



Article Intercultural Experiences Comparison between France and Singapore—Introducing the Proximal Zone of Intercultural Development (PZID)

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Abstract: This article presents results from a comparative analysis of intercultural experiences between French and Singaporean participants. France and Singapore were chosen as research fields because of their singularities in terms of cultural difference management: a universalist cultural model for France and a pluralist cultural model for Singapore. Based on an online questionnaire addressing the intercultural experiences, a quantitative analysis allows us to identify differences between the French and Singaporean participants. A particularity of the Singaporean context leads us to think about the proximal zone of intercultural development concept (PZID) that we will develop in this article.

Keywords: proximal zone; intercultural; development; psychology

1. Introduction

This article presents results from a cross-cultural analysis of intercultural experiences of French and Singaporean participants. Our research took place on two geographical areas, France and Singapore. Our research question was as follows: is there any singularity in the identity development process determined by experienced cultural contacts through out life? Based on an online questionnaire addressing the intercultural experience of French and Singaporean participants, a quantitative analysis (n = 246) allows us to identify differences between the French and Singaporean environments. A particularity of the Singaporean context leads us to think about the concept of proximal zone of intercultural development (PZID) that we will develop in this article.

2. Theoretical Context

Our article aims at providing results from research in intercultural psychology, a discipline that focuses on relationships between psychological and socio-cultural variables in various cultural groups and cultural contacts situations (Dasen and Perregaux 2002; Licata and Heine 2012).

2.1. The Interculturation Process

Erikson (1968) describes identity as a feeling developed through the integration of multiple identifications from birth to adulthood. Dealing with cultural otherness can be a source of conflict and contradiction for involved individuals and it can have an impact on the identity development processes. Several models exist to describe identity modifications that cultural contacts induce, such as Berry's acculturation strategies (Berry 1997), Camilleri and collaborators' identity strategies (Camilleri et al. 1998), and Clanet's interculturation process (Clanet 1993).

The interculturation process is central in our research as a process implemented on both individual and collective levels in cultural contact situations. Each individual or group is no longer perceived as referring to a unique cultural background, but, rather, as trying to



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Copyright: © 2022 by the author. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https:// creativecommons.org/licenses/by/ 4.0/). balance various cultural backgrounds through the interculturation process. As Derivois (2009) proposes, we consider the interculturation process at three levels. The intergroup level considers the group and its relation to other cultural groups. The intersubjective level considers interpersonal relationships within a same cultural group. Finally, the intrapsychic level considers the way individuals deal with their internal cultural alterity.

Our research aimed at providing a better understanding of the way intercultural situations may have an impact on individuals at these three levels. We proceeded to a comparison of intercultural experiences between French and Singaporean participants.

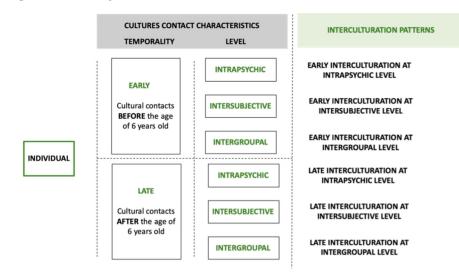
2.2. Categorizing Intercultural Experiences

Previous researches (Oulahal 2019, 2021; Oulahal et al. 2018a, 2018b; Oulahal and Denoux 2018, 2020) highlighted that intercultural experiences can be distinguished according to various characteristics of cultural contacts that we present below:

- The level where the cultural contact is located: intrapsychic, intersubjective, and intergroup;
- The temporality of the cultural contact: this refers to the life period when individuals experienced cultural contacts. A preliminary qualitative analysis (Oulahal and Denoux 2018; Oulahal et al. 2018c; Oulahal and Denoux 2020) enabled us to characterize the cultural contact temporality as either an early interculturation (before the age of 6 years old) or a late interculturation (after the age of 6 years old). Such categorization echoes results from language sciences that distinguish early and late bilingualism and identify variability in the cognitive processes they generate (Singleton 2003).

