The Nature and Scope of Intra-Cultural Variation on Psychological Dimensions

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Abstract

Much of the research in cross-cultural psychology is done using countries (national cultures) as main units of comparison, disregarding other important characteristics of the participants such as their ethnicity, language, religious or territorial affiliation. Thus, despite the fact that there exist clearly distinguishable sub-cultures within many countries or national cultures, they are often regarded as uniform and homogenous entities in cross-cultural research. In many cases, as we will argue in this paper, such approach is rather justifiable. In doing so, however, one should always be aware of large intra-cultural diversity which can be found in many countries all around the world. This chapter is an attempt to demonstrate that intra-cultural variation is an inevitable part of cultural variation in general and that the intra-cultural differences are, as a rule, larger than differences between various cultures. Studies of intra-cultural cognitive, behavioral, or attitudinal diversity are essential for understanding cross-cultural differences as they often provide important insights into processes of development and many other theoretical problems.

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INTRODUCTION

"In the heyday of general ethnographic research in 1930s, Edward Sapir wrote a paper in which he called attention to the neglected fact that in every society we study – from simple, non-literate to complex, industrialized – individual societal members do not all think and act alike" (P. J. Pelto & G. H. Pelto, 1975, p. 1). Although many anthropologists have reported on intra-cultural variability, continued Pelto and Pelto (1975) over more than 30 years ago, their interest and observations concerning intra-cultural diversities seem to fade quickly, as "researchers get on with job of describing ‘social structure’ and ‘typical’ cultural patterning" (p. 1).

The same holds for cross-cultural psychology where over the years the vast majority of studies have been founded on the assumption of intra-cultural homogeneity. Generalizations such as "helping an in-group member is seen in duty-based terms by Indians, whereas Americans see it more as a matter of personal choice" (Triandis, 2001, p. 916) or that Japanese mothers teach their children to fear the pain of loneliness, whereas Western mothers teach children how to be alone (Lebra, 1976), for instance, are frequent in cross-cultural literature, often following an assumption that in each culture, there are more or less "uniform cultural rules, from which only a few people deviate" (Pelto & Pelto, 1975, p. 3).

Much of the research in cross-cultural psychology is done using countries or what we call national cultures as main units of comparison, disregarding other important characteristics of the participants such as their ethnicity (e.g., the Basques, Catalans, and Galicians in Spain), language (e.g., Flemish and Walloons in Belgium), religious affiliation (e.g., Catholics and Protestants in Northern Ireland), or territorial affiliation (e.g., the South versus the North in the United States of America or towns versus countryside). Thus, despite the fact that there exist clearly distinguishable sub-cultures within many countries or national cultures, they are mostly regarded as uniform and homogenous entities in cross-cultural research. Why is that so? On the one hand, it is of course more convenient and economical for researchers to combine the boundaries of cultures with those of states or countries. On the other hand, however, as Smith and Bond (1998) argue, one has to acknowledge the fact that the history over the past century has created powerful nation-states which for many purposes can be indeed considered as separate cultures: "After all, the cultural groups within a nation [state] are bound by the same sets of laws and governmental policies with respect to trade, taxation, immigration, the media, religion, education, and language" (Smith & Bond, 1998, p. 40). The results of the World Value Survey seem to support such claim: in the Germany, for instance, as well as in many other religiously mixed societies the values of Catholics resemble those of Protestants more than they resemble Catholics in other countries. This even holds true of the differences between Hindus and Muslims in India and between Christians and Muslims in Nigeria (Inglehart & Baker, 2000). Thus, for many cases it seems to be rather justified to compare countries or national cultures in cross-cultural research. In doing so, however, one should always be aware of large intra-cultural diversity which can be found in many countries all around the world.
This chapter is an attempt to demonstrate that intra-cultural variation is an inevitable part of cultural variation in general and that the intra-cultural differences are, as a rule, larger than differences between various cultures.

**Regional Variation within the United States**

The vast majority of research on the dimensions of individualism and collectivism has dealt with comparing Asian samples (e.g., Japanese, Chinese, Korean) with samples from (Western) Europe and the United States. In these and other studies on individualism-collectivism, the United States has been usually regarded as the most prototypic individualistic culture in the whole world. Not only has this opinion been seriously contested during the past few years, recent research has revealed remarkable regional variation in individualism-collectivism within the United States (Vandello & Cohen, 1999). Vandello and Cohen (1999) showed that the collectivistic tendencies dominate in the South, especially in the former slave states in the Deep South such as Louisiana, South Carolina, and Mississippi, for instance, whereas individualism is strongest in the sparsely populated states in Great Plains and Mountain West (e.g., Oregon, Nebraska, Wyoming). The most individualistic of the 50 states was Montana and the most collectivistic Hawaii, primarily due to its location "at the crossroads between the East and the West" (p. 289).

