researchers recommend more than just encountering cultural difference (Jacobone Moro 2015; Rodríguez-Izquierdo 2015, 2018). The study claimed that developing IS needs some intentional intervention to be successful.

LIMITATIONS AND FUTURE WORK
Research limitations included the instrument employed to gather the data. IS can be assessed with different tools, the most widespread being self-report. Therefore, there is a need to utilise additional objective instruments. As such, the overall results fail in depicting the difficulty of the topic under examination. The subsequent drawback is a strong absence of previous studies on this issue in Spain, which makes it hard to evaluate our results with other researchers and to suggest a more comprehensive position on the matter. Finally, it should be mentioned that, since the data are correlational in nature, they offer insufficient knowledge on the causal connection that may possibly occur among the variables examined.

In future research it would be pertinent to supplement this information with quasi-experiments and longitudinal design that would allow us to explain how and why students change from the first to the final year of study, what is the place of the practicum and other teaching methodologies that put students in contact with culturally different individuals is.

CONCLUSIONS
The results lead to raising several issues of utmost importance for intercultural education in higher education. Firstly, we refer to the need to rethink university education to respond to complex and multicultural open societies by developing pedagogical skills and intercultural learning geared towards educational equity. We agree with Jiménez (2003: 120) that ‘it is necessary to work to shape ways of organising pedagogical strategies and values of meaning <...> to maintain one’s identity within a plural society’. We discovered that intercultural
development is an ongoing growth and that students need support to develop their IS while they are in higher education.

Secondly, it is suggested to analyse university curricula to propose improvements in promoting recognition of the other, either by including intercultural education explicitly in the curricula, in a transversal way as proposed by Aguado and Del Olmo (2009), or through practices and international exchange programmes that strengthen the necessary IS for professional performance in globalised societies. In agreement with Aguado, Gil y Mata (2008), addressing this challenge does not merely mean adding a new programme but analysing reality and rethinking university education from the perspective of education for intercultural citizenship. Departments must think over the social and ethical responsibility of higher education to educate skilled professionals capable of working successfully and fitting in multicultural societies.

Findings from this and other studies have documented that universities should devote some attention to prepare individuals to participate actively in a society where cultural differences are recognised as richness. We agree with Jokikokko (2010) in understanding intercultural competence as an ethical philosophy that guides thought and action, so university education must share an ethics of concern for ‘mutual respect, understanding and sensitivity to national customs are a precondition for working together’ (World Commission on Culture and Development 1997).

In conclusion, the present study confirmed the need to continue this line of work to collect empirical data to help understand the process of IS development that occurs at a dynamic experiential interface between environmental affordances and students’ agency (Kudo, Volet, Whitsed 2019).

Received 7 July 2022
Accepted 30 November 2022

References


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Demografinių kintamųjų poveikio universiteto studentų tarpkultūriniam jastrumui tyrimas

Santrauka


Raktas: tarpkultūrinis jastrumas, tarpkultūrinės kompetencijos, tarpkultūrinė plėtra, aukštasis mokslas, internacionalizacija