We, therefore, proposed interculturation patterns also derived from the language sciences epistemology (Ardila and Ramos 2010). In bilingualism situations, two languages can be associated with different social contexts and life situations; the first and second language usage patterns can, therefore, vary over the lifetime (Ardila and Ramos 2008). A second language can have been acquired later in life, when an individual migrates to another country, for example. First and second languages can also be acquired simultaneously.

Our interculturation patterns enable us to consider that, for each individual, various cultural backgrounds can be acquired through different levels and life periods. Based on our researches cited above, we proposed the following interculturation patterns as presented in Figure 1.





2.3. Comparing French and Singaporean Environments

Our research aimed at comparing French and Singaporean participants' intercultural experiences. Both environments were chosen for various reasons. Without going into a

strict dichotomous approach, we can speak of a universalist cultural model for France and a pluralist cultural model for Singapore as "two major methods of responding to migration questions: one which is inscribed in the context of pluralist societies where an individual's origin is made visible in the public space and can serve either as a group federation indicator or as an identification parameter for public actions and policies; and one which fits into the context of universalist societies where an individual's origin belongs to the private area and can neither serve as an identification register for public authorities, nor be mobilized by groups to organize themselves " (author's translation) (Escafré-Dublet 2015, p. 74).

Moreover, according to Hofstede (1980, 1994), each society generates its own values and creates forms of organization compatible with its own culture. The culture can, thus, be seen as a human construction, a collective mind setting that distinguishes a group member from other groups' members. Based on his empirical research, especially in the organizational field, Hofstede proposes a descriptive and distinctive cultural model through factors of cultural differentiation—a set of universal values quantified for each culture. Currently, the Hofstede model is based on six dimensions: the 6-D Model (PDI—power distance index; IDV—individualism vs. collectivism; MAS—masculinity vs. femininity; UAI—uncertainty avoidance index; LTO—long-term orientation vs. short-term normative orientation; and IND—indulgence vs. restraint); a score then characterizes each country for each dimension (between 0 and 100). We propose below a comparison between France and Singapore (Figure 2).

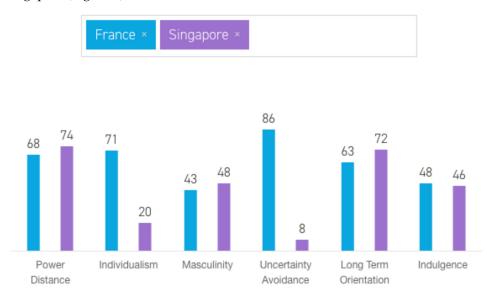


Figure 2. France and Singapore comparison according to the 6-Dimensions Hofstede model.

According to this model, the two dimensions that significantly distinguish French and Singaporean cultures are individualism and uncertainty avoidance.

3. Research Design, Hypothesis, and Methodology

3.1. Data Collection

In order to investigate the interculturation patterns between French and Singaporean participants, we designed an online survey that included a series of questions addressing the cultural contacts though different life periods (see Appendix A). Although our proposal was to consider the age of 6 years old to distinguish early and late interculturation experiences, we wanted to acquire more information by considering different periods of life (between 0 and 6 years old, between 6 and 12 years old, between 12 and 18 years old, and above 18 years old). These periods were derived from the developmental stages presented in the Erikson identity development process (1968). The survey also enabled us to identify the intercultural experience level, the intersubjective level being considered in the family

and friendship contexts while the intergroup level being considered in the participants' general environment context (city, country).