The regional variation within the United States exceeds from the studies of individualism-collectivism to the other fields of research. For instance, there are several studies showing that northerners and southerners (i.e., people from the North and the South of the United States) differ in their reaction patterns to insult as well as in their aggressive and domineering behavior after the insult. Compared with northerners, southerners are more upset in insulting situations and are more likely to engage in aggressive and dominant behavior (Cohen, Nisbett, Bowdle, & Schwarz, 1996). Significant intra-cultural variation between different regions of the United States has been also found in studies of helping behavior (Levine, Martinez, Brase, & Sorenson, 1994) and the pace of life (Levine, Lynch, Miyake, & Lucia, 1989). According to Levine's and his colleagues (1994) findings, overall helping appears to be greatest in the south and north western cities and least in the north-eastern and western cities of the United States. It is also interesting to note that the most consistent and strongest predictor of overall helping was population density – the higher the population density, the lower the level of helping behavior. The pace of life across the states of the United States, on the other hand, has been found to be negatively related to collectivism (Conway, Ryder, Tweed, & Sokol, 2001).

These psychological differences in attitudes, values, and habits have their roots in the history of cultural systems. Sociologists have noticed that many societal characteristics (e.g., crime, mortality, education, income etc.) are not equally distributed across the United States and have surprisingly high correlations with psychological indicators. Putnam (2000) has convincingly demonstrated that the amount of social capital in America’s 50 states – primarily as a measure of social trust – is very strongly related to the low rates of crime and mortality and to the equality of income in these states.
Within-Culture Variation in Estonia

The United States is a multiethnic and multicultural country. According to the 2000 U.S. Census, non-Hispanic whites make up only 69 percent of the U.S. population whereas during the 1990s, whereas the combined population of African Americans, Native Americans, Asians, Pacific Islanders, and Hispanics/Latinos in the United States grew at 13 times the rate of the non-Hispanic white population. In addition to a variety of people from different ethnic or racial background, the U.S. has also a greater number of religious groups than any other country in the world (http://www.adherents.com/rel_USA.html). Compared with this huge cultural variation, Estonians living in Estonia (making up a bit more than 2/3 of the general population of about 1.3 million inhabitants) may seem depressingly uniform. In fact, even within rather homogeneous cultural groups (such as Estonians, for instance), striking differences can be observed and not only by ethnographic or anthropological methods, but by using psychological measures as well.

Different Patterns of Collectivism

In their study of collectivism in Estonia, Realo, Allik, and Vadi (1997) found that various cultural and socio-demographic groups had very different patterns of collectivism. In other words, similarly to Vandello and Cohen (1999), Realo and colleagues concluded that there seem to exist groups within a national culture who differ in their collectivistic orientation. From the total tested population (n = 1031) they singled out eight specific demographic groups which were analyzed separately. The results showed that collectivism was highest among servicemen of the Estonian Army and the old members of a sorority and the lowest among female college students.

The results also showed that different subpopulations exposed different patterns of collectivism. The housewives with five or more children, for example, had extremely high scores on Familism subscale but a relatively medium score on the other peers- and society-related collectivism subscales. The inhabitants of a rather isolated Estonian island, on the other hand, were very collectivistic with their peers compared to the other groups. As Realo and colleagues (1997) argue, on a relatively small and isolated island, mutual help and support between members of the community are indeed of vital importance. Larger than average sensitivity to others may have developed as a consequence of traditional agricultural and fishing practices which certainly requires some collaboration between members of the group. Because of isolation, there is also no escape when people have conflicts with others, which would favor group norms of avoiding conflicts. Therefore it looks quite logical that inhabitants of Kihnu island have elevated peer-related collectivism. A similar elevated level was expected among servicemen who spend most of their time in barracks among their companion-servicemen. Several studies have demonstrated that military and police recruits are under considerable social pressure exerted by their companions concerning their habits and attitudes. According to Realo et al. (1997) this explains, at least to some extent, why collectivism in the relations with peers was the highest among servicemen.
To sum up, it should be noted here that using nearly the same measure in their cross-cultural study of collectivism, Realo and Allik (1999) found that the differences between North-American, Estonian, and Russian students (both living in Russia and Estonia) appeared to be smaller than those between different groups of the Estonian population.

**Geography of Self-Esteem**

Another good example is the geographical distribution of general self-esteem in Estonia (Allik et al., 2001, July). Figure 1 demonstrates the geographical distribution of the mean scores of the Rosenberg Self-Esteem Scale (RSES) among 2751 Estonian school-children in the age from 12 to 18. As seen in Figure 1, self-esteem is the highest in three centrally located counties of Estonia and lowers while moving towards the eastern and southern borders of the country.