The inclusion criterion was the participants' age, which had to be above majority (18 years old in France and 21 years old in Singapore). Participants were recruited by sending emails and messages on social networks and we also asked people within our own networks to transfer our call for participation. In addition, our call was sent to several associations asking them to send it to their members and we also posted it at different French and Singaporean universities. Two types of associations were targeted. First, we contacted psychology students' associations and those from other disciplines in the humanities and social sciences, as well as network groups, social media, and blog managers, asking them to forward the research call. Our questionnaire being exclusively online, a question arose regarding elderly individuals in this quantitative analysis. We, therefore, contacted associations providing computer training for elderly to involve participants who were above 65 years old, and able to use computers and get Internet access to answer our questionnaire.

The research was granted approval for ethical evaluation from the Nanyang Technological University (NTU) of Singapore (IRB-2018-03-021).

3.2. Hypothesis

Our hypothesis was as follows: Singapore being a pluralist environment and France being a universalist environment, the respective participants' intercultural patterns will differ.

3.3. Population

Based on responses obtained during the data-collection phase, we compared intercultural experiences of French and Singaporean participants in the various life periods. The data analysis was carried out using the SPSS (statistical package for the social sciences) software.

Our sample comprised 246 participants (144 in France and 102 in Singapore). The French sample comprised 144 participants whose age varied from 19 to 93 years old, with an average of 34.49 years (*SD*: 13.298). 83% of the respondents were women and 17% men. 92% indicated a higher education level, 7% a secondary education level, and 1% a primary education level. The Singaporean sample was composed of 102 participants whose age varied from 21 to 65 years, with an average of 31.60 years (*SD*: 10.752). 70% of the respondents were women and 30% men. 96% indicated a higher education level and 4% a secondary education level.

A Chi-square independence test indicated no relationship between country and age group variables ($\chi 2(3, 246) = 4.068$, p = 0.254). A Chi-square independence test indicated a relationship between country and gender variables ($\chi 2(1, 246) = 5.767$, p = 0.016 and Phi = 0.153). A Chi-square independence test indicated no relationship between the country and education level variables ($\chi 2(2, 246) = 2.50$, p = 0.287).

4. Results

Table 1 presents the percentage of participants declaring interculturation experiences during various life periods and at the three interculturation levels (as defined in the interculturation patterns).

INTERCULTURATION DECLARED AT ALL AGES (IN %)					
		Before 6 Years Old	Before 12 Years Old	Before 18 Years Old	From 18 Years Old
Intrapsychic Level	France	32	34 *	32 *	49 *
	Singapore	35	51 *	57 *	68 *
Intersubjective Level	France	48	55	70	85
	Singapore	48	60	70	86
Intergroup Level	France	44 *	52 *	64 *	84
	Singapore	84 *	84 *	88 *	92

Table 1. Interculturation at all ages (figures followed by * highlight patterns where difference was found significant between French and Singaporean participants).

As shown in Table 1, after 18 years old, our participants' responses showed no difference between French and Singaporean participants with respect to intersubjective and intergroup interculturation. The quantitative analysis indicates that the only significant difference that remains between French and Singaporean samples after 18 years old is at the intrapsychic interculturation level, with 49% of the French participants and 68% of the Singaporean participants (χ 2 (1, 168) = 5.622, *p* = 0.02).

4.1. Analysis of the Intrapsychic Level

The difference at the intrapsychic interculturation level appears before 12 years old ($\chi 2$ (1, 171) = 4.519, p = 0.034) whereas it was not significant before 6 years ($\chi 2$ (1, 172) = 0.142, p = 0.706). This difference will remain significant before 18 years old ($\chi 2$ (1, 169) = 5.431, p = 0.020) and will still remain after 18 years old, as presented in Table 1; thus, the life period between 6 and 12 years seems unique in the individual intrapsychic integration of cultural plurality.

4.2. Analysis of the Intergroup Level

Before 18 years old, our results show a significant difference at the intergroup interculturation level between French and Singaporean participants: χ^2 (1, 172) = 26,472, p = 0.000 (before 6 years old), χ^2 (1, 168) = 17.284, p = 0.000 (before 12 years old), χ^2 (1, 168) = 10.929, p = 0.001 (before 18 years old). After 18 years old, the difference is no longer significant between French and Singaporean participants with regard to intergroup interculturation (χ^2 (1, 168) = 2.357, p = 0.125).

4.3. Analysis of the Intersubjective Level

Although intersubjective interculturation also increased in the two samples, we did not find a significant difference at this level. In other words, it seems that experiencing cultural diversity and contacts within the close relational environment (family, friends) is not different between the French universalist monocultural environment and the Singaporean institutionalized multicultural environment. While being rather surprising at first glance, this result leads us to believe that the intersubjective interculturation may have only little impact on the intrapsychic interculturation integration.

5. Discussion—Interculturation at the Intergroup Level as a Proximal Zone of Intercultural Development (PZID)

We propose the following graph (Figure 3) to better highlight our results and the convergence of intrapsychic and intersubjective interculturations after 18 years old while the intergroup interculturation appears after 6 years old and remains significantly different between French and Singaporean participants afterwards.

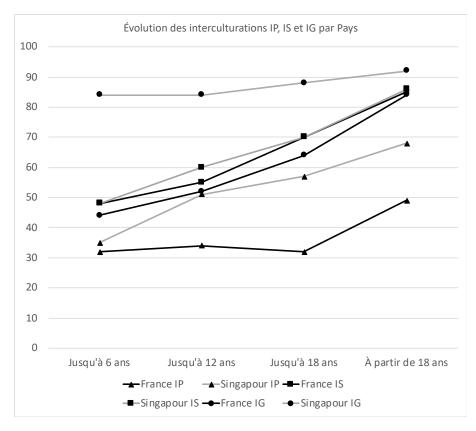


Figure 3. Evolution of interculturations by country (IP: intrapsychic; IS: intersubjective; IG: intergroup).

Our analysis suggests that the significant early intergroup interculturation in the Singaporean environment had a positive impact in the intrapsychic interculturation level of Singaporean participants. This also leads us to consider the role school may play in the cultural plurality integration. Indeed, it is between 6 and 12 years old that we find the highest increase of Singaporean participants' declaring interculturation at the intrapsychic level (increase from 35% to 51% of the sample). Such an increase was not found in the French sample. The encounter in schools with peers from multiple cultural backgrounds could lead a child to consider gaps and relations between these cultural affiliations.

More generally, it seems as if being born in a multicultural environment would not have an impact on the intrapsychic interculturation between birth and 6 years old. The family cultural background may, indeed, remain as a basis in a child's life between birth and 6 years old. Although intersubjective interculturation increases with age in both French and Singaporean samples, it does not seem sufficient to explain the significant difference at the intrapsychic interculturation level. Our assumption is that the intergroup interculturation does not have access to individuals between birth and 6 years old. It would only be after 6 years old that intergroup interculturation would be perceived by individuals and would start having an impact on intrapsychic interculturation between 6 and 12 years old.

Finally, the intrapsychic level appears at the center of the cultural contact matter. Both in France and in Singapore, a large proportion of participants (over 84% after 18 years old) indicate living in a close (family, friend) and large (city, country) environment where several cultures mix together. Therefore, the main difference between both environments is to be investigated at the inner and intimate intrapsychic level. The sole analysis of multiculturalism within national environments and/or families should not be considered as sufficient to characterize individuals' intrapsychic interculturation.

Intergroup interculturation would act as a catalyst for the intrapsychic interculturation integration. Without intergroup interculturation, nothing would be possible. We then understand that the group level stands significantly at the intrapsychic interculturation level. Intergroup interculturation must be recognized and encouraged so that cultural

contacts can be integrated at the individual inner level. The intercultural identity of the Singaporean participants would echo the intercultural identity of their nation.