**Figure 1.** Geographical distribution of the Rosenberg Self-Esteem Scale scores across 15 Estonian counties.

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This pattern of distribution appears to be meaningfully related to certain socio-economic indices. The general self-esteem of school-children was systematically higher in those counties where the proportion of working-age population and the employment rate is higher. The mean score of the RSES had a significant (negative!) correlation with the share of retired people in the total population \( (r = -.52) \) as well as with the proportion of individual earnings from the retirement income \( (r = -.58) \) and with the unemployment rate \( (r = -.52, \text{ all significant } p < .05) \). Although the proportion of retired people in a certain county or the rate of unemployment is not directly affecting school-children, their self-esteem can be used as a reliable barometer of wider socio-economic conditions.

These two examples – collectivism and self-esteem – serve as exemplary illustrations of non-negligible cultural variation that is found within a country which is small and relatively homogeneous in both geographical (app. 45,000 sq. km.) and cultural sense.

**Culture of Gender**

In modern societies men and women live in the same physical and cultural environment and therefore, it is only metaphorically possible to say that they represent two different cultures. For this very reason men and women are seldom considered as a source of variation in inter-cultural studies. On the contrary, many idols of the mass media have succeeded in exploiting the metaphor of "male and female culture." Quite recently, for example, Deborah Tannen (1999) has tried to persuade not only lay-readers but also scholars that men and women communicate in very different ways. In her book, *The argument culture*, which rapidly topped best-seller lists, she claims that the differences in communication between men and women can be explained by "different cultures hypothesis: "men are nurtured in a world in which a conversation is often a contest, best described by a metaphor of war. For instance, the best way to begin an essay is to attack someone or the best sign of you being a thinking person is to criticize somebody in a crude manner. Women, on the other hand, are socialized into a more peaceful world where understanding and tolerance are norms rather than exceptions" (p.xx). Another example of the success of this metaphor is the John Gray's book *Men are from Mars, women are from Venus* (1992) which have had a phenomenal success all over the world. It has been sold more than 15 million copies in the United States only to say nothing about translations into more than 40 different languages throughout the world! It is interesting that in its extreme the "different culture hypothesis" is hardly separable from a "different nature hypothesis:" men are different from women not only by their physiology but also by their psychological make-up.

Are men and women of the same culture really different? Are these differences caused by two subcultures, one for men and another for women?
Male-Female Differences in Selecting Mates

Of course, men and women are different. In many traditional cultures it is not a mere metaphor that they represent two different cultures. Women cannot visit houses where men live, they do not participate in rituals in which only men are actors, and they do not know songs that are passed from fathers to their sons. In these cases indeed we can talk about separate cultures of men and women. Nevertheless, even in modern societies there are many values, attitudes and norms in which men and women differ from each other.

One interesting example is the preference for mates. What are the qualities we rely on when we are looking for a mate? Are these qualities same for men and women? With a help of international collaborators, Buss and colleagues (1990) conducted a study of 37 cultures for mate preferences. They found that in all studied cultures female preferences for mates are governed by the need for protection and economic stability whereas male preferences for mates are dominated by health (beauty) and age issues. Across all preferable mate characteristics, culture accounted at least 14% of the total variance. At the same time, the sex of respondents accounted only for 2.4% of the total variance in mate preference. For example, the average Spearman Rank correlation (Rho) between the male and female ratings was .87, indicating that both men and women ordered the preferable mate characteristics in a rather similar way. Sexual dimorphism, however, varies considerably across cultures. In general, Asian and African cultures showed the most and the Western European samples showed the least of sexual dimorphism with North and South American cultures being intermediate in terms of male-female differences. It is instructive to notice that the study of Buss and his collaborators is usually presented as a convincing example of the transcultural universality of sexual selection patterns. Indeed, in general women look for status and men for beauty in almost every known culture, but this regularity, as mentioned above, is observed on the background of intercultural variation that exceeds many times the variation caused by sex.

Gender Differences in Personality

There is no doubt that men and women are guided by different values, attitudes and habits when important choices need to be made, including the choice of a romantic partner. This discrepancy, however, cannot mask the truth that in many cases the differences between men and women are only small variations of the same general rule or pattern. Up to date, there is no credible scientific evidence demonstrating very deep differences in the psychological make-up of men and women.