We think of cultural contacts at the intergroup level as a proximal zone of intercultural development (PZID), echoing Vygotsky's proximal zone of development. Several works, starting with Vygotsky's initial theorization and its further development in collaboration with Luria, highlighted relations between cognitive development and individuals' cultural environments. The proximal developmental zone represents the stage a child is able to reach with the help of those around him. Individuals around him and their interactions open the way to new development possibilities to which the child would not get access if alone. Moreover, if we link our assumption to early bilingualism (before 6 years old), a hypothesis would be that an individual's integration of multiple languages takes place before integration of cultural plurality which would come later, between 6 and 12 years old. According to Vygotski (Vygotski 2013), children's thought development is associated with an *inner language*; we can, therefore, wonder if early contact with various languages is not also an opportunity for the child under development to implement an intercultural thought supported by this intercultural inner language. According to Vygotsky, language is the main mediator for cognition. Schrauf and Rubin (2003), on their side, indicated that bilingual individuals have a language-specific self in the way that the self, when put forward in a given situation, will depend on the language used in such a situation.

Our results indicate that intergroup interculturation seems to allow a greater integration of the interculturation process at the intrapsychic level and it is, indeed, in this sense that we think of a proximal zone of intercultural development (PZID). If interaction with an individual's close environment allows an intersubjective interculturation integration, individuals living in an environment with a significant integroup interculturation (as this is the case in Singapore) seem to present a greater individual integration of the interculturation process at the intrapsychic level.

6. Conclusions

We initially thought that, echoing results in the linguistic field, early interculturation would emerge before 6 years old; however, our quantitative analysis drives us towards the 6 to 12 years old life period as seeming significant in the integration of plural cultural affiliations. A hypothesis would be that the family's effect is less important in the psychic integration of cultural plurality than the individual's national environment. The cultural contacts within the close and intersubjective environment would be a basis of intrapsychic interculturation but intergroup interculturation would be the condition for the emergence of intrapsychic interculturation.

We believe that an analysis of the proximal zone of intercultural development (PZID) would be relevant for future researches in the intercultural psychology field as well as in the theory of mind field. Theory of mind is at the basis of social cognition involving a "set of mental processes such as the perception of self and of others and the use of knowledge about the rules governing interpersonal interactions to decode the social world" (Duval et al. 2011, p. 41). This aptitude, which development takes place during childhood, is essential for the individual's behavior regulation and an appropriate development of social interactions, and, we believe, intersubjective and intergroup interculturations could promote it.

Considering the intrapsychic, intersubjective, and intergroup interculturation levels, we could, thus, propose that the interculturation process develops first in an intersubjective perspective allowing the child to experience contacts with cultures while interacting with those around him through a collective and social activity. The interculturation process could then develop as an individual and inner activity, intergroup interculturation being a facilitator to it; interculturation would then occur at the intrapsychic level as an integrated characteristic specific to each individual.

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Institutional Review Board Statement: The study was conducted in accordance with the Declaration of Helsinki, and approved by the Institutional Review Board of Nanyang Technological University (NTU) of Singapore (IRB-2018-03-021).

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: The data presented in this study are available on request from the corresponding author.

Conflicts of Interest: The author declares no conflict of interest.

Appendix A

The questionnaire items were presented as follows with a yes/no type of answer:

- When I was between 0 and 6 years old, I had several cultures
- When I was between 0 and 6 years old, among my relatives (family, friends), several cultures were represented
- When I was between 0 and 6 years old, I lived in an environment (city, country) where several cultures came together
- When I was between 6 and 12 years old, I had several cultures
- When I was between 6 and 12 years old, among my relatives (family, friends), several cultures were represented
- When I was between 6 and 12 years old, I lived in an environment (city, country) where several cultures came together
- When I was between 12 and 18, I had several cultures
- When I was between 12 and 18 years old, among my relatives (family, friends), several cultures were represented
- When I was between 12 and 18 years old, I lived in an environment (city, country) where several cultures came together
- Since I was 18, I have several cultures
- Since I was 18 years old, within my family (family, friends), several cultures are represented
- Since I was 18, I have lived in an environment (city, country) where several cultures come together

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