Personality psychologists have reached a common understanding that the Big Five personality traits – Neuroticism, Extraversion, Openness, Agreeableness and Conscientiousness – appear to be the best summary of broad personality traits. Although many instruments have been developed to measure the five traits, the most comprehensive and popular among the researchers is the Revised NEO Personality Inventory, developed by Costa and McCrae (1992). This popular personality instrument has been translated into more than 30 languages and as a consequence, personality...
profiles for many cultures are today available. This intensive multicultural research provides an interesting challenge. As we all know, the position of women as regards to men and their role in society is rather different in the different parts of the world. In that sense, Dutch women in the egalitarian and modern Netherlands obviously differ, for example, from Telugu-speaking women living in India. One way to test the influence of these differences on personality is to compare personality profiles of men and women in different cultures. McCrae (2001) studied personality profiles of men and women collected in 26 different cultures and found them very similar. Men and women of the same age and culture have clearly similar profiles. However, even small differences between personality profiles demonstrate a regular pattern with sex differences being the smallest in Asia and black Africa and the largest among European cultures (Costa, Terracciano & McCrae, 2001). This is a rather surprising result as one would expect that personality of women differs from men more in traditional societies where sex roles are more segregated and differences between them emphasized. On the contrary, the largest differences in personality (if any at all) can be observed in modern Western societies.

Ideology and Personality: A Case of East and West Germany

By its nature, the subject of intra-cultural variation is somewhat paradoxical. As it was said in Introduction, people (including cross-cultural researchers) are quite often blind to existing differences within one culture. At the same time, folk psychology and sometimes scholars themselves create and support myths about intra-cultural differences that do not exist. One such example concerns differences between eastern and western Germans that are often highlighted in cross-cultural literature.

Do political systems change human personality? Changing human nature has long been a goal of various religious movements and governments, and many political systems have tried to create a new type of personality that would fit better to their ideological objectives. How successful have these experiments been? In this respect it is very instructive to compare people living in the eastern and the western states of Germany who between 1945 and 1989 lived under dramatically different political systems. Did Communist control of education, law, the mass media, and the economy result in a new Homo sovieticus in the German Democratic Republic? If so, it should be possible to detect differences between East and West German personality profiles. Note that this is an elegant natural experiment: Before 1945, the “participants” shared a common ancestry, language, culture, and history; they were assigned to one of two conditions by accidents of geography that must have approximated randomization. When Angleitner and Ostendorf (2000, July) administered the German NEO-PI-R to large Eastern and Western German samples, they found identical factor structures. More tellingly, they also showed very similar mean levels: East Germans scored about one-fifth standard deviation lower than West Germans on Openness to Experience, but did not differ on any of the other factors. Thus, the a half-century long experiment to create a "new man" appears to be an almost complete failure. Despite of the popular lore about "ossies" who are not willing or unable to
adapt to the Western standards, their personality profile is very similar to the one of "wessies."

**Conclusion**

In this paper we tried to demonstrate that besides studying cross-cultural variability, it is often important and informative to study within-culture variation. Studies of intra-cultural cognitive, behavioral, or attitudinal diversity are essential for understanding cross-cultural differences as they often provide important insights into processes of development and many other theoretical problems.

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Anu Realo received her PhD from the University of Tartu, Estonia. She has taught at the Universities of Tartu and Iceland and has been a Visiting Scholar at Abo Academi University, Finland and the Swedish Collegium for Advanced Study in the Social Sciences (Uppsala, Sweden). Since September 1999 she holds a position of Associate Professor of Personality Psychology at the University of Tartu. During 2001-2002 she works as a Research Fellow at the University of Leuven, Belgium. Her research focuses on issues related to similarities and differences in individual psychological functioning in various cultural settings. More specifically, her research interests concern individualism-collectivism as well as individual differences in basic personality traits and development, and emotions. This work has resulted in approximately 20 publications in internationally renowned scientific journals and books. E-mail: realo@psych.ut.ee.

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Estonian National Science Award in the Social Sciences Category and, in 1997, he was elected Foreign Member of the Finnish Academy of Sciences and Letters. His primary field of research is visual psychophysics and he is particularly interested in the perception of visual motion. However, in his recent work he has concentrated more on personality, emotions, intelligence, and cross-cultural comparison. Jüri Allik has published around 80 articles in peer-reviewed journals, including *Nature and Neuroscience*. He is editor (with R. R. McCrae) of "The Five-Factor Model Across Cultures" (2002). E-mail: jyri@psych.ut.ee.

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Questions for Discussion

1. What does it mean to belong to a culture? What culture do you belong to? Why?

2. Think about the intracultural variation within your country of origin. What are the main cultural groups in your country? Are they based on ethnic belonging, language, religious or territorial affiliation?

3. Name at least five factors that can either (a) increase or (b) reduce the intracultural variation within a country.

4. If a study shows that the difference between two countries is smaller than the intracultural difference within those countries, does it mean that the intercultural variation can be ignored? Explain your answer.

5. To what extent and in which way one can say that men and women of the same country constitute two different cultures?

6. What historical reasons could lie behind the cultural differences of the people from the North and the South of the United States?